# Forum AS

# 10 PM Current Affairs Quiz Compilation

January, 2021

#### **GOVERNMENT SCHEMES/INITIATIVES**

- Q.1) Consider the following statements regarding the Agri India Hackathon 2020:
- 1. It is being organised by the NITI Aayog in collaboration with the Food & Agriculture Organisation.
- 2. The hackathon will accept innovations on farm mechanization, supply chain & food technology.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **Virtual Agri-India Hackathon 2020** is being organised by the **Department of Agriculture and Cooperation and Farmers' Welfare** in association with IARI, Pusa, New Delhi.

Statement 2 is correct. The hackathon will accept innovations & ideas on farm mechanization, precision agriculture, supply chain & food technology, waste to wealth, green energy, etc.

The 24 best innovations from different focus areas will be awarded a cash prize of INR 1,00,000 each.

Q.2) Consider the following statements regarding the Mera Gaon Mera Gaurav programme:

- 1. It is a national programme of the Indian Council of Agricultural Research (ICAR).
- 2. Its objective is to promote the direct interface of scientists with the farmers to hasten the lab to land process.

Which of the statements given above is/are correct?

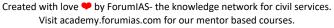
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

Mera Gaon Mera Gaurav is the national innovative initiative of Indian Council of Agricultural Research (ICAR). The objective of this scheme are:

- --To provide farmers with required information, knowledge and advisories on regular basis by adopting villages.
- --To promote the direct interface of scientists with the farmers to hasten the lab to land process.
- --To ensure that farmers benefit from best farm practices by providing required information, knowledge and advisories on regular basis by adopting villages
- --To create awareness among farmers about the organisations and their programmes and schemes as well as government policies related to the farming sector.
- Q.3) Which of the following sector(s) is/are supported by the **Production-Linked Incentive** (PLI) Scheme of Government of India?



- 1. Automobiles and Auto Components
- 2. Pharmaceuticals Drugs
- 3. Technical textiles

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** To provide a major boost to manufacturing, the government has launched **Production-Linked Incentive (PLI)** Scheme for 13 sectors, 3 sectors in March 2020 and 10 sectors in November 2020 with an outlay of Rs 1.97 lakh crore over the next five years.

The sectors are (i) Automobiles and Auto Components, (ii) Pharmaceuticals Drugs, (iii) Specialty Steel, (iv) Telecom & Networking Products, (v) Electronic/Technology Products, (vi) White Goods (ACs and LEDs), (vii) Food Products, (viii) Textile Products: MMF segment and technical textiles, (ix) High efficiency solar PV modules, and (x) Advanced Chemistry Cell (ACC) Battery (xi) Medical devices (xii) Large scale electronics manufacturing including mobile phones (xiii) Critical Key Starting materials /Drug intermediaries and APIs.

The PLI schemes will be implemented by the concerned ministries/departments and will be within the overall financial limits prescribed.

# Q.4) Consider the following statements regarding the Centre for Augmenting WAR with COVID-19 Health Crisis (CAWACH) initiative:

- 1. It is an initiative of the Department for Promotion of Industry and Internal Trade (DPIIT).
- 2. The initiative supported startups having solutions to fight pandemic COVID-19 by way of funding.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

Explanation: Statement 1 is incorrect. The Centre for Augmenting WAR with COVID-19 Health Crisis (CAWACH) is an initiative by National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology (DST), Government of India.

Statement 2 is correct. DST has nominated Society for Innovation and Entrepreneurship (SINE), IIT B to implement Centre for Augmenting WAR with COVID-19 Health Crisis (CAWACH) to source and support startups having solutions to fight pandemic COVID-19 by way of funding. SINE will be supported by Indian STEPs and Business Incubator Association (ISBA) in implementation of the program.

**CAWACH supports innovations** in the areas of diagnostics, devices, informatics including bio-informatics & information management systems, any intervention for the control of COVID-19 and/or startup ideas to address/mitigate various challenges faced by country / society due to severe impact of COVID-19.

# India has emerged globally as the second largest Personal Protective Equipment (PPE) manufacturer [PIB].

- **Q.5)** Consider the following statement regarding the **Renewable Sector** energy production in India:
- 1. India's installed solar power capacity is more than twice as much as its wind power installed capacity.
- 2. Renewable energy constitutes more than twenty percent of country's installed power capacity.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **National Solar Mission** have driven the grid connected solar power installed capacity from 25 MW in the year 2010-11 to about **36.32 GW** as **on 31st October 2020**. An additional 58.31 GW solar power capacity is currently under installation/tendering process.

The wind power installed capacity has grown by 1.8 times during past 6.5 years to about **38.26 GW** (as on 31st October 2020) and India now has the 4th largest wind power capacity in the world.

Statement 2 is correct. As on 31st October 2020, India's total renewable energy installed capacity (excluding hydro power above 25 MW) had reached over 89.63 GW. During the last 6 years, India has witnessed the fastest rate of growth in renewable energy capacity addition among all large economies, with renewable energy capacity growing by 2.5 times and solar energy expanding by over 13 times. Renewable energy now constitutes over **24 per cent of the country's installed power capacity** and around 11.62 per cent of the electrical energy generation.

If large hydro is included, the share of renewable energy in electric installed capacity would be over 36 percent and over 26 per cent of the electric energy generation.

- Q.6) Which of the following is/are the primary function(s) of the **Drug Controller General of India (DCGI)**?
- 1. Regulation of sale and distribution of Drugs
- 2. Approval of licenses of Vaccines

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Option 1 is incorrect. Under the **Drug and Cosmetics Act**, the regulation of manufacture, sale and distribution of Drugs is primarily the concern of the State authorities while the Central Authorities are responsible for approval of New Drugs, Clinical Trials in the country, laying down the standards for Drugs, control over the quality of imported Drugs,

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coordination of the activities of State Drug Control Organisations and providing expert advice with a view of bring about the uniformity in the enforcement of the Drugs and Cosmetics Act. Option 2 is correct. Drug Controller General of India is responsible for **approval of licenses** of specified categories of Drugs such as blood and blood products, I. V. Fluids, Vaccine and Sera.

# Q.7) Consider the following statements regarding the Affordable Sustainable Housing Accelerator – India (ASHA India):

- 1. It is a component of the 'Global Housing Technology Challenge-India (GHTC- India)' challenge.
- 2. ASHA-India aims to identify proven foreign construction technologies and implement them in India.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation: Ministry of Housing and Urban Affairs (MoHUA)**, Government of India has been implementing Pradhan Mantri Awas Yojana, Urban (PMAY-U) Mission to provide all weather pucca houses to eligible urban households/beneficiaries by the year 2022.

Within the ambit of the overarching PMAY (U) Mission, a Technology Sub Mission (TSM) was set up to facilitate the adoption of innovative, sustainable, eco-friendly and disaster-resilient technologies and building materials for low cost, speedier and quality construction of houses.

In this regard, MoHUA launched 'Global Housing Technology Challenge-India (GHTC-India)' has been launched' to identify emerging, disaster-resilient, environment friendly, cost effective and speedy construction technologies.

Statement 1 is correct. The challenge has three components viz. i) Conduct of biennial Expocum-Conference named Construction Technology India ii) Identifying Proven Demonstrable Technologies from across the globe to construct Light House projects iii) **Promoting Potential Future Technologies** (domestic) through Affordable Sustainable Housing Accelerator – India (ASHA India). (Statement 2 is incorrect)

- **Q.8)** The 'NAVARITIH' certificate Course has been launched recently in which of the following academic field?
- a) Innovative Construction Technologies
- b) Teacher Education
- c) Tribal Handicrafts Development
- d) India's Traditional Medicinal System

#### Correct answer: A

**Explanation:** Prime Minister recently laid the foundation of six Light House Projects (LHPs) as part of Global Housing Technology Challenge – India (GHTC -India) initiative, in six States at Indore (Madhya Pradesh), Rajkot (Gujarat), Chennai (Tamil Nadu), Ranchi (Jharkhand), Agartala (Tripura) and Lucknow (Uttar Pradesh).

As part of 'Construction Technology Year 2019-20', besides LHPs, a Certificate Course on Innovative Construction Technologies namely **NAVARITIH** (New, Affordable, Validated, Research Innovation Technologies for Indian Housing) was also launched. The objectives of

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this course are to familiarise the professionals with the latest materials and technologies being used worldwide for housing.

# Q.9) Consider the following statements regarding the Global Housing Technology Challenge-India (GHTC-India):

- 1. It is an initiative of the NITI Aayog.
- 2. It aims to evaluate and shortlist proven technologies from across the globe and mainstream them in Indian construction sector.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. GHTC-India stands for **Global Housing Technology Challenge** – India, an initiative by Ministry of Housing and Urban Affairs, Govt. of India.

Statement 2 is correct. It aims to identify, evaluate and shortlist a basket of proven & potential innovative technologies from across the globe and subsequently mainstream them in Indian construction sector that are sustainable, green, disaster resilient.

Such technologies would be cost effective, faster and ensure a higher quality of construction of houses, suiting to diverse geo-climatic conditions of India and desired structural & functional needs.

# Prime Minister will lay the foundation stone of Light House Projects (LHPs) under Global Housing Technology Challenge-India (GHTC-India) at six sites across six States on 1st January 2021.

#### Q.10) Consider the following statements regarding the Patents (Amendment) Rules of 2020:

- 1. The patentee is required to submit the approximate revenue/ value accrued in India through manufacturing in India of the patented invention.
- 2. Patentees are required to submit reasons for non-working of patent in India and steps taken for working the invention.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

The Patent (Amendment) Rules 2020 have come into force on October 20, 2020.

It is mandatory under the (Indian) Patents Act, 1970 for every patentee and every licensee to file a statement as to the extent of commercial working of a granted patent in the Indian territory.

The information to be provided in the New Form 27 for the relevant financial year is:

- --If patent worked in India Approximate revenue/value accrued in India through manufacturing in India/import into India of the patented invention;
- --If not worked in India Reasons for non-working and steps taken for working the invention

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#### Q.11) Consider the following statements regarding the E-way bills:

- 1. It is a mechanism to ensure that goods being transported comply with the GST Law.
- 2. For a distance of less than 200 Km the e-way bill is valid for a day from the bill generation. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **E-way bill** is a mechanism to ensure that goods being transported comply with the GST Law and is an effective tool to track movement of goods and check tax evasion.

It is generated from the GST Common Portal for E-Way bill system by the registered persons or transporters who cause movement of goods of consignment before commencement of such movement.

Statement 2 is correct. The **validity of e-way bill** depends on the distance to be travelled by the goods. For a distance of less than 200 Km the e-way bill will be valid for a day from the relevant date. For every 200 Km thereafter, the validity will be additional one day from the relevant date. The "relevant date" shall mean the date on which the e-way bill has been generated.

# As per the notification dated 22 December 2020, No. 94 / 2020. the validity period of e-waybill will be changed from 100 KM per day to 200 KM per day from 01/01/2021.

### Q.12) Which of the following is/are the objective(s) of the Co-WIN platform?

- 1. Real time information of vaccine stocks
- 2. Individualized tracking of beneficiaries for COVID-19 vaccine
- 3. Registration and verification of beneficiaries

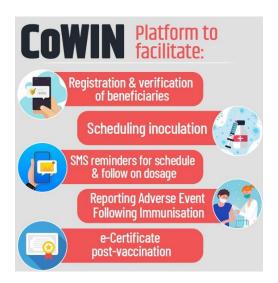
Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation: COVID Vaccine Intelligence Network (CoWIN)** platform has been developed by MoHFW for real time information of vaccine stocks, their storage temperature and individualized tracking of beneficiaries for COVID-19 vaccine.

This software will assist the programme managers across all levels through automated session allocation for pre-registered beneficiaries, their verification and a digital certificate will be generated upon successful completion of the vaccine schedule.



Q.13) Which of the following vaccine(s) have been granted permission for restricted use in emergency situation in India?

- 1. Covaxin
- 2. Covishield
- 3. ZyCoV-D

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** Option 1 is correct. Serum Institute of India, Pune has presented a Recombinant Chimpanzee Adenovirus vector vaccine (**Covishield**) encoding the SARS-CoV-2 Spike (S) glycoprotein with technology transfer from AstraZeneca/Oxford University.

It has been granted permission for restricted use in emergency situation subject to certain regulatory conditions.

Option 2 is correct. Bharat Biotech has developed a Whole Virion Inactivated Corona Virus Vaccine (**Covaxin**) in collaboration with ICMR and NIV (Pune).

It has been granted permission for restricted use in emergency situation in public interest as an abundant precaution, in clinical trial mode, to have more options for vaccinations, especially in case of infection by mutant strains.

Option 3 is incorrect. Cadila Healthcare Ltd., has developed a Novel Corona Virus-2019-nCov-Vaccine (ZyCov-D) using DNA platform technology. It has been granted permission to conduct **Phase-III clinical** trial in India.

Q.14) Consider the following statements regarding the recent initiatives of the Ministry of Tribal Affairs:

- 1. The GOAL programme is designed to provide mentorship to tribal youth through digital mode.
- 2. 'Swasthya' online platform provides all health and nutrition related information of the tribal population of India in a single platform.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. Ministry Tribal Affairs had launched the "**GOAL (Going Online As Leaders)**" programme in partnership with Facebook. The GOAL programme is designed to provide mentorship to tribal youth through digital mode.

The program intends to upskill and empower 5,000 tribal youths in the current phase to harness the full potential of digital platforms and tools to learn new ways of doing business, explore and connect with domestic and international markets. The digital skilling and technology will integrate them into the mainstream.

Statement 2 is correct. Ministry of Tribal Affairs launched the Tribal Health and Nutrition Portal 'Swasthya' and opened National Overseas Portal and National Tribal Fellowship Portal last year. It is a first of its kind e-portal, providing all health and nutrition related information of the tribal population of India in a single platform.

Swasthya will also curate innovative practices, research briefs, case studies, and best practices collected from different parts of India to facilitate the exchange of evidence, expertise and experiences.

**Q.15)** Consider the following statements regarding the **Draft Model Standing Orders** issued by Ministry of Labour & Employment recently:

- 1. A 'Model Standing Orders' for Services Sector has been proposed for the first time.
- 2. The concept of "Work from home" has been formalized in the Model Standing Orders for Manufacturing Sector, Mining Sector and Service Sector.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation**: Pursuant to section 29 of the Industrial Relations Code, 2020; the Central Government has published the draft Model Standing Orders for the Manufacturing Sector, Mining Sector and Service Sector in the official gazette, inviting suggestions/objections from the stakeholders within a period of thirty days.

- --All the three Model Standing Orders encourage employer for use of information technology in dissemination of information to the workers through electronic mode.
- -- To provide safeguard to IT industry, "Involvement in unauthorized access of any IT system, computer network of the employer/ customer/client" has been prescribed as misconduct.

Statement 1 is correct. Uniformity has been maintained in all the three Model Standing Orders while providing some flexibility considering the sector-specific requirements.

Given the needs and expansion of the services sector in Indian economy, a separate Model Standing Orders for Services Sector has been prepared **first time**.

Statement 2 is incorrect. The concept of **"Work from home"** has been formalized in the Model Standing Orders for **Service** Sector.



NOTE: It is a draft issue by the government and the final Model Standing Order.

# Q.16) Which of the following matter(s) come fall under the mandate of the **Department of Military Affairs (DMA)**?

- 1. rocurement exclusive to the Services except capital acquisitions
- 2. The Territorial Army
- 3. Facilitation of restructuring of Military Commands for optimal utilisation of resources Select the correct answer using the code given below:
- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The **Chief of Defence Staff** heads the Department of Military Affairs (DMA) within the Ministry of Defence and functions as its Secretary.

The following areas are dealt by the Department of Military Affairs headed by CDS:

- --The Armed Forces of the Union, namely, the Army, the Navy and the Air Force.
- --Integrated Headquarters of the Ministry of Defence comprising Army Headquarters, Naval Headquarters, Air Headquarters and Defence Staff Headquarters.
- -- The Territorial Army.
- --Works relating to the Army, the Navy and the Air Force.
- --Procurement exclusive to the Services except capital acquisitions, as per prevalent rules and procedures.
- --Promoting jointness in procurement, training and staffing for the Services through joint planning and integration of their requirements.
- --Facilitation of restructuring of Military Commands for optimal utilisation of resources by bringing about jointness in operations, including through establishment of joint/theatre commands.
- --Promoting use of indigenous equipment by the Services.

### **Q.17)** Consider the following statements:

- 1. National Metrology Conclave 2021 is being organised by the India Meteorological Department (IMD).
- 2. The National Atomic Timescale by CSIR- National Physical Laboratory generates Indian Standard Time with an accuracy of 2.8 nanosecond.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **National Metrology Conclave 2021** is being organised by Council of Scientific and Industrial Research-National Physical Laboratory (CSIR-NPL), New Delhi, which is entering into its 75th year of inception. The theme of the conclave is 'Metrology for the Inclusive Growth of the Nation'.

Statement 2 is correct. The **CSIR—NPL National Atomic Timescale** launched recently generates Indian Standard Time with an accuracy of 2.8 nanosecond.

#### **Q.18)** Consider the following statements:

- 1. IN-SPACe is an independent nodal agency under Department of Space (DOS) to promote the private sector for their participation in Space Sector.
- 2. Private players can also use ISRO infrastructure through IN-SPACe.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Government has created **Indian National Space**, **Promotion & Authorization Centre** (INSPACe), under Department of Space to encourage, promote and hand hold the private sector for their participation in Space Sector. Private players will also be able to use ISRO infrastructure through INSPACe.

It is to be established as a single window nodal agency, with its own cadre, which will permit and oversee the **following activities of Non-Government Private Enterprises**:

- --Space activities including building of launch vehicles and satellites and providing space based services as per the definition of space activities.
- --Sharing of space infrastructure and premises under the control of ISRO with due considerations to on-going activities.
- --Establishment of new space infrastructure and facilities, by NGPEs, in pursuance of space activities based on safety norms and other statutory guidelines and necessary clearances.
- --Initiation of launch campaign and launch, based on readiness of launch vehicle and spacecraft systems, ground and user segment.
- --Building, operation and control of spacecraft for registration as Indian Satellite by NGPEs and all the associated infrastructure for the same.

#### Q.19) Consider the following statements regarding India's research stations in Antarctica:

- 1. Maitri and Bharati are India's two stations in the Antarctica.
- 2. The research centers are being operated under the National Centre for Polar and Ocean Research (NCPOR), Ministry of Earth Sciences.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** India presently has two research stations at Antarctica namely 'Maitri' and 'Bharati' which are being operated under National Centre for Polar and Ocean Research (NCPOR), Ministry of Earth Sciences. At both the stations, research and investigations are undertaken to understand the Polar processes and phenomenon. Observations and studies are carried out in atmospheric, biological, geological, ecological sciences etc.

Maitri station has been in operation since 1989 while Bharati has been constructed and established in March, 2013.

# The 40th Indian Scientific Expedition to Antarctica was launched recently.

#### Q.20) Which of the following is/are recommendations under the School Bag Policy 2020?

- 1. The weight of a schoolbag across classes 1 to 12 should be 10% of the body weight of the student carrying it.
- 2. There should be no homework for students from school up to Class 2. Select the correct answer using the code given below:
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

The **School Bag Policy 2020** released by the Department of School Education and Literacy, Ministry of Education recommends that the weight of a schoolbag across classes 1 to 12 should be 10% of the body weight of the student carrying it.

Weight of school bag needs to be monitored and checked on a regular basis in the school. For this, every school needs to keep a digital weighing machine in the school premises.

In line with the National Education Policy (NEP) it also suggested that there should be no homework up to Class 2. Homework requiring a time of maximum of two hours a week is allowed for Classes 3 to 5, five-six hours a week for classes 6 to 8, and 10-12 hours a week for classes 9-12.

#### **Q.21)** Consider the following statements:

- 1. India's toy market is import dependent for fulfillment of majority of the domestic demand.
- 2. Toycathon 2021 is aimed to conceptualize innovative toys based on the Indian value system Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

### Correct answer: C

**Explanation:** Statement 1 is correct. The size of toy market in India is about one billion USD but unfortunately **80% of the toys are imported**.

Statement 2 is correct. Ministry of Education, Ministry of Women and Child Development (MWCD), Ministry of Textile, Ministry of Commerce and Industries, Ministry of MSME, Ministry of I&B and All India Council for Technical Education (AICTE) have jointly launched **Toycathon-2021**.

This is a special kind of hackathon where students and teachers from schools and colleges, design experts, toy experts and startups will get together to crowd source ideas for developing toys and games that are based on Indian culture and ethos, local folklore and heroes, and Indian value systems.

Q.22) Which of the following programme(s) is/are being implemented by the **Energy Efficiency** Services Limited (EESL)?

- 1. Unnat Jyoti by Affordable LEDs for All
- 2. Street Lighting National Programme
- 3. Pradhan Mantri Ujjwala Yojana

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

### Correct answer: A

**Explanation:** Option 1 and 2 are correct. **Unnat Jyoti by Affordable LEDs for All (UJALA)** and **Street Lighting National Programme (SLNP)** are being implemented by Energy Efficiency Services Limited (EESL), a joint venture of PSUs under the Ministry of Power, Government of India since their inception.

Under UJALA, EESL has distributed over 36.69 crore LED bulbs across India. This has resulted in estimated energy savings of 47.65 billion kWh per year with avoided peak demand of 9,540 MW and estimated GHG emission reduction of 38.59 million tonnes CO2 per year.

With SLNP, EESL has installed about 1.14 crore LED streetlights across India. This has resulted in an estimated energy savings of 7.67 billion kWh per year with avoided peak demand of 1,280 MW and estimated GHG emission reduction of 5.29 million tonnes CO2 per year.

Option 3 is incorrect. Ministry of Petroleum & Natural Gas is implemented the "Pradhan Mantri Ujjwala Yojana" (PMUY) providing concessional LPG connections especially the women living below poverty line (BPL) to make smoke free Rural India.

Q.23) Consider the following statements regarding the Quality Council of India (QCI):

- 1. It is a statutory body set up under the Bureau of Indian Standards Act, 1986.
- 2. QCI provides financial assistance directly to Ministry of Micro, Small & Medium Enterprises (MSMEs).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. **Quality Council of India (QCI)** was set up in 1997 jointly by the Government of India and the Indian Industry represented by the three premier industry associations i.e. Associated Chambers of Commerce and Industry of India (ASSOCHAM), Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI), to establish and operate national accreditation structure and promote quality through National Quality Campaign.

Statement 2 is incorrect. QCI is an autonomous body under Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry. The main objectives of QCI are (a) to establish and operate national accreditation structure (b) to monitor and administer the National Quality Campaign. QCI **does not provide any financial assistance** to MSMEs.

# Department for Promotion of Industry and Internal Trade (DPIIT) is organizing Udyog Manthan - a marathon of focused sector-specific webinars for promoting Quality and Productivity in Indian Industry in association with Quality Council of India, National Productivity Council, and Industry bodies.

# Q.24) Consider the following statements regarding the Scheme of "Special Assistance to States for Capital Expenditure":

- 1. It is aimed at boosting capital expenditure by the State Governments in view of the shortfall in tax revenue due to the COVID 19 pandemic.
- 2. The scheme is supported by the World Bank through financial assistance.
- 3. It promotes citizen-centric reforms in States.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: C

**Explanation:** Statement 1 is correct. The Scheme of **"Special Assistance to States for Capital Expenditure"** is aimed at boosting capital expenditure by the State Governments who are facing difficult financial environment this year due to the shortfall in tax revenue arising from the COVID 19 pandemic.

Statement 2 is incorrect. The grants and funds for the scheme are being provided for by the **Union Government**.

Statement 3 is correct. The Scheme has three parts:

**Part-I**: Rs.200 crore for the 7 north-eastern States (Arunachal Pradesh, Meghalaya, Manipur, Mizoram, Nagaland, Sikkim and Tripura) and Rs.450 crore for Himachal Pradesh, Uttarakhand and Assam

**Part-II**: For all other States not included in Part-I, Rs.7,500 crore in proportion to their share of central tax as per the interim award of the 15th Finance Commission for the year 2020-21.

**Part-III**: An amount of Rs.2000 crore is earmarked for only to those States who carry out at least 3 out of the 4 reforms: One Nation One Ration Card, Ease of doing Business Reform, Urban Local Body/ Utility Reform and Power Sector Reform.

# Madhya Pradesh and Andhra Pradesh have become the first group of States to complete three out of the four citizen centric reforms stipulated by the Department of Expenditure, Ministry of Finance.

# Q.25) Consider the following statements regarding the Longitudinal Ageing Study in India (LASI):

- 1. It is a full-scale national survey of scientific investigation of the health, economic, and social determinants and consequences of population aging in India.
- 2. It is being conducted by the National Sample Survey Office.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The Longitudinal Ageing Study in India (LASI) is a full-scale national survey of scientific investigation of the **health**, **economic**, **and social determinants and consequences** of population aging in India. The LASI is a nationally representative survey over 72,000 older adults age 45 and above across all states and union territories of India.

# The concept of LASI is comparable to the Health and Retirement Study (HRS) in the United States.

Statement 2 is incorrect. The **National Programme for Health Care of Elderly, Ministry of Health & Family Welfare** has undertaken the Longitudinal Ageing Study of India, through International Institute for Population Sciences, (IIPS), Mumbai in collaboration with Harvard School of Public Health, University of Southern California, USA, United Nations Population Fund (UNFPA) and National Institute on Ageing.

# Longitudinal Ageing Study of India (LASI) Wave-1 has been released recently.

# Q.26) Consider the following statements regarding the recently released **Draft Science**Technology and Innovation Policy (STIP):

- 1. It is a first ever national level Science & Technology policy for India.
- 2. It proposes "one nation, one subscription" policy whereby, in return for one centrally-negotiated payment, all individuals in India will have access to journal articles.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **draft Science Technology and Innovation Policy (STIP)** released recently once approved will be fifth such national policy since independence. Statement 2 is correct. The draft STIP proposes Open Data Policy for Publicly Funded Research, i.e. all data used in and generated from public-funded research will be available to everyone under **FAIR (findable, accessible, interoperable and reusable)** terms.

Scientific Policy Resolution 1958	Sought to "foster, promote and sustain" the "cultivation of science and scientific research in all its aspects".
Technology Policy Statement 1983	"emphasized the need to attain technological competence and self-reliance"
Science and Technology Policy 2003	sought to "integrate programmes of socio-economic sectors with the national R&D system and the creation of a national innovation system"
Science, Technology and Innovation Policy 2013	" <u>Science, Technology and Innovation</u> to focus on faster, sustainable and <u>inclusive development</u> of the people"

Further One Nation, One Subscription is proposed: The Government will negotiate with journal publishers for a "one nation, one subscription" policy whereby, in return for one centrally-negotiated payment, all individuals in India will have access to journal articles.

Q.27) Consider the following statements regarding the Pravasi Bharatiya Divas (PBD):

- 1. It is the flagship event of the Ministry of External Affairs for engaging and connecting with the overseas Indians.
- 2. PBD conventions have been held every year since 2003.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **Pravasi Bharatiya Divas (PBD)** Convention is the flagship event of the Ministry of External Affairs and provides an important platform to engage and connect with the overseas Indians.

# The 16th Pravasi Bharatiya Divas Convention, is being organized on 9th January 2021.

Statement 2 is incorrect. PBD conventions were being held every year in January since 2003. Since 2015, its format has been revised to celebrate the PBD **once every two years** and to hold theme-based PBD Conferences during the intervening period with participation from overseas diaspora experts, policy makers and stakeholders.

# January 9 was chosen as the day to celebrate this occasion since it was on this day in 1915 that Mahatma Gandhi, the greatest Pravasi, returned to India from South Africa.

# Q.28) Consider the following statements regarding the Industrial Development Scheme for Jammu & Kashmir (J&K IDS, 2021):

- 1. It is a Central Sector Scheme.
- 2. The scheme is exclusive for development of Micro Small & Medium Enterprises (MSMEs). Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The **Cabinet Committee on Economic Affairs** recently approved the proposal of Department for Promotion of Industry and Internal Trade for Central Sector Scheme for Industrial Development of Jammu & Kashmir.

Statement 2 is incorrect. The scheme is approved with a total outlay of Rs. 28,400 crores up to the year 2037. It supports both **smaller and larger units**. Smaller units with an investment in plant & machinery up to Rs. 50 crores will get a capital incentive up to Rs. 7.5 crore and get capital interest subvention at the rate of 6% for maximum 7 years.

The scheme provides Capital Investment Incentive, Capital Interest subvention, GST Linked Incentive and Working Capital Interest Incentive.

Q.29) Which of the following is/are the function(s) of the National Statistics Office (NSO)?

- 1. Prepares national accounts as well as publishes annual estimates of national product
- 2. Organizes and conducts periodic all-India Economic Censuses
- 3. Conducts the Annual Survey of Industries (ASI)

Select the correct answer using the code given below:



- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

Explanation: National Statistics Office (NSO) is mandated with the following responsibilities:

- -- prepares national accounts as well as publishes annual estimates of national product, government and private consumption expenditure, capital formation, savings, estimates of capital stock and consumption of fixed capital
- -- compiles and releases the Index of Industrial Production (IIP) every month in the form of 'quick estimates'; conducts the **Annual Survey of Industries (ASI)**; and provides statistical information to assess and evaluate the changes in the growth, composition and structure of the organized manufacturing sector;
- -- organizes and conducts periodic **all-India Economic Censuses** and follow-up enterprise surveys, provides an in-house facility to process the data collected through various socioeconomic surveys and follow-up enterprise surveys of Economic Censuses.
- # The National Statistics Office (NSO) released today the first Advance Estimates (AE) of GDP for the year 2020-21. The real GDP at 2011-12 prices in 2020-21 has been estimated to contract by 7.7 per cent and nominal GDP at current prices by 4.2 per cent.

# Q.30) Consider the following statements regarding the "Liberalised Authorised Economic Operator Package for MSMEs" Scheme:

- 1. It is a voluntary compliance programme under the Central Board of Indirect Taxes & Customs (CBIC).
- 2. It enables swifter Customs clearance for accredited stakeholders.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

Recognising their critical contribution in supporting the economy especially during the present difficult times of COVID-19 pandemic, Central Board of Indirect Taxes & Customs (CBIC) has taken a new initiative to introduce its flagship "Liberalised MSME AEO Package" for Micro Small and Medium Enterprises (MSMEs).

It is a voluntary compliance programme which enables swifter Customs clearance for accredited stakeholders in the global supply chain viz. importers, exporters, logistic service providers, custodians etc.

Another important benefit available to specified AEOs is that their payment of Customs duty is deferred and need not to be paid before the clearance of the imported goods by Customs.

# Q.31) Consider the following statements regarding the National Internet Exchange of India (NIXI):

- 1. It is a statutory body regulating the Internet Service Providers in India.
- 2. It operates the INRegistry that manages India's Country Code Top Level domain (.in).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **National Internet Exchange of India (NIXI)** is a not-for-profit Organization under section 25 of the Companies Act 1956, and was registered on 19th July, 2003.

NIXI was set up for peering of ISPs among themselves for the purpose of routing the domestic traffic within the country, instead of taking it all the way to US/Abroad, thereby resulting in better quality of service (reduced latency) and reduced bandwidth charges for ISPs by saving on International Bandwidth.

Statement 2 is correct. **(dot)IN is India's Country Code Top Level domain (ccTLD)**. The Govt. of India delegated the operations of INRegistry to NIXI in 2004. The INRegistry operates and manages India's (dot)IN ccTLD.

# NIXI has announced that it will offer a free IDN (Internat<mark>ionalized Domain Name) i</mark>n any of their preferred 22 official Indian language along with every IN domain booked by the registrant.

Q.32) The Agricultural and Processed Food Products Export Development Authority (APEDA) is mandated with the responsibility of export promotion of which of the following product(s)?

- 1. Dairy products
- 2. Honey, jaggery and sugar products
- 3. Herbal and medicinal plants

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The Agricultural and Processed Food Products Export Development Authority (APEDA) was established by the Government of India under the **APEDA Act, 1985**. It has been entrusted with the responsibility of export promotion and development of agricultural and processed food product groups listed in the **Schedule to the APEDA Act**:

Fruits, Vegetables and their Products; Meat and Meat Products; Poultry and Poultry Products; Dairy Products; Confectionery, Biscuits and Bakery Products; Honey, Jaggery and Sugar Products; Cocoa and its products, chocolates of all kinds; Alcoholic and Non-Alcoholic Beverages; Cereal and Cereal Products; Groundnuts, Peanuts and Walnuts; Pickles, Papads and Chutneys; Guar Gum; Floriculture and Floriculture Products; and Herbal and Medicinal Plants.

# APEDA has organized Virtual Buyer Seller Meet (BSM) in various countries during to the ongoing Covid19 pandemic, when the export promotion programme was not possible to be organized physically.

Q.33) Which of the following is/are correctly matched?

Indian Army Command - Headquarter

Southern Command - Pune, Maharasthra
 Central Command - Lucknow, Uttar Pradesh

3. Western Command - Jaipur, Rajasthan

Select the correct answer using the code given below:

a) 1 and 2 only

b) 2 and 3 only

c) 3 only

d) 1 and 3 only

#### Correct answer: A

**Explanation:** The **Indian Army is divided into six operational commands** (field armies) and one training command, each under the command of a Lieutenant General, who has an equal status to the Vice-Chief of Army Staff (VCOAS), working under the control of Army HQ in New Delhi.

The Western Command (Chandimandir), Eastern Command (Kolkata), Northern Command (Udhampur), Southern Command (Pune), Central Command (Lucknow), Army Training Command (Shimla) and South-Western Command (Jaipur).

#### **Q.34)** Consider the following statements:

- 1. Natural Capital Accounting and Valuation of the Ecosystem Services (NCAVES) India Forum-2021 is being organised by the NITI Aayog.
- 2. "EnviStats India" is annually published by the Ministry of Statistics & Programme Implementation.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

### Correct answer: B

**Explanation:** Statement 1 is incorrect. **NCAVES India Forum 2021** is being organised by the Ministry of Statistics and Programme Implementation (MoSPI).

The NCAVES Project, funded by EU, has been jointly implemented by the United Nations Statistics Division (UNSD), the United Nations Environment Programme (UNEP) and the Secretariat of the Convention of Biological Diversity (CBD). India is one of the five countries taking part in this project - the other countries being Brazil, China, South Africa and Mexico.

Statement 2 is correct. The participation in the NCAVES project has helped the **Ministry of Statistics and Programme Implementation (MoSPI)** commence the compilation of the Environment Accounts as per the UN-SEEA (System of Environmental Economic Accounting) framework and release environmental accounts in its publication "**EnviStats India**" on an annual basis since 2018.

#### Q.35) The Western Dedicated Freight Corridor passes through which of the following States?

- 1. Punjab
- 2. Haryana
- 3. Uttar Pradesh

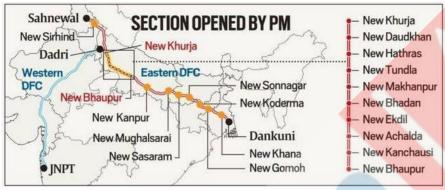


Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: B

**Explanation:** The **Western Dedicated Freight Corridor** connecting Dadri in Uttar Pradesh to Jawaharlal Nehru Port (JNPT) in Mumbai will traverse through the states of UP, Haryana, Rajasthan, Gujarat and Maharashtra



Q.36) Consider the following statements regarding the Rashtriya Kamdhenu Aayog (RKA):

- 1. It is a statutory authority under the Ministry of Agriculture & Farmers' Welfare.
- 2. Its mandate is to develop appropriate programmes for conservation, sustainable development and genetic upgradation of Indigenous breeds of cows.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

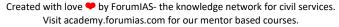
**Explanation:** Statement 1 is incorrect. The **Rashtriya Kamdhenu Aayog (RKA)** is a high-powered permanent apex advisory body under Ministry of Fisheries, Animal Husbandry and Dairying. Government of India constituted the Rashtriya Kamdhenu Aayog through a Resolution dated 21st February, 2019.

Statement 2 is correct. It is mandated to help the Central Government to develop appropriate programmes for conservation, sustainable development and genetic upgradation of Indigenous breeds of cows.

It is a permanent body to formulate policies and to provide directions for the implementation of schemes related to cattle so as to lay more emphasis on livelihood generation for small & marginal farmers, women and youth entrepreneurs.

#### Q.37) Consider the following statements regarding the National Youth Parliament Festival:

- 1. The 2021 festival is the first ever edition of the festival.
- 2. The youth selected by a Jury from the State Youth Parliament participate in this national event.



Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **National Youth Parliament Festival (NYPF)** aims to encourage the youth to engage with public issues, understand the common man's point of view, form their opinions and express it in an articulate manner

The first NYPF 2019 was organised from 12 January to 27 February 2019 at District, State & National level with the theme "Be the Voice of New India and Find solutions and Contribute to Policy".

The 2nd National Youth Parliament Festival 2021 was launched on 23rd December 2020 through virtual mode which was witnessed by more than 23 Lac youth and stakeholders across the country at district, state and national level.

Statement 2 is correct. The youth selected by a Jury from the District Youth Parliament participate at the State level in SYP. Furtherm the youth selected by a Jury from the State Youth Parliament participate at the National level in NYP.

#### **Q.38)** Consider the following statements:

- 1. Wheat and Paddy are only crops covered under the Minimum Support Price (MSP) mechanism.
- 2. Hundred percent of the food grains the sugar is mandatorily packed in diversified jute bags. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

Explanation: Statement 1 is incorrect. Commission for Agricultural Costs & Prices (CACP) recommends MSPs of 23 commodities, which comprise 7 cereals (paddy, wheat, maize, sorghum, pearl millet, barley and ragi), 5 pulses (gram, tur, moong, urad, lentil), 7 oilseeds (groundnut, rapeseed-mustard, soyabean, seasmum, sunflower, safflower, nigerseed), and 4 commercial crops (copra, sugarcane, cotton and raw jute).

Statement 2 is incorrect. Under the Jute Packaging Materials (Compulsory use in Packing Commodities) Act, 1987, the Government is required to consider and provide for the compulsory use of jute packaging material in the supply and distribution of certain commodities in the interest of production of raw jute and jute packaging material and of persons engaged in the production thereof.

The Government has decided that 100% of food grains and 20% of sugar shall be mandatorily packed in diversified jute bags.

### **Q.39)** Which of the following vehicles manufacturing is/are supported under the **Faster** Adoption and Manufacturing of Electric Vehicles (FAME) in India Phase II scheme?

- 1. Electric Buses
- 2. Electric Three Wheelers



3. Electric Two Wheelers

Select the correct answer using the code given below:

- a) 1 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** Government had approved **Phase-II of FAME Scheme** with an outlay of Rs. 10,000 Crore for a period of 3 years commencing from 1st April 2019. Following categories of vehicles are eligible for demand incentives: Buses (only Electric Vehicle technology), Four Wheelers (Electric (EV), Plug in Hybrid (PHEV) and Strong Hybrid (SHEV)}, Three-wheeler (Electric) including Registered E-Rickshaws and Two Wheelers (Electric).

With greater emphasis on providing affordable & environment friendly public transportation options for the masses, scheme will be applicable mainly to vehicles used for public transport or those registered for commercial purposes in e-3W, e-4W and e-bus segments. However, privately owned registered e-2Ws are also covered under the scheme as a mass segment.

# Q.40) Consider the following statements regarding the **Prime Minister's National Relief Fund** (PMNRF):

- 1. It has been created through an Act of Parliament.
- 2. It was initially established to assist displaced persons from Pakistan post-independence.
- 3. The fund consists entirely of public contributions and does not get any budgetary support. Which of the statements given above is/are correct?
- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. PMNRF has not been constituted by the Parliament. The fund is recognized as a **Trust under the Income Tax Act**.

Statement 2 is correct. The Prime Minister's National Relief Fund (PMNRF) was established with public contributions to assist **displaced persons** from Pakistan. The resources of the PMNRF are now utilized primarily to render immediate relief to families of those killed in natural calamities like floods, cyclones and earthquakes, etc. and to the victims of the major accidents and riots.

Statement 3 is correct. The fund consists entirely of **public contributions** and does not get any budgetary support. The corpus of the fund is invested in various forms with scheduled commercial banks and other agencies.

#### **Q.41)** Consider the following statements:

- 1. Commercial mining allows the private sector to mine coal commercially without placing any end-use restrictions.
- 2. India does not allow commercial mining in the coal sector.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only

- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **Commercial mining** allows the private sector to mine coal commercially without placing any end-use restrictions.

Statement 2 is incorrect. Private sector participation was permitted until the early 1970s. The Indira Gandhi government announced the nationalization of the coal blocks in two phases between 1971 and 1973.

Further, there had been end-use restrictions and the private sector was not allowed to trade into the market making it unattractive for the private sector.

Government of India has done away with these restrictions and 19 successful bidders have been allotted mines under the country's first commercial coal mining auction.

- # Ministry of Coal has launched Single Window Clearance Portal, a unified platform that facilitates grant of clearances and approvals required for starting a coal mine in India.
- # Presently, about 19 major approval or clearances are required to be obtained before starting a coal mine in the country. Some of them include approval of Mining Plan and Mine Closure Plan, Grant of Mining Lease, Environment and Forest Clearances, Wild Life Clearance, Clearances related to Safety, Environment, Rehabilitation of project affected families, welfare of workers etc.

#### **Q.42)** Consider the following statements:

- 1. BharatNet project aims to provide broadband connectivity to all the Gram Panchayats in the country.
- 2. PM-WANI scheme aims to provide public Wi-Fi service through Public Data Offices (PDOs) spread across length and breadth of the country.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

### Correct answer: C

**Explanation:** In 2020, the total telephone connections rose to 1171.72 million out of which 1151.73 million are mobile connections (till Oct data). The tele-density has reached 86.37%, while the rural tele-density is at 58.85%.

Statement 1 is correct. Government is implementing the flagship **BharatNet project** in a phased manner to provide broadband connectivity to all the Gram Panchayats (approx. 2.5 lakh GPs) in the country.

Under BharatNet project around 1.50 lakh Gram Panchayats (GPs) have already been connected with high-speed broadband connectivity. The scope of BharatNet has now been enhanced to connect all 6 Lakh inhabited villages in the country

Statement 2 is correct. **Prime Minister's Wi-Fi Access Network Interface (PM-WANI)** aims at setting up of Public Wi-Fi Networks by Public Data Office Aggregators (PDOAs) to provide public Wi-Fi service through Public Data Offices (PDOs) spread across length and breadth of the country to accelerate proliferation of Broadband Internet services through Public Wi-Fi network in the country.

Q.43) Consider the following statements regarding the Sea Vigil-21 Exercise:

- 1. It is a joint maritime Exercise between Indian and Australian naval forces.
- 2. The exercise will cover entire coastline and Exclusive Economic Zone of India.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The second edition of the biennial pan-India coastal defence exercise 'Sea Vigil-21' will be conducted on 12-13 January 2021. Assets of the Indian Navy, Coast Guard, Customs and other maritime agencies will participate in SEA VIGIL, the conduct of which is also being facilitated by the Ministries of Defence, Home Affairs, Shipping, Petroleum and Natural Gas, Fisheries, Customs, State Governments and other agencies of Centre/ State.

Statement 2 is correct. The exercise, inaugural edition of which was conducted in January 2019; will be undertaken along the entire 7516 km coastline and Exclusive Economic Zone of India and will involve all the 13 coastal States and Union Territories along with other maritime stakeholders, including the fishing and coastal communities.

# Q.44) Consider the following statements regarding ASHA or Accredited Social Health Activist:

- 1. They are trained to work as an interface between the community and the public health system.
- 2. ASHAs are primarily a literate woman resident of the village.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

One of the key components of the **National Rural Health Mission** is to provide every village in the country with a trained female community health activist ASHA or Accredited Social Health Activist. Selected from the village itself and accountable to it, the ASHA will be trained to work as an interface between the community and the public health system.

ASHA must primarily be a literate woman resident of the village married/ widowed/ divorced, preferably in the age group of 25 to 45 years.

They receive **performance-based incentives** for promoting universal immunization, referral and escort services for Reproductive & Child Health (RCH) and other healthcare programmes, and construction of household toilets.

#### **Q.45)** Consider the following statements regarding India's Foreign Trade Policy (FTP):

- 1. FTP is issued by the Union Government in exercise of powers conferred under the Foreign Trade (Development & Regulation) Act, 1992.
- 2. The FTP 2015-20 has been extended till March 2021 due to Covid-19 pandemic.



Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. The Foreign Trade Policy is notified by Central Government, in exercise of powers conferred under Section 5 of the Foreign Trade (Development & Regulation) Act, 1992 which states that 'the Central Government may, from time to time, formulate and announce, by notification in the Official Gazette, the foreign trade policy'.

Statement 2 is correct. India's FTP has conventionally been formulated for five years at a time. The FTP 2015-20 came into effect on 1stApril 2015 and the same was extended by one year till 31 March 2021, due to Covid-19 pandemic.

# Meeting of the Parliamentary Consultative Committee of the Ministry of Commerce and Industry was held today on the subject "New Foreign Trade Policy 2021-26".

### **Q.46)** Which of the following is recognised under the **Kayakalp Award Scheme?**

- a) Cleanliness, hygiene and infection control practices in public health care facilities
- b) Recognition to higher educational institutions for publishing quality research papers
- c) Implementation of Ease of doing business reforms by States
- d) Achieving development indicators under Aspirational Districts programme

#### Correct answer: A

Explanation: 'Kayakalp Award Scheme' was launched in 2015 as an extension of 'Swachh Bharat Mission'. Aim of initiative which to improve and promote the cleanliness, hygiene, waste management and infection control practices in public health care facilities and incentivize the exemplary performing facilities.

The scheme is intended to encourage and incentivize Public Health Facilities (PHFs) in the country to demonstrate their commitment for cleanliness, hygiene and infection control practices.

- # 5th National Kayakalp Awards were inaugurated recently.
- # The success of Kayakalp is duly recognized in Global Baseline Report 2019 published by WHO, UNICEF and JMP.

# Q.47) Consider the following statements regarding the SAATHI (System for Assessment, Awareness and Training for Hospitality Industry) initiative:

- 1. It allows self-certification of Hotels agreeing to go through the SAATHI framework.
- 2. It has been developed based on the COVID-19 guidelines.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.



To assist the hospitality industry in their preparedness to continue operations safely and mitigate risks arising out of the COVID-19 pandemic, the **Ministry of Tourism has partnered with the Quality Council of India (QCI)**, to assist the Hospitality Industry through an initiative called SAATHI (System for Assessment, Awareness and Training for Hospitality Industry).

SAATHI has been developed based on the COVID-19 guidelines, with a provision to incorporate State specific hygiene and safety requirements encompassing the following 10 elements of SAATHI:

--Management Commitment, Hygiene and Sanitization, Safety Advisories in Hotel Operations, Communication, Training & Awareness, Preventive Measures, Transport Management, Vendor Management, Ventilation, Waste Management and Control of Discriminatory Practices.

Under the initiative, a Hotel/Unit goes through the SAATHI framework and agrees to follow the requirements wherever applicable to the fullest extent possible. A self-certification is issued.

# Q.48) Which of the following losses/risks is/are covered under the Bima Yojana (PMFBY)? Pradhan Mantri Fasal

- 1. Prevented from sowing/planting the insured crop due to adverse weather conditions
- 2. Yield losses due Natural Fire and Lightning, Storm, Hailstorm
- 3. Individual farm level losses arising out of localized calamities Select the correct answer using the code given below:
- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The **Pradhan Mantri Fasal Bima Yojana (PMFBY)** recently completed five years in operation. Premium cost over and above the farmer share is equally subsidized by States and GoI. However, GoI shares 90% of the premium subsidy for North Eastern States to promote the uptake in the region. Risks covered under PMFBY:

- --Yield losses due to non-preventable risks, such as (i) Natural Fire and Lightning (ii) Storm, Hailstorm, Cyclone, Typhoon, Tempest, Hurricane, Tornado etc. (iii) Flood, Inundation and Landslide (iv) Drought, Dry spells (v) Pests/ Diseases etc.
- --In cases where majority of the insured farmers of a notified area, having intent to sow/plant and incurred expenditure for the purpose, are prevented from sowing/planting the insured crop due to adverse weather conditions
- --Post Harvest (individual farm basis) Coverage is available upto a maximum period of 14 days from harvesting specific perils of cyclonic rains, unseasonal rains throughout the country.
- --Localised Calamities (individual farm basis) Loss resulting from occurrence of identified localized risks i.e. hailstorm, landslide, and Inundation affecting isolated farms in the notified area.

**Q.49)** Which of the following vaccine(s) are provided under the **Universal Vaccination Programme (UIP)** of Government of India?

- 1. Hepatitis B
- 2. Meningitis
- 3. Hemophilus Influenza type B



Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation: Universal Immunization Programme (UIP)** is one of the largest public health programmes targeting close of 2.67 crore newborns and 2.9 crore pregnant women annually. It is one of the most cost-effective public health interventions and largely responsible for reduction of vaccine preventable under-5 mortality rate.

Under UIP, immunization is providing free of cost against **12 vaccine preventable diseases**: Nationally- Diphtheria, Pertussis, Tetanus, Polio, Measles, Rubella, severe form of Childhood Tuberculosis, Hepatitis B and Meningitis & Pneumonia caused by Hemophilus Influenza type B Sub-nationally- Rotavirus diarrhoea, Pneumococcal Pneumonia and Japanese Encephalitis; of which Rotavirus vaccine and Pneumococcal Conjugate vaccine are in process of expansion while JE vaccine is provided only in endemic districts.

#### Q.50) Consider the following statements regarding the Special Marriage Act, 1954:

- 1. It allows the solemnisation of marriages between any two individuals without religious customs, rituals, or ceremonial requirements.
- 2. It requires parties to give a 30-day public notice of their intention to marry.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

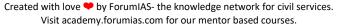
The Special Marriage Act is a civil law enacted in 1954 that allows the solemnisation of marriages between any two individuals **without religious customs**, **rituals**, **or ceremonial requirements**. It creates provisions for the marriage of interfaith couples without religious conversions — a requirement for marriages under personal laws such as the Hindu or the Muslim marriage acts.

**Section 5 of the Special Marriage Act** requires parties to give a 30-day public notice of their intention to marry. The public notice is displayed at the office of the marriage officer, inviting potential objections to the marriage.

# The Allahabad High Court has ruled that couples seeking to solemnise their marriage under the Special Marriage Act, 1954 can choose not to publish the mandatory 30-day notice of their intention to marry.

# Q.51) Consider the following statements regarding the proposed National Educational Technology Forum (NETF):

- 1. It will provide independent evidence-based advice to Central and State Government agencies on technology-based interventions.
- 2. It will replace All India Council for Technical Education regulator for technical education in India.





Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. As per the National Education Policy 2020 an autonomous body, the **National Educational Technology Forum (NETF)**, will be created to provide a platform for the free exchange of ideas on the use of technology to enhance learning, assessment, planning, administration, and so on, both for school and higher education. The NETF will have the following functions:

- --provide independent evidence-based advice to Centra and State Government agencies on technology-based interventions;
- --build intellectual and institutional capacities in educational technology;
- --envision strategic thrust areas in this domain; and articulate new directions for research and innovation.

Statement 2 is incorrect. **All India Council for Technical Education** is the statutory body and a national-level council for technical education. NETF is not envisaged to replace the AICTE.

# Q.52) Which of the following institution is organizing the 'Prarambh: Startup India International Summit'?

- a) NITI Aayog
- b) Department of Science & Technology
- c) Department for Promotion of Industry and Internal Trade
- d) World Economic Forum

#### Correct answer: C

**Explanation:** 'Prarambh: Startup India International Summit' is being organized by the **Department for Promotion of Industry and Internal Trade**, Ministry of Commerce and Industry, on 15-16 January, 2021.

The Summit marks the fifth anniversary of the Startup India initiative. With participation from over 25 countries and more than 200 global speakers, the Summit focus on enhancing multilateral cooperation and engagement with countries from around the globe to collectively develop and strengthen the startup ecosystems.

Q.53) Which of the following defence forces(s) participated in the Exercise Sea Vigil 21?

- 1. Indian Coast Guard
- 2. Sri Lanka Navy
- 3. Royal Thailand Navy

Select the correct answer using the code given below:

- a) 1 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 2 only

#### Correct answer: A

**Explanation:** Exercise **Sea Vigil 21**, the two-day coastal defence exercise was conducted on 12 and 13 January 2021. The conceptual and geographical expanse of Sea Vigil included the entire coastline and EEZ of the country and contingencies from Peace to War-time were exercised. In addition, mitigation measures, on shore, in case of any breach in coastal security were also validated.

The exercise involved deployment of the entire coastal security apparatus and more than 110 surface assets of **Indian Navy (IN) and Coast Guard (CG)** participated in the exercise. In addition, a large number of Marine Police and Customs assets were also deployed.

#### Q.54) Consider the following statements regarding the National Innovation Foundation (NIF):

- 1. It is an autonomous body under the Department of Science and Technology (DST).
- 2. Its mandate is to strengthen the grassroots technological innovations and outstanding traditional knowledge of India.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

**National Innovation Foundation (NIF)** is an autonomous body of the Department of Science and Technology (DST), Government of India. It is India's national initiative to strengthen the grassroots technological innovations and outstanding traditional knowledge.

Its mission is to help India become a creative and knowledge-based society by expanding policy and institutional space for grassroots technological innovators.

NIF scouts, supports and spawns' grassroots innovations developed by individuals and local communities in any technological field, helping in human survival without any help from formal sector.

# A National Innovation Portal (NIP) by NIF has been launched recently hosting about 1.15 lakh innovations scouted from common people of the country, covering Engineering, Agriculture, Veterinary and Human Health.

# Q.55) Consider the following statements regarding the **Pradhan Mantri Kaushal Vikas Yojana** (PMKVY 3.0):

- 1. It is a Central Sector Scheme.
- 2. It is a demand driven scheme with bottom-up approach for identification and mapping of job roles.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** The first version of **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** scheme was launched in 2015 to encourage and promote skill development in the country by providing

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free short duration skill training and incentivizing this by providing monetary rewards to youth for skill certification.

**PMKVY 2.0 (2016-20)** was launched by scaling up sectors, geographies and by greater alignment with other missions / programs of Government of India such as 'Make in India', 'Digital India' and 'Swachh Bharat Mission'.

Skill India Mission **PMKVY 3.0** envisages to create an ecosystem for the youth to make informed choices on the available skilling avenues by training of eight lakh candidates over a scheme period of 2020-2021 with an outlay of Rs. 948.90 crore.

Statement 1 is incorrect. This scheme will have two components:

- --Centrally Sponsored Centrally Managed (CSCM) known as the Central Component to be implemented by the National Skill Development Corporation (NSDC).
- --Centrally Sponsored State Managed (CSSM) known as the State Component to be implemented by the State Skill Development Missions (SSDMs) / respective Departments of the States / UTs.

Total target of the scheme will be divided approximately in the ratio of 75:25 between Central and State Components respectively. However, States having performed well and willing to take higher targets shall be allocated accordingly based on assessment of their performance.

Statement 2 is correct. It is a demand driven scheme with bottom up approach for identification and mapping of job roles.

District level plan shall be the fundamental level of implementation. district level plan shall be the fundamental level of implementation. District Skill Committee (DSC) shall be the focal point of implementation of PMKVY 3.0. DSC shall play major role in preparation of District level plan, mobilization and counselling of candidates, formation of training batches, monitoring of quality assurance and post training support.

#### Q.56) The Army Day commemorates which of the following event?

- a) Returning of Indian Army personnel from World War II
- b) India's victory in the Indo-Pak War of 1971
- c) General K M Carriappa taking over the command of Army in 1949
- d) India's victory in the Indo-Pak War of 1965

### Correct answer: C

**Explanation:** Every year Indian Army celebrates 15th January as 'Army Day'.

The event commemorates the day when **General (later Field Marshal) K M Carriappa took over the command of Army** from General Sir FRR Bucher, the last British Commander-in-Chief in 1949 and became the first Commander-in-Chief of Indian Army post Independence.

# Q.57) Consider the following statements regarding the Scheme of Fund for Regeneration of Traditional Industries (SFURTI):

- 1. It is an initiative by the Ministry of Tribal Affairs.
- 2. It aims to organize the traditional industries and artisans into clusters to make them competitive and provide support for their long-term sustainability.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. Scheme of Fund for Regeneration of Traditional Industries (SFURTI) is an initiative by Ministry of MSME to promote Cluster development.

Statement 2 is correct. Objectives of the scheme:

- --To organize the traditional industries and artisans into clusters to make them competitive and provide support for their long term sustainability
- --To enhance marketability of products of clusters by providing support for new products, design intervention and improved packaging, and also the improvement of marketing Infrastructure
- --To equip traditional artisans of the associated clusters with improved skills and capabilities through training and exposure visits
- --To build innovative and traditional skills, improved technologies, advanced processes, market intelligence and new models of public-private partnerships, so as to gradually replicate similar models of cluster- based regenerated traditional Industries.

### Q.58) Consider the following statements regarding India's COVID-19 vaccination program:

- 1. COVAXIN and COVISHIELD have been approved for restricted use in emergency situation.
- 2. CO-WIN platform facilitates real time information of vaccine stocks, storage temperature and individualized tracking of beneficiaries for COVID-19 vaccine.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Covishield from the Serum Institute of India and Bharat Biotech's Covaxin** have been granted of permission for restricted use in emergency situation subject to certain regulatory conditions.

Statement 2 is correct. **CoWIN**, an online digital platform developed by Union Ministry of Health and Family Welfare, will be used to drive the COVID-19 vaccination programme in the country.

It will facilitate real time information of vaccine stocks, storage temperature and individualized tracking of beneficiaries for COVID-19 vaccine. This digital platform will assist programme managers across National, State, and District levels while conducting vaccination sessions. It will help them track beneficiary coverage, beneficiary dropouts, sessions planned v/s sessions held and vaccine utilization

### **HOW SHOTS WILL REACH RECIPIENTS**





#### **Q.59)** Consider the following statements:

- 1. A foreigner can drive a vehicle in India on the basis of European driving license.
- 2. In India, International Driving Permit (IDP) can be issued to NRI/foreigners.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Both statements are incorrect.

An NRI or foreigner cannot drive a vehicle in India on the basis of European license or driving license issued by any foreign country. However, if he has obtained an IDP from his own country and his country is a signatory to the 1949 Geneva Convention he can drive in India the specified category of vehicle till the IDP is valid.

IDP in India can be issued only to Indian citizens.

# The Ministry of Road Transport and Highways has issued a notification to facilitate the issuance of International Driving Permit (IDP) for Indian citizens whose IDP has expired while they are abroad.

#### **Q.60)** Consider the following statements regarding the **National Youth Festival**:

- 1. It is an annual event organized by the Ministry of Youth Affairs and Sports.
- 2. The festival commemorates the birth anniversary of Swami Vivekananda.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

The **National Youth Festival** in India is an annual gathering of youth with various activities including competitive ones. Celebrated to commemorate the birth anniversary of youth icon Swami Vivekananda, it is organized by Ministry of Youth Affairs and Sports, Government of India in collaboration with one of the State Governments.

Due to COVID-19, the 24th National Youth Festival is being held in virtual mode. YUVAAH – Utsah Naye Bharat Ka' is the theme of this year's festival.

# **Q.61)** Consider the following statements regarding the **Grid Connected Rooftop Solar Programme**:

- 1. It aims to achieve cumulative capacity of 40,000 MW from Rooftop Solar (RTS) Projects by the year 2022.
- 2. Ministry of New and Renewable Energy is providing hundred percent subsidy for the rooftop solar power upto 3 kW.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2



#### d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The **Phase-II of the Grid Connected Rooftop and Small Solar Power Plants Programme** aims for achieving cumulative capacity of 40 GW RoofTop Solar plants by 2022.

Statement 2 is incorrect. Components of the scheme:

#### Component A: Central Financial Assistance (CFA) to Residential sector - 4 GW

--CFA of **40% for capacity up to 3 kWp**, 20% for capacity beyond 3 kWp and up to 10 kWp and 20% for Group Housing Societies/Residential Welfare Associations capacity up to 500 kWp (limited to 10 kWp per house and total upto 500 kWp)

#### Component B: Incentives to DISCOMs for initial 18 GW Capacity

Progressive incentive for Discoms for achievements above baseline (the cumulative RTS capacity installed at the end of previous financial year).

--No incentives for capacity addition up to 10%, 5% incentives for addition beyond 10% and up to 15% and 10% incentives for addition beyond 15%

#### **Q.62)** Consider the following statements:

- 1. Indian Railways is a public sector undertaking (PSU) under the Government of India.
- 2. Iron-ore and Steel combined form more than half of the annual freight loading of Indian Railway.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. **Indian Railways is not a PSU but is a department** of Government of India under a ministry, handled by a minister, elected to Parliament.

Statement 2 is incorrect. Iron-ore is the second most important stream of traffic of Railways and along with steel accounts for nearly 17% (53.81 Million Tonne of Steel & 153.35 Million Tonne of Iron ore) of total 1210 Million Tonne freight loading of IR in 2019-20.

# A new 'Iron-ore Policy 2021' governing allocation of rakes and transportation of iron-ore has been issued by Indian Railways recently.

#### Q.63) Which of the following is/are the provisions under the National Mineral Policy 2019?

- 1. Encouragement of merger and acquisition of mining entities
- 2. Introduction of Right of First Refusal for reconnaissance permit and prospecting license holders
- 3. Encouraging the private sector to take up exploration

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The **National Mineral Policy 2019** includes provisions which will give boost to mining sector such as

--introduction of Right of First Refusal for RP/PL holders,

[A reconnaissance permit is granted for preliminary prospecting through regional, aerial, geophysical or geochemical surveys and geological mapping. A prospecting licence is granted for exploring, locating and proving mineral deposits.]

- --encouraging the private sector to take up exploration,
- --encouragement of merger and acquisition of mining entities and
- --transfer of mining leases and creation of dedicated mineral corridors to boost private sector mining areas.

The 2019 Policy proposes to grant status of industry to mining activity to boost financing of mining for private sector and for acquisitions of mineral assets in other countries by private sector.

The Policy also mentions rationalize reserved areas given to PSUs which have not been used and to put these areas to auction, which will give more opportunity to private sector for participation.

#### Q.64) Consider the following statements regarding the National Education Policy, 2020:

- 1. The NEP 2020 is only second in of National Education Policy of independent India.
- 2. It proposed a National Mission on Foundational Literacy and Numeracy to target illiteracy among adult population.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. The **National Education Policy, 2020** is the third in the series of National Education Policies (1968 and 1986 modified in 1992) in India and is the first education policy of the 21st century. NEP 2020 covers wider spectrum of school education from pre-primary to senior secondary.

Statement 2 is incorrect. The highest priority of the education system will be to achieve universal foundational literacy and numeracy in primary school by 2025. To this end, a **National Mission on Foundational Literacy and Numeracy** is to be set up by the Ministry of Education on priority.

Accordingly, all State/UT governments will immediately prepare an implementation plan for attaining universal foundational literacy and numeracy in all primary schools, identifying stage-wise targets and goals to be achieved by 2025, and closely tracking and monitoring progress of the same.

#### **Q.65)** Consider the following statements:

- 1. The forest dwellers are legally empowered with the ownership and governance of the Minor forest produce through the Forest Rights Act, 2006.
- 2. TRIFED is a national-level apex organization functioning under the administrative control of Ministry of Tribal Affairs

Which of the statements given above is/are correct?



- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. The forest dwellers are legally empowered with the ownership and governance of the minor forest produce through **PESA** (**Panchayat Extension** to Scheduled Areas) Act, 1996, and the Forest Rights Act, 2006.

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, gives the "right of ownership, access to collect, use and dispose of minor forest produce which has been traditionally collected within or outside village boundaries".

Under Forest Rights Act, 2006, "minor forest produce" includes all non-timber forest produce of plant origin including bamboo, brush wood, stumps, cane, tussar, cocoons, honey, wax, lac, tendu or kendu leaves, medicinal plants and herbs, roots, tubers and the like.

Statement 2 is correct. The Tribal Cooperative Marketing Development Federation of India (TRIFED) came into existence in 1987. It is a national-level apex organization functioning under the administrative control of Ministry of Tribal Affairs

# TRIFED and Indian Farm Forestry Development Co-operative Ltd (IFFDC) have entered into a Memorandum of Understanding (MoU) on January 18, 2021 to work together for tribal livelihood generation.

### **Q.66)** The **India Innovation Index** is an initiative of which of the following institution?

- a) Invest India
- b) NITI Aayog
- c) World Economic Forum
- d) Federation of Indian Chambers of Commerce & Industry

#### Correct answer: B

**Explanation:** The **India Innovation index is released by the NITI Aayog**. It has released the second edition of the India Innovation Index 2020 today.

The India Innovation Index 2020 seeks to rank the states and union territories based on their relative performance of supporting innovation, and to empower them to improve their innovation polices by highlighting their strengths and weaknesses.

The ranking methodology is designed in a way that states can draw lessons from the national leaders in innovation. Hopefully, this will lead to a healthy competition among the states and union territories, thereby fostering competitive federalism.

#### Q.67) Consider the following statements regarding the National Startup Advisory Council:

- 1. It is mandated to advise the Government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country.
- 2. It is chaired by the Minister of Electronics and Information Technology.

Which of the statements give above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2



#### Correct answer: A

**Explanation:** Statement 1 is correct. The Central Government last year notified the **National Startup Advisory Council** to advise the Government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country to drive sustainable economic growth and generate large scale employment opportunities.

Statement 2 is incorrect. The National Startup Advisory Council will be chaired by **Minster for Commerce** & Industry. The Council will consist of the non-official members, to be nominated by Central Government, from various categories like founders of successful startups, veterans who have grown and scaled companies in India, persons capable of representing interests of investors into startups, persons capable of representing interests of incubators and accelerators and representatives of associations of stakeholders of startups and representatives of industry associations.

# Recently non-official members on the National Startup Adviso<mark>ry Co</mark>uncil h<mark>ave been nomi</mark>nate<mark>d</mark> by the government.

**Q.68)** Which of the following is being commemorated through 'Parakram Diwas' celebration recently announced by the government?

- a) Birth Anniversary year of Netaji Subhas Chandra Bose
- b) The Galwan valley clash between India-China armed forces
- c) Balakot Air strike
- d) Nathu La and Cho La clashes of 1967

#### Correct answer: A

**Explanation:** Government of India has decided to celebrate the **125th Birth Anniversary year of Netaji Subhas Chandra Bose** in a befitting manner at national and international level, beginning from 23rd January 2021. A High Level Committee, headed by the Prime Minister, has been constituted for deciding the programs, and to supervise and guide the commemoration.

In order to honour and remember Netaji's indomitable spirit and selfless service to the nation, Government of India has decided to celebrate his birthday on the 23rd day of January every year as "PARAKRAM DIWAS".

# Gazette Notification for declaring 23rd January as "ParakramDiwas" has been published.

#### Q.69) Consider the following statements regarding the North Eastern Council (NEC):

- 1. It is a zonal council established under the States Re-organisation Act, 1956.
- 2. The Union Home Minister is ex-officio Chairman of the NEC.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **North Eastern Council** is the nodal agency for the economic and social development of the North Eastern Region which consists of the eight States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The North Eastern Council was constituted in 1971 by an Act of Parliament.

# Other zonal councils are set up under the States Re-organisation Act, 1956.



Statement 2 is correct. The **Union Home Minister** is ex-officio Chairman and the MoS(IC) Development of North Eastern Region (DoNER) is the ex-officio Vice-Chairman of the NEC.

Q.70) Consider the following statements regarding the "Electricity (Rights of Consumers) Rules, 2020":

- 1. Prosumers to have right to set up Renewable Energy (RE) generation unit including roof top solar photovoltaic (PV) systems.
- 2. Maximum time period of 7 days in metro cities and 30 days in rural areas identified to provide new connection and modify an existing connection:

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

Union Ministry of Power has promulgated "Electricity (Rights of Consumers) Rules, 2020" laying down the rights of power consumers in the country.

- --It is the duty of every distribution licensee to supply electricity on request made by an owner or occupier of any premises in line with the provisions of Act.
- --It is the right of consumer to have minimum standards of service for supply of electricity from the distribution licensee.
- -- Maximum time period of 7 days in metro cities and 15 days in other municipal areas and 30 days in rural areas identified to provide new connection and modify an existing connection:
- --While the prosumers will maintain consumer status and have the same rights as the general consumer, they will also have right to set up Renewable Energy (RE) generation unit including roof top solar photovoltaic (PV) systems either by himself or through a service provider. Net metering for loads up to ten kW and for gross metering for loads above ten kW.

A prosumer is an one who both consumes as well as produces.

Q.71) Which of the following institution conducted the Time Use Survey (TUS) 2019 in India?

- a) National Statistical Office (NSO)
- b) NITI Aayog
- c) Labour Bureau
- d) Centre for Monitoring Indian Economy

## Correct answer: A

**Explanation:** Time Use Survey (TUS) provides a framework for measuring time dispositions by the population on different activities. It is an important source of information about the activities that are performed by the population and the time duration for which such activities are performed.

The primary objective of Time Use Survey (TUS) is to measure participation of men and women in paid and unpaid activities. TUS is an important source of information on the time spent in unpaid caregiving activities, volunteer work, unpaid domestic service producing activities of the household members. It also provides information on time spent on learning, socializing, leisure activities, self-care activities, etc., by the household members.

National Statistical Office (NSO) conducted the first Time Use Survey in India during January – December 2019. The survey measures the participation rate and time spent on paid activities, care activities, unpaid activities, etc.

## **Q.72)** Consider the following statements:

- 1. The first National Conference with States on Logistics has been organized by the NITI Aayog.
- 2. The Logistics Performance Index is released by the World Bank every two years.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The first **National Conference with States on Logistics** was organized on Tuesday 19th January, 2021 by the Department of Commerce, Ministry of Commerce & Industry, with the objective to initiate a consultative and collaborative framework for the Central and State Governments to work in a coordinated manner in the logistic sector.

Statement 2 is correct. The **Logistics Performance Index is reported by the World Bank** in every two years. The LPI is based on a worldwide survey of stakeholders on the ground providing feedback on the logistics "friendliness" of the countries in which they operate and those with which they trade.

## Q.73) Consider the following statements regarding the India Innovation Index 2020:

- 1. It has been released by the Department for Promotion of Industry and Internal Trade (DPIIT).
- 2. Karnataka is ranked first among in 'Major States' category.

Which of the statements given above is/are correct?

- a) 1 Only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **NITI Aayog, along with the Institute for Competitiveness**, have released the second edition of the India Innovation Index in a virtual event. The report examines the innovation capabilities and performance of the states and union territories. The first edition of the index was launched in October 2019.

Statement 2 is correct. In the 'Major States' category, **Karnataka** continued to occupy the top position, while Maharashtra moved past Tamil Nadu to reach the second place.

Overall, Delhi retained its first rank, while Chandigarh made a big leap since 2019 and landed in the second place this year.

Under the 'North-Eastern/Hill States' category, Himachal Pradesh moved up from the second position to emerge as the top ranker this year, while 2019's top performer (in this category), Sikkim, slipped down to the fourth position.

Q.74) Consider the following statements regarding status of telecom services in India:

- 1. Out of the total Telephone subscription in India, the share of Rural subscription is more than the Urban subscription.
- 2. The tele-density of India is more than hundred percent.

Which of the statements given above is/are correct?

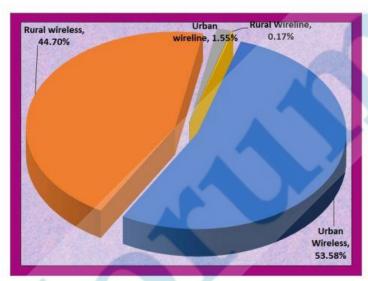
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

## Correct answer: D

**Explanation:** Telecom Regulatory Authority of India (TRAI) has recently released the **"Indian Telecom Services Performance Indicator Report**" for the Quarter ending 30th September, 2020. This Report provides a broad perspective of the Telecom Services in India and presents the key parameters and growth trends of the Telecom Services.

Statement 1 is incorrect. Out of the total subscription, the share of Rural subscription is at 44.87% and Urban subscription is at 55.13%.

## Composition of Telephone Subscribers



Statement 2 is incorrect. **Teledensity** – Number of telephone connections (fixed lines and mobile phone subscribers) per 100 inhabitants within a geographical area.

The overall Tele-density in India also increased from 85.85% as in QE Jun-20 to 86.22% as in QE Sep-20. The Urban Tele-density also increased from 137.35% to 138.25% and the Rural Tele-density remained same i.e. 58.96%, as it was during last quarter June, 2020.

Q.75) Which of the following defence force(s) of India is/are participating in the 'Exercise Kavach'?

- 1. Indian Army
- 2. Indian Air Force
- 3. Indian Coast Guard

Select the correct answer using the code given below:

a) 1 and 2 only



- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** A large scale **Joint Military exercise 'Exercise Kavach'** involving assets of Indian Army, Indian Navy, Indian Air Force and Indian Coast Guard is being conducted under the aegis of the Andaman and Nicobar Command (ANC), the only Joint Forces Command of the country.

The exercise would involve participation and deployment of elements of Army's Amphibious Brigade along with supporting forces including Special Forces of Navy, Armour/Mechanised components, Naval Ships comprising Destroyers, ASW Corvettes and Landing Ships with shipborne helicopters of Eastern Naval Command and ANC, Jaguar Maritime Strike and Transport aircrafts from Indian Air Force and assets of Coast Guard.

The joint force would execute multi domain, high intensity offensive and defensive manoeuvres in the Andaman Sea and Bay of Bengal and carry out amphibious landing operations, air landed operation, helicopters-borne insertion of Special Forces from sea culminating in tactical follow-on operations on land.

Q.76) What was the mandate of the B.N. Srikrishna Committee?

- a) Data Protection Framework for India
- b) National Education Policy
- c) Doubling the Farmer's Income
- d) Reforms in Criminal Laws of India

#### Correct answer: A

**Explanation:** A **Committee of Experts on a Data Protection Framework** for India under the chairmanship of (retd.) Justice B.N. Srikrishna was constituted by the government in 2017 which submitted its report in 2018. The committee also brought out a draft Personal Data Protection Bill (PDPB).

The framework seeks to put in place a culture of privacy by design and promoting concepts such as consent framework, purpose limitation, storage limitation, and data minimization among various other privacy-oriented concepts.

[Dr. Kasturirangan Committee - National Educational Policy.]

[Ashok Dalwai Committee - Doubling the Farmers' Income]

[Ranbir Singh Committee - Criminal Laws Reforms]

**Q.77)** Consider the following statements regarding the **Rapid Assessment System (RAS)** that has been in news recently:

- 1. It has been developed by the National e-Governance Division (NeGD).
- 2. It is a feedback tool for e-services delivered by Government of India and State Governments. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

Under the COVID Vaccination drive, the Government of India is using 'Rapid Assessment System (RAS)' for taking feedback from those who get vaccinated. This initiative to utilize RAS platform is aimed at improving the vaccination experience for citizens, while ensuring that all norms are being followed during the vaccination process at all vaccination centres.

**National e-Governance Division** has developed a Rapid Assessment System (RAS) for online instant feedback for e-services (online as well as offline through counters) delivered by Government of India and State Governments.

The main objective of RAS is to continuously assess the quality of eServices, through feedback, under each e-Governance project and realign processes to achieve targeted benefits. RAS interface prompts the citizens to provide feedback about the quality of service immediately after the citizen avails an eService of the Government.

## Q.78) Consider the following statements regarding the Personal Data Protection Bill, 2019:

- 1. It provides for right of individual to obtain confirmation from the data fiduciary on whether their personal data has been processed.
- 2. Sensitive personal data may be transferred outside India for processing if explicitly consented to by the individual.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

The **Personal Data Protection Bill (PDPB)** was introduced in Parliament in December 2019 and is currently being discussed by a **joint select committee**.

The Bill sets out certain rights of the individual (or data principal). These include the right to: (i) obtain confirmation from the fiduciary on whether their personal data has been processed, (ii) seek correction of inaccurate, incomplete, or out-of-date personal data, (iii) have personal data transferred to any other data fiduciary in certain circumstances, and (iv) restrict continuing disclosure of their personal data by a fiduciary, if it is no longer necessary or consent is withdrawn.

Sensitive personal data may be transferred outside India for processing if explicitly consented to by the individual, and subject to certain additional conditions. However, such sensitive personal data should continue to be stored in India.

The Bill sets up a **Data Protection Authority** which may take steps to protect interests of individuals, prevent misuse of personal data, and ensure compliance with the Bill.

## **Q.79)** Consider the following statements:

- 1. SVEEP is a flagship program of the Election Commission of India for spreading voter awareness and promoting voter literacy in India.
- 2. The National Voters' Day is been celebrated on January 25 every year marking first ever general election of 1952.

Which of the statements given above is/are correct?

a) 1 only



- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **Systematic Voters' Education and Electoral Participation program**, better known as SVEEP, is the flagship program of the Election Commission of India for voter education, spreading voter awareness and promoting voter literacy in India.

Statement 2 is incorrect. The **National Voters' Day** has been celebrated on **January 25** every year since 2011, all across the country to mark the foundation day of Election Commission of India, i.e. 25th January 1950.

The theme for this year's NVD, 'Making Our Voters Empowered, Vigilant, Safe and Informed'.

# General elections to the first Lok Sabha since independence were held in India between 25 October 1951 and 21 February 1952.

## **Q.80)** Consider the following statements:

- 1. The Census (2011) data showed a significant declining trend in the Child Sex Ratio reaching all time low below 900.
- 2. The objective of the Beti Bachao, Beti Padhao (BBBP) Scheme is to celebrate the girl child & enable her education.
- 3. Sex Ratio at Birth (SRB) and Gross Enrolment Ratio of girls in the schools at secondary level has increased in last five years.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **Census (2011)** data showed a significant declining trend in the Child Sex Ratio (CSR), calculated as number of girls for every 1000 boys between age group of 0-6 years, with an all time low of **918 in 2011 from 976 in 1961.** 

Statement 2 is correct. The Overall Goal of the **Beti Bachao**, **Beti Padhao** (**BBBP**) Scheme is to Celebrate the Girl Child & Enable her Education. The objectives of the Scheme are:

- --Prevent gender biased sex selective elimination
- --Ensure survival & protection of the girl child
- -- Ensure education of the girl child

Statement 3 is correct. During the last 6 years the Sex Ratio at Birth (SRB) has improved by 16 points from 918 in 2014-15 to 934 in 2019-20. Gross Enrolment Ratio of girls in the schools at secondary level has improved from 77.45 to 81.32.

## Q.81) Which of the following is/are component(s) of the SagarMala project?

- 1. Port Modernization & New Port Development
- 2. Port-linked Industrialization
- 3. Coastal Community Development
- 4. Coastal Shipping & Inland Waterways Transport



Select the correct answer using the code given below:

- a) 1, 2 and 3 only
- b) 2, 3 and 4 only
- c) 1 and 4 only
- d) All of the above

#### Correct answer: D

**Explanation:** Vision of the **Sagarmala Programme** is to reduce logistics cost for **EXIM** and domestic trade with minimal infrastructure investment. Components of Sagarmala Programme are:

- --Port Modernization & New Port Development: De-bottlenecking and capacity expansion of existing ports and development of new greenfield ports.
- --Port Connectivity Enhancement: Enhancing the connectivity of the ports to the hinterland, optimizing cost and time of cargo movement through multi-modal logistics solutions including domestic waterways (inland water transport and coastal shipping).
- --Port-linked Industrialization: Developing port-proximate industrial clusters and Coastal Economic Zones to reduce logistics cost and time of EXIM and domestic cargo.
- --Coastal Community Development: Promoting sustainable development of coastal communities through skill development & livelihood generation activities, fisheries development, coastal tourism etc.
- --Coastal Shipping & Inland Waterways Transport: Impetus to move cargo through the sustainable and environment-friendly coastal and inland waterways mode.

Q.82) Which of the following is/are potential impacts of the proposed imposition of 'green tax' on old vehicles?

- 1. Increase fuel efficiency
- 2. Reduce environmental pollution
- 3. Improving safety standards

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation: Road Transport and Highways Ministry** has approved the proposal to levy the tax on older vehicles.

The policy will only apply for petrol and diesel vehicles in a bid to protect the environment and curb pollution. Whereas other vehicles like strong hybrids, electric vehicles and those running on alternate fuels like CNG, ethanol and LPG will be exempted.

The move in addition to reducing air pollution will help raise fuel efficiency, and improving safety standards by dissuading resale of old vehicles.

According to MoRTH, the older fleet, typically manufactured before the year 2000, constitute less than 1 percent of the total fleet but contributes around 15 percent of total vehicular pollution. These older vehicles pollute 10-25 times more than modern vehicles.

# Q.83) Consider the following statements regarding the National Non-communicable Disease Monitoring Survey (NNMS):

- 1. It has been conducted by the National Sample Survey Office.
- 2. It has observed that more than one fourth of the adults in India are overweight or obese. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **National Non-communicable Disease Monitoring Survey (NNMS)** conducted by the Indian Council of Medical Research (ICMR) - National Centre for Disease Informatics & Research (NCDIR), Bengaluru, Government of India with the support of Ministry of Health and Family Welfare, Govt. of India assesses the national NCD targets and indicators.

Statement 2 is correct. The findings stated that **more than one in every four adults and 6.2% adolescents were overweight or obese**; almost three out of ten adults had raised blood pressure and 9.3% had raised blood glucose.

Recently released survey, conducted during the period of 2017–18, showed that more than two in five adults and one in four adolescents were doing insufficient physical activity and their average daily intake of salt was 8 gms. The survey also showed that one in every three adults and more than one-fourth proportion of men used any form of tobacco and consumed alcohol in past 12 months respectively.

## Q.84) Consider the following statements regarding the gallantry awards of India:

- 1. The gallantry awards are announced twice in a year, on the occasion of the Republic Day and the Independence Day.
- 2. Civilian citizens are not eligible for the Param Vir Chakra awards.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

## Correct answer: C

Explanation: Post-independence, first three gallantry awards namely Param Vir Chakra, Maha Vir Chakra and Vir Chakra were instituted by the Government of India in 1950.

Thereafter, other three gallantry awards i.e. Ashoka Chakra Class-I, Ashoka Chakra Class-II and Ashoka Chakra Class-III were instituted in 1952, these awards were renamed as Ashoka Chakra, Kirti Chakra and Shaurya Chakra respectively in January, 1967.

Statement 1 is correct. These gallantry awards are announced twice in a year - first on the occasion of the Republic Day and then on the occasion of the Independence Day.

Statement 2 is correct. The following categories of persons shall be eligible for the Param Vir Chakra, the Maha Vir Chakra and the Vir Chakra:

--Officers and men and women of all ranks of the Naval, Military and Air Forces, of any of the Reserve Forces, of the Territorial Army, Militia and of any other lawfully constituted Armed Forces.

--Matrons, Sisters, Nurses and the Staff of the Nursing Services and other Services pertaining to Hospitals and Nursing, and Civilians of either sex serving regularly or temporarily under the orders, directions or supervision of any of the above-mentioned Forces

# Q.85) Which of the following is/are the objectives of **Pradhan Mantri Kaushal Vikas Yojana** (PMKVY) 3.0?

- 1. Provide support to youth for skill training and certification.
- 2. Promote sustainable Skill Centres for greater participation of private sector Select the correct answer using the code given below:
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation: Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE) implemented by National Skill Development Corporation.

Objectives of PMKVY 3.0 (2020-21):

- --Create an ecosystem for the youth to make informed choices on the available skilling avenues.
- -- Provide support to youth for skill training and certification.
- --Promote sustainable Skill Centres for greater participation of private sector.
- --Benefit 8 lakh youth over the scheme period (2020-21).

# Q.86) Consider the following statements regarding the Annual Status of Education Report (ASER):

- 1. It is published by the National Council of Educational Research and Training (NCERT).
- 2. ASER is a household-based rather than school-based survey.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

## Correct answer: B

**Explanation:** Statement 1 is incorrect. The **Annual Status of Education Report (ASER)** is released by NGO Pratham. This is an annual survey that aims to provide reliable estimates of children's enrolment and basic learning levels for each district and state in India. ASER has been conducted every year since 2005 in all rural districts of India.

Statement 2 is correct. Unlike most other large-scale learning assessments, **ASER** is a **household-based rather than school-based survey**. This design enables all children to be included – those who have never been to school or have dropped out, as well as those who are in government schools, private schools, religious schools or anywhere else.

#COVID-19 pandemic spurred the growth of online education in India. Remote learning opens up another channel that widens the learning disadvantage of relatively poorer children. ASER 2020 has found that a majority (55 per cent) of children in relatively poorer households not having a

smartphone, their access to whatever learning material being distributed in this mode was limited.

## **Q.87)** Consider the following statements regarding the **Textiles Committee**:

- 1. It is a statutory body.
- 2. Its sole objective is to ensure the quality of textiles for export purposes.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The **Textiles Committee** was established in the year 1963 by an Act of Parliament and is a statutory body under the Ministry of Textiles.

Statement 2 is incorrect. The Textiles Committee's main objective is to ensure the **quality of** textiles and textile machinery both for internal consumption and export purposes. The Textiles Committee is the only body providing for all the quality related needs of the entire Textiles Value Chain (TVC) in an integrated format on a pan-India basis through its network.

# Textiles Committee, Ministry of Textiles have signed a Memorandum of Understanding (MoU) with Nissenken Quality Evaluation Centre, Japan to boost export of Textile and Apparel to Japanese market.

## Q.88) Consider the following statements regarding the India Justice Report 2020:

- 1. It has been published by the Department of Justice, Ministry of Law and Justice.
- 2. Women comprise less than one third of the total Judges in India.
- 3. Maharasthra is the top ranked state on delivery of justice to people among large and midsized states of India.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **India Justice Report (IJR)** is an initiative of **Tata Trusts** in collaboration with Centre for Social Justice, Common Cause, Commonwealth Human Rights Initiative, DAKSH, TISS-Prayas, Vidhi Centre for Legal Policy and How India Lives. The maiden IJR was announced in 2019.

Statement 2 is correct. The Report highlights stark conclusions, when aggregated for an all-India picture. Women comprise only 29% of judges in India. Two-thirds of the country's prisoners are yet to be convicted. In the last 25 years, since 1995, only 1.5 crore people have received legal aid, though 80% of the country's population is entitled to.

Statement 3 is correct. The **second edition of the India Justice Report**, India's only ranking of states on delivery of Justice to people, ranks Maharashtra once again at the top of the 18 Large and Mid-sized states (with population of over one crore each), followed by Tamil Nadu (2019: 3rd), Telangana (2019: 11th) Punjab (2019: 4th) and Kerala (2019: 2nd). The list of

seven Small States (population less than one crore each) was topped by Tripura (2019: 7th), followed by Sikkim (2019: 2nd) and Goa (2019: 3rd).

# Q.89) Consider the following statements regarding the Foreign Contribution (Regulation) Act (FCRA):

- 1. The editors or publishers of a registered newspaper are prohibited to accept any foreign contribution.
- 2. The foreign contribution can be received only in an account designated bank account of the EXIM Bank.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. Under the **Foreign Contribution (Regulation) Act, 2010**, certain persons are prohibited to accept any foreign contribution. These include: election candidates, editor or publisher of a newspaper, judges, government servants, members of any legislature, and political parties, among others.

The **FCRA Amendment Act 2020** adds public servants (as defined under the Indian Penal Code) to this list. Public servant includes any person who is in service or pay of the government, or remunerated by the government for the performance of any public duty.

Statement 2 is incorrect. The FCRA Amendment Act, 2020 states that foreign contribution must be received only in an account designated by the bank as "FCRA account" in such branch of the **State Bank of India, New Delhi**, as notified by the central government.

No funds other than the foreign contribution should be received or deposited in this account. The person may open another FCRA account in any scheduled bank of their choice for keeping or utilising the received contribution.

# Q.90) Consider the following statements regarding the Strengthening Teaching-Learning and Results for States (STARS) project:

- 1. The Program envisions improving the overall monitoring and measurement activities in the Indian education system through interventions in each state and UT.
- 2. It is being implemented as Centrally Sponsored Scheme.
- 3. The STARS projected is receiving financial assistance from the World Bank.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The objective of the **Strengthening Teaching-Learning** and **Results for States (STARS) Operation** for India is to improve the quality and governance of school education in selected states.

The project covers 6 States viz **Himachal Pradesh**, **Rajasthan**, **Maharashtra**, **Madhya Pradesh**, **Kerala and Odisha**. The identified States will be supported for various interventions for improving the quality of education.

Statement 2 and 3 are correct. The total project cost of STARS project is Rs 5718 crore with the financial support of World Bank amounting to US \$ 500 million (approximately Rs. 3700 crore) and rest coming as State share from the participating States, over a period of 5 years.

STARS project would be implemented as a new Centrally Sponsored Scheme under Department of School Education and Literacy (DoSEL), MOE.

# Q.91) Which of the following is/are potential benefit(s) for India of promoting blending of fuel grade ethanol with petrol?

- 1. Boost to agricultural economy
- 2. Saving of foreign exchange
- 3. Reduction in air pollution

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

### Correct answer: D

Explanation: The Government has fixed a target of 10% blending of fuel grade ethanol with petrol by 2022 and 20% blending by 2025. This has been done with a view to boost agricultural economy, to reduce dependence on imported fossil fuel, to save foreign exchange on account of crude oil import bill and to reduce the air pollution as Ethanol and ethanol-gasoline mixtures burn cleaner and have higher octane levels than pure gasoline.

To meet out the requirement of ethanol, the Government has notified a scheme for extending financial assistance to project proponents for enhancement of their ethanol distillation capacity or to set up distilleries for producing 1st Generation (1G) ethanol from feed stocks such sugarcane, rice available with Food Corporation of India, maize etc.

Ethanol is a renewable biofuel because it is made from biomass. Ethanol is a clear, colorless alcohol made from a variety of biomass materials called feedstocks. Fuel ethanol feedstocks include grains and crops with high starch and sugar content such as corn, sorghum, barley, sugar cane, and sugar beets.

#### Q.92) Consider the following statements regarding India's gallantry awards:

- 1. The Param Vir Chakra, given for displaying acts of valour during wartime, is India's highest military decoration.
- 2. Civilian citizens as well as members of Police Forces are eligible to be awarded the Ashoka Chakra.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Post-independence**, first three gallantry awards namely Param Vir Chakra, Maha Vir Chakra and Vir Chakra were instituted by the Government of India on 26th January, 1950. Thereafter, other three gallantry awards i.e. Ashoka Chakra Class-I, Ashoka Chakra Class-II and Ashoka Chakra Class-III were instituted in 1952, which were renamed as Ashoka Chakra, Kirti Chakra and Shaurya Chakra respectively in January, 1967.

**Order of precedence** of these awards is the Param Vir Chakra, the Ashoka Chakra, the Mahavir Chakra, the Kirti Chakra, the Vir Chakra and the Shaurya Chakra.

Statement 2 is correct. The Ashoka Chakra, Kirti Chakra and the Shaurya Chakra awards can be made to any member of the armed forces, police forces as well as civilians in the war effort or during peacetime.

# Q.93) Consider the following statements regarding the Water Technology Initiative (WTI) programme:

- 1. It aims to promote Research & Development activities for providing safe drinking water at affordable cost and in adequate quantity.
- 2. It is being implemented by the NITI Aayog under the Atal Innovation Mission. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **Water Technology Initiative**, initiated in August 2007 aims to promote R&D activities aimed at providing safe drinking water at affordable cost and in adequate quantity using appropriate Science and Technology interventions evolved through indigenous efforts. Since quality is the main consideration of safe drinking water, processes which imply nano-material and filtration technologies have been focused.

Statement 2 is incorrect. The Water Technology Initiative programme is an initiative of the **Department of Science & Technology (DST).** 

# IIT Bombay has come up with 'Shaft with Multiple Outlets' as an intervention for improving the performance of existing piped water distribution networks. The intervention consists of a new strategy of optimal water supply operation by use of scheduling and decentralizing infrastructure.

With support from the DST-Water Technology Initiative, IIT Bombay & IIT Madras, with participation of local gram panchayat, implemented the solution in the towns of Saphale, and Umerpada, in Palghar district, Maharashtra, which is currently provided with water from a multi village water supply system.

## **Q.94)** Consider the following statements regarding the **Padma Awards**:

- 1. Padma Vibhushan for exceptional and distinguished service is the highest civilian award of India.
- 2. The Padma Awards are conferred on the recommendations made by the Padma Awards Committee, chaired by the Prime Minister.

Which of the statements given above is/are correct?

a) 1 only



- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. **Bharat Ratna** is the highest civilian award of the country. The Padma Awards are one of the highest civilian honours of India announced annually on the eve of Republic Day.

The Awards are given in three categories: Padma Vibhushan (for exceptional and distinguished service), Padma Bhushan (distinguished service of higher order) and Padma Shri (distinguished service).

Statement 2 is incorrect. All nominations received for **Padma Awards** are placed before the Padma Awards Committee, which is constituted by the Prime Minister every year. The Padma Awards Committee is headed by the Cabinet Secretary and includes Home Secretary, Secretary to the President and four to six eminent persons as members. The recommendations of the committee are submitted to the Prime Minister and the President of India for approval.

Q.95) What is the objective of the recently launched "AYU SAMVAD" Campaign?

- a) Information dissemination to curb vaccine hesitancy among people
- b) Awareness campaign on 'Ayurveda for COVID 19 Pandemic'
- c) Promoting minimization of individual carbon footprint for long and sustainable livelihood
- d) Improving the communication between the elderly and younger generation

#### Correct answer: B

**Explanation: "AYU SAMVAD" (My Health My Responsibility)** is one of the largest public awareness campaign programs on AYURVEDA and COVID 19 PANDEMIC, organized by All India Institute of Ayurveda New Delhi, as envisioned & supported by Ministry of AYUSH. More than 5 lac lectures will be organized across the nation by Ayurveda Physicians for citizens of India.

This campaign will be immensely beneficial in understanding the importance of Ayurveda & in the fight against COVID 19 & also for Post Covid Management. This campaign will specifically focus on the Role of Preventive, Promotive, Curative and Rehabilitation in Management of COVID 19 through Ayurveda.

**Q.96)** Which of the following force(s) of India participated in the amphibious exercise **AMPHEX** – **21**?

- 1. Indian Army
- 2. Indian Air Force
- 3. Indian Navy

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** A large-scale tri-service joint amphibious exercise AMPHEX - 21 was conducted in Andaman & Nicobar group of islands from 21 − 25 Jan 2021. The exercise Created with love by ForumIAS- the knowledge network for civil services.

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involved participation of Naval ships, amphibious troops of the Army and different types of aircraft from the Air force.

The exercise involved multi-faceted maritime operations by synergised employment of amphibious assault ships, surveillance platforms, execution of maritime air strikes and complex manoeuvres at sea. Airborne insertion of Marine Commandos of Navy and Special Forces of the Army, naval gunfire support, amphibious landing of forces and follow-on operations also formed part of the exercise.

Exercise KAVACH for defence of Andaman & Nicobar Islands formed a part of AMPHEX - 21.



#### **SCIENCE & TECHNOLOGY**

- Q.1) Consider the following statements regarding the Laser Dazzlers:
- 1. It is a directed-energy instrument capable of temporarily blinding a person.
- 2. It can be used as a non-lethal method for warning and stopping suspicious vehicles or boats from approaching secured areas during both day and night.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

The **Laser Dazzler** is used as a non-lethal method for warning and stopping suspicious vehicles/boats/aircrafts/UAVs/pirates etc. from approaching secured areas during both day and night.

It is capable of dazzle and thereby suppress the person's/optical sensor's action with disability glare in case of non-compliance to orders. It disorient/ confuse/blind a person temporarily. It also dazzles and distract aircraft/UAVs.

# Bharat Electronics Limited (BEL) has signed a contract with In<mark>dian Nav</mark>y for supply 20 Light Amplification by Stimulated Emission of Radiation Dazlers (Laser Daz<mark>zler</mark>s).

**Q.2)** Which of the following **COVID-19 vaccine** has become the first one to receive emergency validation from **World Health Organisation**?

- a) Oxford University/AstraZeneca developed COVISHIELD
- b) Pfizer/BioNTech vaccine for COVID-19
- c) Moderna COVID-19 vaccine
- d) Sputnik V

#### Correct answer: B

**Explanation:** The World Health Organization (WHO) today listed the Comirnaty COVID-19 mRNA vaccine for emergency use, making the **Pfizer/BioNTech vaccine** the first to receive emergency validation from WHO since the outbreak began a year ago.

The **WHO's Emergency Use Listing (EUL)** opens the door for countries to expedite their own regulatory approval processes to import and administer the vaccine. It also enables UNICEF and the Pan-American Health Organization to procure the vaccine for distribution to countries in need.

The Comirnaty vaccine requires storage using an ultra-cold chain; it needs to be stored at -60°C to -90°C degrees. This requirement makes the vaccine more challenging to deploy in settings where ultra-cold chain equipment may not be available or reliably accessible. For that reason, WHO is working to support countries in assessing their delivery plans and preparing for use where possible.

Q.3) Consider the following statements regarding the "Thirty Metre Telescope":

1. It is being built at Hanle, Ladakh.

2. The TMT project is an international partnership among various nations including China and India.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **Thirty Metre Telescope** is proposed to be sited on top of the **Mauna Kea**, Hawaii. Project is expected to be completed in the early 2030s.

Statement 2 is correct. The Thirty-meter telescope (TMT) project is an international partnership between CalTech, Universities of California, Canada, Japan, China, and India; through the Department of Science and Technology (DST) and Department of Atomic Energy (DAE).

The "Thirty Meter" in TMT refers to the 30-meter diameter of the main mirror or the primary mirror. Since making a single 30-m glass blank for astronomy is not possible, it comprises 492 segments of 1.45-m each. The complex project involves making all the 492 segments to act as one single mirror of 30-m diameter while the telescope is tracking the sky with extreme precision.

India's contribution relates to the software, electronics and hardware to control the 492 segments behave as a single mirror within a few nanometers. More than a dozen industries are involved in making these very precision systems.

Q.4) Which of the following statements correctly defines the term 'Brachytherapy'?

- a) Internal radiation therapy to treat cancers and tumors
- b) Supplementary oxygen for people suffering from lung disease
- c) A branch of traditional Indian medicinal system
- d) Prophylaxis for vaccine side-effects

#### Correct answer: A

Explanation: Brachytherapy is a type of radiation therapy used to treat cancer. It places radioactive sources inside the patient to kill cancer cells and shrink tumors. A small radioactive material called a source is put into your body, inside or close to the cancer.

There are different types of radioactive sources (also called implants) such as seeds, wires or discs. They deliver radiotherapy to the area, destroying the cancer cells. Healthy tissue near to the cancer gets a lot less radiation.

# Bhabha Atomic Research Centre (BARC) Mumbai has developed Eye Cancer therapy in the form of the first indigenous Ruthenium 106 Plaque for treatment of Ocular Tumours.

## **Q.5)** Consider the following statements:

- 1. Random number generators have application in field of cryptography.
- 2. Council of Scientific and Industrial Research is the only institution in India to have developed a Quantum Random Number Generator (QRNG).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2



## Correct answer: A

**Explanation:** Statement 1 is correct. **Random numbers** have essential roles in many fields, such as Quantum Communication, cryptography (key generation, key wrapping, authentication etc.), scientific simulations, lotteries and fundamental physics experiments. Cryptography requires numbers that attackers can't guess.

The generation of genuine randomness is generally considered impossible with classical means. Statement 2 is incorrect. **DRDO Young Scientist Laboratory for Quantum Technologies** (**DYSL-QT**) has developed a Quantum Random Number Generator (QRNG) which detects random quantum events and converts those into a stream of binary digits.

The Laboratory has developed a fiber-optic branch path based QRNG. Branch path based QRNG is based on the principle that if a single photon is incident on a balanced beam splitter, it will take either of the beam-splitter output paths randomly. As the path chosen by photon is random, the randomness is translated to sequence of bits.

## **Q.6)** Consider the following statements:

- 1. Proxima Centauri is the nearest star to the Sun.
- 2. BLC1 is a radio signal being estimated to have emitted from Proxima Centauri. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Alpha Centauri star system**, a triple system, is the nearest star system to our sun. Of the three stars in Alpha Centauri, Proxima is thought to be the one actually closest to our sun, at 4.22 light-years away.

Statement 2 is correct. **Breakthrough Listen project**, started by the legendary physicist Stephen Hawking, regularly spot blasts of radio waves using two powerful telescopes— the Parkes Observatory in Australia or the Green Bank Observatory in the US.

**BLC1** (Breakthrough Listen Candidate 1) is a candidate SETI radio signal announced in December 2020, possibly coming from the star Proxima Centauri. and an apparent shift in its frequency is consistent with the Doppler effect caused by the movement of Proxima b, a planet of Proxima Centauri.

#### Q.7) Consider the following statements regarding the **Pneumonia**:

- 1. It causes infection in the lungs.
- 2. Bacteria, viruses, or fungi may cause pneumonia.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

## Correct answer: C

**Explanation:** Both statements are correct.

**Pneumonia** is an infection of the lungs that can cause mild to severe illness in people of all ages. It causes the air sacs, or alveoli, of the lungs to fill up with fluid or pus. Bacteria, viruses,

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or fungi may cause pneumonia. Symptoms can range from mild to serious and may include a cough with or without mucus (a slimy substance), fever, chills, and trouble breathing. # Some patients with coronavirus disease 2019 (COVID-19) have had pneumonia.

## **Q.8)** Consider the following statements regarding the **Trans fats**:

- 1. Trans fats are naturally occurring as well as artificially produced unsaturated fats.
- 2. Trans fats raise low-density lipoproteins (LDL) cholesterol level levels in body.
- 3. The Food Safety and Standards Authority of India (FSSAI) has capped the amount of trans fatty acids (TFA) in oils and fats.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** Statement 1 is correct. **Trans fats or trans-fatty acids are a** form of unsaturated fats. They come in both natural and artificial forms.

Naturally-occurring trans fats are produced in the gut of some animals and foods made from these animals (e.g., milk and meat products) may contain small quantities of these fats.

Artificial trans fats (or trans fatty acids) are created in an industrial process that adds hydrogen to liquid vegetable oils to make them more solid. The primary dietary source for trans fats in processed food is "partially hydrogenated oils."

Statement 2 is correct. Trans fats raise the low-density lipoproteins (LDL) cholesterol levels and lower the good (HDL) cholesterol levels. Eating trans fats increases the risk of developing heart disease and stroke. It's also associated with a higher risk of developing type 2 diabetes.

Statement 3 is correct. The Food Safety and Standards Authority of India (FSSAI) has capped the amount of trans fatty acids (TFA) in oils and fats to 3% for 2021 and 2% by 2022 from the current permissible limit of 5% through an amendment to the Food Safety and Standards (Prohibition and Restriction on Sales) Regulations.

## **Q.9)** Consider the following statements regarding the **Atomic Clocks**:

- 1. Atomic clocks use the electronic transition in an atom from one state to another as their 'pendulum' for time measurement.
- 2. These are more accurate than the conventional clocks.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Atomic clocks** use atoms, more precisely the electronic transition from one state to another as their 'pendulum'. They take advantage of the fact that all atoms of a particular element (Caesium and Rubidium) have exactly the same electron configuration.

Statement 2 is correct. Atomic clocks are far more precise than conventional clocks because atomic oscillations have a much higher frequency and are much more stable.

# The National Atomic Timescale generates Indian Standard Time with an accuracy of 2.8 nanosecond.

## Q.10) Consider the following statement regarding the DNA vaccines:

- 1. It involves introduction of a plasmid, containing the DNA sequence encoding the disease-causing antigen(s), in the body.
- 2. The Covaxin developed by the Bharat Biotech in association with the Indian Council of Medical Research is a DNA vaccine.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **DNA vaccines** is a new approach to vaccination. It involves the direct introduction into appropriate tissues of a plasmid containing the DNA sequence encoding the antigen(s) against which an immune response is sought, and relies on the in situ production of the target antigen.

This approach offers a number of potential **advantages over traditional** approaches, including the stimulation of both B- and T-cell responses, improved vaccine stability, the absence of any infectious agent and the relative ease of large-scale manufacture.

Statement 2 is incorrect. Bharat Biotech has developed a Whole Virion Inactivated Corona Virus Vaccine (Covaxin) in collaboration with ICMR and NIV (Pune). It is not a DNA vaccine but an inactivated virus vaccine.

The COVID-19 Vaccine Candidate by Zydus Cadila, **ZyCov-D** is a **DNA type vaccine** candidate. The candidate has been supported by the National Biopharma Mission (NBM) under the aegis of BIRAC and the Department of Biotechnology, Government of India.

## Q.11) Which of the following virus causes the Bird Flu?

- a) Influenza A
- b) Coronavirus
- c) Adenovirus
- d) Parvovirus

## Correct answer: A

**Explanation: Avian influenza** refers to the disease caused by infection with **avian (bird) influenza (flu) Type A** viruses. These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species.

Influenza A viruses are divided into subtypes on the basis of two proteins on the surface of the virus: hemagglutinin (HA) and neuraminidase (NA). There are 18 known HA subtypes and 11 known NA subtypes.

# Samples of dead migratory water birds found at the Pong Dam Lake in Himachal Pradesh have tested positive for avian influenza or bird flu. It has now become the fifth state to report suspected cases of bird flu after Haryana, Rajasthan, Kerala and Madhya Pradesh.

#### **Q.12)** Consider the following statements:

1. Oxygen is not a flammable gas.

2. Pressure swing adsorption (PSA) is the process by which ambient air passes through a filtration system for the generation of enriched oxygen gas.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Oxygen is not a flammable gas**, but it easily supports combustion. All materials that are flammable in air will burn vigorously in oxygen. Some fuels, such as oil and grease, burn with almost explosive violence when combined with oxygen.

Statement 2 is correct. **Pressure swing adsorption (PSA)** is the process by which ambient air passes through an internal filtration system (e.g. a molecular sieve [zeolite granules or membranes]), which has a large enough total surface area to separate nitrogen (N2) from the air, concentrating the remaining oxygen (O2) to a known purity.

# The Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM CARES) Fund Trust is allocating Rs.201.58 crores for installation of additional 162 dedicated Pressure Swing Adsorption (PSA) Medical Oxygen Generation Plants inside public health facilities in the country.

### **Q.13)** Consider the following statements:

- 1. Natural sources of ammonia include the decomposition of organic waste matter, forest fires, animal and human waste.
- 2. Ammonia is toxic to aquatic life in elevated concentrations.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. Ammonia is produced for commercial fertilizers and other industrial applications. Natural sources of ammonia include the decomposition or breakdown of organic waste matter, gas exchange with the atmosphere, forest fires, animal and human waste, and nitrogen fixation processes.

Statement 2 is correct. Ammonia can enter the aquatic environment through direct means such as municipal effluent discharges and the excretion of nitrogenous wastes from animals, and indirect means such as nitrogen fixation, air deposition, and runoff from agricultural lands.

When ammonia is present in water at high enough levels, it is difficult for aquatic organisms to sufficiently excrete the toxicant, leading to **toxic buildup in internal tissues and blood**, and potentially death. Environmental factors, such as pH and temperature, can affect ammonia toxicity to aquatic animals.

**Q.14)** What is **'SwasthVayu'** instrument developed by the CSIR scientists, that has been in news recently?

- a) A non-electric indoor air purifier
- b) A non-invasive ventilator



- c) A Breathalyzer to check alcohol content in breath
- d) Air pollution measuring instrument

#### Correct answer: B

**Explanation: CSIR-NAL (National Aerospace Laboratories)** scientists along with medical professionals from CSIR-IGIB came forward to address the shortages of ventilators in the beginning of the Covid-19 pandemic and indigenously designed and developed the **non-invasive bilevel positive airway pressure ventilator –SwasthVayu**.

The performance of the device has been evaluated by the expert committee constituted by Director General of Health Services, Ministry of Health & Family Welfare, Government of India. The expert committee, after careful evaluation, has concluded that SwasthVayu may be used on Covid-19 patients who require oxygen supplementation up to 35%.

Q.15) Which of the following are threshold limits for Particulate Matter pollution as per the World Health Organisation's Air Quality Guidelines (AQG)?

- 1. PM2.5  $10 \mu g/m3$  annual mean
- 2. PM10 20 μg/m3 annual mean

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation: WHO Air Quality Guidelines (AQG)** offer guidance on threshold limits for key air pollutants that pose health risks and provide a reference for setting air pollution targets at regional and national levels to improve air quality.

#### WHO Guidelines:

PM2.5: 10  $\mu$ g/m3 (annual mean) and 25  $\mu$ g/m3 (24-hour mean)

PM10: 20 µg/m3 (annual mean) and 50 µg/m3 (24-hour mean)

Air quality guidelines have been published by WHO in 1987 and they were revised in 1997. The 2005 update represents the most current assessment of air pollution health effects.

## India's National Ambient Air Quality Standards (NAAQS):

PM2.5: 40µg/m3 (annual mean) and 60µg/m3 (24-hour mean)

PM10: 60µg/m3 (annual mean) and 100µg/m3 (24-hour mean)

## Q.16) Consider the following statements regarding the Avian Influenza:

- 1. Human infections are primarily acquired through direct contact with infected animals.
- 2. In India, the disease spreads mainly by migratory birds coming into India during winter months.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

## Correct answer: C

**Explanation: Avian influenza** refers to the disease caused by infection with avian (bird) influenza (flu) Type A viruses. These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species.

Statement 1 is correct. Humans can be infected with avian, swine and other zoonotic influenza viruses, such as avian influenza virus subtypes A(H5N1), A(H7N9), and A(H9N2) and swine influenza virus subtypes A(H1N1), A(H1N2) and A(H3N2).

Human infections are primarily acquired through direct contact with infected animals or contaminated environments.

Statement 2 is correct. India notified the first outbreak of avian influenza in 2006. In India, the disease spreads mainly by **migratory birds coming into India during winter months** i.e. from September – October to February – March.

## Q.17) Consider the following statements regarding the Particulate Matter (PM):

- 1. This term is used for mixture of solid particles and liquid droplets found in the air.
- 2. Anthropogenic sources include combustion engines and solid-fuel combustion for energy production.
- 2. It does not have major impact on human health due to its extremely small size. Which of the statements given above is/are correct?
- a) 1 and 2 only
- b) 2 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** Statement 1 is correct. Particulate matter (PM) is the term for a **mixture of solid** particles and liquid droplets found in the air.

Particle pollution includes:

PM10: inhalable particles, with diameters that are generally 10 micrometers and smaller; and PM2.5: fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller. Statement 2 is correct. **Anthropogenic sources** include combustion engines (both diesel and petrol), solid-fuel (coal, lignite, heavy oil and biomass) combustion for energy production in households and industry, other industrial activities (building, mining, manufacture of cement, ceramic and bricks, and smelting), and erosion of the pavement by road traffic and abrasion of brakes and tyres.

Statement 3 is incorrect. Exposure to such particles can affect both lungs and heart. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including: premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma etc.

# As per a study in The Lancet Planetary Health journal, an estimated 349,681 pregnancy losses per year in South Asia were associated with exposure to PM2.5 concentrations.

## Q.18) Consider the following statements regarding the Avian Influenza:

- 1. The H5N1 subtype of the influenza virus does not infect humans.
- 2. Seasonal influenza vaccination does not protect against H5N1 infection. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only

- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. Influenza A viruses are divided into subtypes on the basis of two proteins on the surface of the virus: **hemagglutinin (HA) and neuraminidase (NA)**.

H5N1 is a type of influenza virus that causes a highly infectious, severe respiratory disease in birds called avian influenza (or "bird flu"). **Human cases of H5N1** avian influenza occur occasionally, but it is difficult to transmit the infection from person to person.

Almost all cases of H5N1 infection in people have been associated with close contact with infected live or dead birds, or H5N1-contaminated environments.

Statement 2 is correct. There is **no vaccine** for humans against avian flu. The vaccine against human influenza virus does not protect against avian flu.

# It is safe to eat properly prepared and cooked poultry and game birds. The virus is sensitive to heat.

## Q.19) Consider the following statements regarding the Analytical Quality Control (AQC):

- 1. In AQC, the quality of analytical data generated in any laboratory is controlled through controlling errors to achieve target accuracy.
- 2. The AQC exercise of Central Pollution Control Board (CPCB) aims to ensure the reliability of the analyzed data for prevention and control of pollution.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 correct. **Analytical Quality Control (AQC)** is one of the main components of a Quality Assurance System, wherein the quality of analytical data being generated in any laboratory is controlled through minimizing or controlling errors to achieve a target accuracy.

Example: A particular water quality study involves the collection, comparison and interpretation of analytical data, which leads to a decision for the management and use of water resource. The correctness of decision or actions depends largely upon the accuracy of the analytical results. If the errors in the analytical results are high, the manpower, material and money spent on any monitoring programme or study would be futile and further lead to wrong decision and improper action plans.

Statement 2 is correct. The **AQC** exercise of **CPCB** is to evaluate the performance of participating laboratories in terms of analytical activities, the robustness of instruments used for sample analysis and the expertise of manpower engaged in the laboratory.

It also helps to ensure the reliability of the analyzed data, for an informed and conclusive decision for the prevention and control of pollution.

# The Instrumentation Laboratory of Central Pollution Control Board, Delhi has organized the 33rd Analytical Quality Control (AQC) exercise for trace metal parameters for Environmental Laboratories of Central and State Pollution Control Boards, Pollution Control Committee's, and EPA Recognized Private Labs.

Q.20) Consider the following statements regarding Avian Influenza:

- 1. All known subtypes of influenza A viruses can infect birds.
- 2. Avian influenza A viruses are designated as highly pathogenic or low pathogenic based on the ability of the virus to cause disease in humans.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

### Correct answer: D

**Explanation:** Statement 1 is incorrect. Influenza A viruses are divided into subtypes on the basis of two proteins on the surface of the virus: **hemagglutinin** (**HA**) and **neuraminidase** (**NA**). There are 18 known HA subtypes and 11 known NA subtypes.

All known subtypes of influenza A viruses can infect birds, except subtypes H17N10 and H18N11, which have only been found in bats.

# Bats are mammals and not birds.

Statement 2 is incorrect. Avian influenza A viruses are designated as highly pathogenic avian influenza (HPAI) or low pathogenicity avian influenza (LPAI) based on molecular characteristics of the virus and the ability of the virus to cause disease and mortality in avian species they usually infect.

HPAI and LPAI designations do not refer to the severity of illness in cases of human infection with these viruses; both LPAI and HPAI viruses have caused severe illness in humans.

## Q.21) Consider the following statements regarding the Lipoproteins:

- 1. LDL (low-density lipoprotein) absorbs cholesterol and carries it back to the liver.
- 2. High levels of HDL high-density lipoprotein cholesterol raises the risk for heart disease and stroke.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Both statements are incorrect.

Cholesterol travels through the blood on proteins called "lipoproteins". Two types of lipoproteins carry cholesterol throughout the body:

- --LDL (low-density lipoprotein), sometimes called "bad" cholesterol, makes up most of body's cholesterol. High levels of LDL cholesterol raise the risk for heart disease and stroke.
- --HDL (high-density lipoprotein), or "good" cholesterol, absorbs cholesterol and carries it back to the liver. The liver then flushes it from the body. High levels of HDL cholesterol can lower the risk for heart disease and stroke.

When body has too much LDL cholesterol, the LDL cholesterol can build up on the walls of blood vessels. This buildup is called "plaque." As the blood vessels build up plaque over time, the insides of the vessels narrow. This narrowing blocks blood flow to and from heart and other organs. When blood flow to the heart is blocked, it can cause angina (chest pain) or a heart attack.

## **Q.22)** Consider the following statements:

- 1. The deficiency of Iron in body is a major cause of Anemia.
- 2. The '+F' logo has been notified by Food Safety and Standards Authority of India (FSSAI) to identify fortified food.

Which of the statements give above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

### Correct answer: C

**Explanation:** Statement 1 is correct. **Anemia** occurs when there are not enough healthy red blood cells to carry oxygen to body's organs.

A common cause of anemia is **low levels of iron** in the body. This type of anemia is called iron-deficiency anemia. Human body needs a certain amount of iron to make hemoglobin, the substance that moves oxygen throughout the body.

Statement 2 is correct. In October 2016, FSSAI operationalized the Food Safety and Standards (Fortification of Foods) Regulations, 2016 for fortifying staples namely Wheat Flour and Rice (with Iron, Vitamin B12 and Folic Acid), Milk and Edible Oil (with Vitamins A and D) and Double Fortified Salt (with Iodine and Iron) to reduce the high burden of micronutrient malnutrition in India. The '+F' logo has been notified to identify fortified foods.

## Q.23) Consider the following statements regarding Bird Flu:

- 1. The avian influenza Type A viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry.
- 2. Infected birds can shed flu virus in their saliva and feces.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

### Correct answer: C

**Explanation:** Statement 1 is correct. **Avian influenza** refers to infection of birds with avian influenza Type A viruses. These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species.

**Wild aquatic birds** can be infected with avian influenza A viruses in their intestines and respiratory tract, but usually do not get sick.

However, avian influenza A viruses are very contagious among birds and some of these viruses can sicken and even kill certain domesticated bird species including chickens, ducks, and turkeys.

Statement 2 is correct. Infected birds can **shed avian influenza A viruses** in their saliva, nasal secretions, and feces. Susceptible birds become infected when they have contact with the virus as it is shed by infected birds. They also can become infected through contact with surfaces that are contaminated with virus from infected birds.

#### **Q.24)** Consider the following statements:

1. Bolivia has world's largest identified Lithium reserves.



2. The Nickel-Cadmium battery has the advantage being less costly than the Lithium-ion battery.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** A lithium-ion (Li-ion) battery is an advanced battery technology that uses lithium ions as a key component of its electrochemistry. During a discharge cycle, lithium atoms in the anode are ionized and separated from their electrons. The lithium ions move from the anode and pass through the electrolyte until they reach the cathode, where they recombine with their electrons and electrically neutralize.

Statement 1 is correct. Lithium resources, in descending order, are: **Bolivia**, 21 million tons; Argentina, 17 million tons; Chile, 9 million tons; Australia, 6.3 million tons; China, 4.5 million tons.

Statement 2 is correct. One of the major disadvantages of the Lithium ion battery is it is expensive to manufacture - about 40 percent higher in cost than nickel-cadmium.

The cost of Li-ion battery packs fell by 85 percent in the last decade and will further fall by 35 percent by 2024

India has recently set up Khanij Bidhesh India Pvt. Ltd. to explore strategic mineral assets abroad. India and Australia recently signed a preliminary deal to supply India the critical minerals required for a new-energy economy.

#### **Q.25)** Consider the following statements regarding **Vanadium**:

- 1. It is alloyed with iron to make shock- and corrosion-resistant steel variety.
- 2. High doses of vanadium are toxic to humans.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Vanadium is a medium-hard, steel-blue metal. It is quite valuable in the manufacturing industry due to its **malleable**, **ductile and corrosion-resistant qualities**.

Around 80 percent of the vanadium produced is alloyed with iron to make a shock- and corrosion-resistant steel additive called ferrovanadium.

Vanadium-steel alloys are used to make extremely tough tools such as axles, armor plates, car gears, springs, cutting tools, piston rods and crankshafts.

**High doses of vanadium are toxic to humans**, but scientists think we may need the element in very small amounts for normal bone growth. Vanadium can be found in trace amounts in many types of food, including mushrooms, black pepper, parsley, dill weed, shellfish, beer, wine and grain.

#### **Q.26)** Consider the following statements regarding the **COVISHIELD vaccine**:

1. It is based on weakened version of the adenovirus found in chimpanzees.

2. It has become the first COVID-19 vaccine to receive emergency validation from the World Health Organization (WHO).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **Covishield vaccine** that had been in the works for several months has been approved in India. It is based on a weakened version of a common cold virus or the **adenovirus** that is found in chimpanzees.

This viral vector contains the genetic material of the SARS-CoV-2 spike protein present on the outer surface of the virus that helps it bind with the human cell.

Statement 2 is correct. COVISHIELD is yet to be granted emergency use approval from the the World Health Organization (WHO).

The WHO recently listed the Comirnaty COVID-19 mRNA vaccine for emergency use, making the **Pfizer/BioNTech vaccine** the first to receive emergency validation from WHO.

**Q.27)** Which of the following metal(s) can be found in **paints**?

- 1. Lead
- 2. Cadmium
- 3. Zinc

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** Many of the traditional pigments used in paints and pastels are compounds that contain metals, including **antimony**, **barium**, **cadmium**, **chromium**, **cobalt**, **copper**, **lead**, **manganese**, **strontium** and **zinc**. These metals are linked to various cancers, as well as diseases of the heart, kidneys, liver, lungs and skin.

The Khadi and Village Industries Commission has launched an eco-friendly, non-toxic paint, called "**Khadi Prakritik Paint**" with anti-fungal, anti-bacterial properties. Based on cow dung as its main ingredient, the paint is cost-effective and odorless, and has been certified by Bureau of Indian Standards. The paint is free from heavy metals like lead, mercury, chromium, arsenic, cadmium and others.

#### Q.28) What is Spintronics?

- a) Study of conservation of momentum in Space
- b) Study of the intrinsic spin of an electron and its associated magnetic moment
- c) Study of rotation of Earth's core
- d) Study of movement of Ocean Waves in tropics

#### Correct answer: B

Explanation: Spintronics, or spin electronics, refers to the study of the role played by electron (and more generally nuclear) spin in solid state physics, and possible devices that specifically exploit spin properties instead of or in addition to charge degrees of freedom.

The need for attaining new functionalities in modern electronic devices has led to the manipulation of property of an electron called spin degree of freedom along with its charge. This has given rise to an altogether new field of spin-electronics or 'spintronics'.

Scientists at Institute of Nano Science and Technology (INST), Mohali (Punjab), an autonomous institution of Department of Science and Technology (DST), Government of India, have produced an ultra-high mobility 2d-electron gas(2DEG) at the interface of two insulating oxide layers.

**Q.29)** Consider the following statements regarding the **LCA Tejas**:

- 1. Tejas is a single engine supersonic aircraft.
- 2. It is powered by the Kaveri engine indigenously developed in India. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

Explanation: Statement 1 is correct. Light Combat Aircraft Tejas is a single engine, light weight, highly agile, multi-role supersonic fighter. It has quadruplex digital fly-by-wire Flight Control System (FCS) with associated advanced flight control laws. The aircraft with delta wing is designed for 'air combat' and 'offensive air support' with 'reconnaissance' and 'anti-ship' as its secondary roles.

Statement 2 is incorrect. It is powered by the General Electric GE F414-INS6 of the US.

The Kaveri engine for the indigenous jet was undertaken by Gas Turbine Research Establishment (GTRE), however, the thrust to the weight ratio of Kaveri is below required figure for Tejas aircraft. Due to this, the DRDO was forced to steer the Kaveri engine away from the LCA programme.

Q.30) The CollabCAD Software has been launched by the National Informatics Centre (NIC) and Central Board of Secondar Education (CBSE) for what purpose?

- a) Platform for students across the country to create and modify 3D digital designs
- b) Maintain a national database of teaching resources
- c) Collaboration of Industry with Schooling development
- d) Assessment of and assistance for promoting teacher education

## Correct answer: A

Explanation: National Informatics Centre (NIC), MeitY along with Central Board of **Secondary Education** (CBSE), Ministry of Education is jointly launching CollabCAD Software, a collaborative network, computer-enabled software system, providing a total engineering solution from 2D drafting & detailing to 3D product design for students and faculty of Engineering Graphics Curriculum.

This initiative aims to provide a great platform to students across the country to create and modify 3D digital designs with a free flow of creativity and imagination. This software would Created with love by ForumIAS- the knowledge network for civil services.

Visit academy.forumias.com for our mentor based courses.

also enable students to collaborate over designs across the network and concurrently access the same design data for storage and visualization.

**Q.31)** Which of the following is/are potential causes of **Anaphylaxis**?

- 1. Medications
- 2. Insect stings
- 2. Food allergy

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation: Anaphylaxis is a serious, life-threatening allergic reaction**. The most common anaphylactic reactions are to foods, insect stings, medications and latex.

Most cases are caused by a bee sting or eating foods that are known to cause allergies, such as peanuts or tree nuts. Anaphylaxis causes a series of symptoms, including a rash, low pulse, and shock, which is known as anaphylactic shock. This can be fatal if it isn't treated immediately.

# A few cases of Anaphylaxis have been reported as adverse events post COVID-19 vaccination in USA.

## Q.32) What is Thrombocytopenia?

- a) Low platelet count in blood
- b) Low red blood cell count in blood
- c) Deficiency of Vitamin K in body
- d) Deficiency of Hemoglobin

#### Correct answer: A

**Explanation: Thrombocytopenia** is a condition that causes **low levels of platelets**. Platelets (thrombocytes) are colorless blood cells that help blood clot. Platelets stop bleeding by clumping and forming plugs in blood vessel injuries.

Thrombocytopenia might occur as a result of a bone marrow disorder such as leukemia or an immune system problem. Or it can be a side effect of taking certain medications.

Q.33) Which of the following falls under the terminology Over-the-Top (OTT) platforms?

- 1. Internet Service Providers (ISP)
- 2. Online Audio/Video Streaming services
- 3. Cable TV

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 only
- c) 1 and 3 only
- d) 3 only

#### Correct answer: B

**Explanation:** OTT stands for 'Over-the-Top' and refers to **any streaming service that delivers content over the internet**. The service is delivered 'over the top' of another platform.

Services like Netflix or Amazon Prime Video are video OTT services, another major OTT market is audio, with services such as Spotify.

OTT messaging services like WhatsApp, Telegram or Signal have overtaken SMS as primary text communication mode.

## **Q.34)** Consider the following statements regarding **Drone Swarms**:

- 1. It is a fleet of Unmanned Aerial Vehicles (UAVs) that work together to achieve a specific goal.
- 2. It has applications in field of defence, surveillance and observation of hostile, distant areas. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

## Correct answer: C

**Explanation:** Both statements are correct.

A **Drone swarm** is a fleet of Unmanned Aerial Vehicles (UAVs) that work together to achieve a specific goal. The flight of the drones is controlled either manually, i.e. by remote control operations, or autonomously by using processors deployed on the drones

Swarms of drones are increasingly being requested to carry out missions that cannot be completed by single drones. Particularly in the field of civil security, strong needs emerge in terms of surveillance and observation of hostile, distant or extended areas.

#The Indian Army carried out a live demonstration of Drone Swarming capability using 75 indigenously designed and developed drones which executed an array of Artificial Intelligence (AI) enabled simulated offensive missions and close support tasks during the Army Day Parade held at Delhi Cantt on 15 January 2021.

## Q.35) What is the utility of the LiDAR technology?

- a) Measuring distances
- b) Absorbing solar radiation
- c) Measuring pollutants in ambient air
- d) Measuring the luminosity

#### Correct answer: A

**Explanation: Light Detection and Ranging (LiDAR)**, is a remote sensing method that uses light in the form of a pulsed laser to **measure ranges (variable distances) to the Earth**. These light pulses—combined with other data recorded by the airborne system — generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.

A lidar instrument principally consists of a laser, a scanner, and a specialized GPS receiver. Airplanes and helicopters are the most commonly used platforms for acquiring lidar data over broad areas. Two types of lidar are topographic and bathymetric. Topographic lidar typically uses a near-infrared laser to map the land, while bathymetric lidar uses water-penetrating green light to also measure seafloor and riverbed elevations.

**Q.36)** Which of the following is *not* a **bird**?

- a) Ostriches
- b) Bats
- c) Penguins
- d) Himalayan Quail

## Correct answer: B

**Explanation: Flightless birds** are birds that through evolution lost the ability to fly. Most living forms belong to the order Struthioniformes (a group that includes the ostrich, the rhea, the cassowary, the kiwi, and the emu); however, they are more commonly known as ratites. **Penguins** (order Sphenisciformes) are also flightless birds.

Bats are mammals and not birds. In fact, bats are the only mammals that can truly fly. A few other mammals, such as the flying squirrel, appear to fly, but they actually glide through the air instead. A Bat has fur instead of feathers. Bats also give birth to live young and produce milk to nurse their babies. Birds, on the other hand, lay eggs and feed their young with food they find by foraging.

# All known subtypes of influenza A viruses can infect birds, except subtypes H17N10 and H18N11, which have only been found in bats.

Q.37) Consider the following statements comparing the 4G and 5G Technology:

- 1. It offers lower latency than the 4G LTE.
- 2. The high-band 5G spectrum provides faster data transmission speeds compared to 4G networks.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. 5G technology offers an extremely **low latency rate**, the delay between the sending and receiving of information. From around 200 milliseconds for 4G, it goes down to about 1 millisecond (1ms) with 5G.

Statement 2 is correct. 5G speed tops out at 10 gigabits per second (Gbps). According to communication principles, the shorter the frequency, the **larger the bandwidth**.

The use of shorter frequencies (millimeter waves between 30GHz and 300GHz) for 5G networks is why 5G can be faster. This high-band 5G spectrum provides the expected boost not only in speed but also in capacity, low latency, and quality.

Q.38) Consider the following statements regarding the Seroprevalence Survey:

- 1. It is a mass application of RT-PCR diagnostic tests on population.
- 2. Its objective is to estimate the percentage of people in a population who have antibodies against a particular disease.

Which of the statements given above is/are correct?

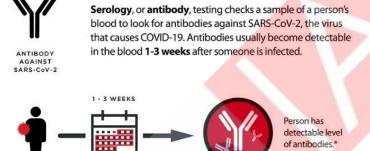
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. A **Seroprevalence Survey** employs Antibody Tests on large scale. Serology testing checks a sample of a person's blood to look for antibodies against a particular infection.

Statement 2 is correct. The percentage of individuals in a population who have antibodies to an infectious agent is called **seroprevalence**.

# What COVID-19 Seroprevalence Surveys Can Tell Us



\*Some people may take longer than 3 weeks to develop antibodies, and some people may not develop antibodies. It is currently unknown how long antibodies are detectable after infection.

## **Q.39) Endothelium** is found in which part of the body?

- a) Inside the blood vessels
- b) Liver
- c) Skin tissue
- d) Brain tissue

#### Correct answer: A

**Explanation:** The **endothelium** is a thin membrane that lines the inside of the heart and blood vessels. Endothelial cells release substances that control vascular relaxation and contraction as well as enzymes that control blood clotting, immune function and platelet (a colorless substance in the blood) adhesion.

The endothelium forms an interface between circulating blood or lymph in the lumen and the rest of the vessel wall. Endothelial cells form the barrier between vessels and tissue and control the flow of substances and fluid into and out of a tissue.

## **Q.40)** Consider the following statements regarding the **ACE2 receptor**:

- 1. It is a protein on the surface of several cell types and tissues including the lungs and heart.
- 2. It is a vital element in regulating blood pressure and inflammation.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2



#### Correct answer: C

**Explanation:** The **angiotensin-converting enzyme 2**, or ACE2 "receptor" is the protein that provides the entry point for the coronavirus in human body.

Statement 1 is correct. ACE2 is present in many cell types and tissues including the lungs, heart, blood vessels, kidneys, liver and gastrointestinal tract. It is present in epithelial cells, which line certain tissues and create protective barriers.

Statement 2 is correct. ACE2 is a vital element in a biochemical pathway that is critical to regulating processes such as blood pressure, wound healing and inflammation, called the renin-angiotensin-aldosterone system (RAAS) pathway.

ACE2 helps modulate the many activities of a protein called angiotensin II (ANG II) that increases blood pressure and inflammation, increasing damage to blood vessel linings and various types of tissue injury. ACE2 converts ANG II to other molecules that counteract the effects of ANG II.

### **Q.41)** Consider the following statements:

- 1. Vaccines trigger an immune response within the body producing antibodies against a specific pathogen.
- 2. Vaccines may require multiple doses to allow for the production of long-lived antibodies and development of memory cells.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Vaccines** contain weakened or inactive parts of a particular organism (antigen) that triggers an immune response within the body to produce the pathogen specific antibodies. Newer (DNA/RNA) vaccines contain the blueprint for producing antigens rather than the antigen itself.

Regardless of whether the vaccine is made up of the antigen itself or the blueprint so that the body will produce the antigen, this weakened version will not cause the disease in the person receiving the vaccine, but it will prompt their immune system to respond much as it would have on its first reaction to the actual pathogen.

Statement 2 is correct. **Some vaccines require multiple doses**, given weeks or months apart. This is sometimes needed to allow for the production of long-lived antibodies and development of memory cells. In this way, the body is trained to fight the specific disease-causing organism, building up memory of the pathogen so as to rapidly fight it if and when exposed in the future.

## Q.42) What is Angiogenesis?

- a) Formation of new blood vessels
- b) Infection in blood vessels
- c) Blockage of blood vessels
- d) Paralysis of blood vessels

## Correct answer: A

**Explanation: Angiogenesis** is the formation of new blood vessels. This process involves the migration, growth, and differentiation of endothelial cells, which line the inside wall of blood vessels. The process of angiogenesis is controlled by chemical signals in the body.

Angiogenesis is critical in the growth of cancer because tumors need blood supply to grow. Tumors trigger the growth of blood cells by giving off chemical signals that stimulate angiogenesis.

Inhibition of tumor angiogenesis has become a popular anti-cancer strategy after chemotherapy. However, the clinically approved anti-angiogenic drugs are ineffective due to parallel activation of various compensatory mechanisms involving a cascade of molecules, which aids tumor angiogenesis and investigation of these mechanisms are essential for developing anti-angiogenic therapies.

# DST INSPIRE faculty from Chennai is working to develop transgenic zebrafish (which have exogenous genes added to their genome) model by use of the CRISPR/Cas9 gene-editing tool to further study the compensatory angiogenesis mechanism in tumor microenvironment.

# Q.43) Which of the following is/are classified as an 'Adverse event following immunization' (AEFI)?

- 1. A adverse reaction caused or precipitated by a vaccine due to inherent properties of the vaccine product.
- 2. Coincidental adverse event post vaccination caused by something other than the vaccine product.

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** An **Adverse event following immunization (AEFI)** is any untoward medical occurrence which follows immunization and which does not necessarily have a causal relationship with the usage of the vaccine. The adverse event may be any unfavourable or unintended sign, abnormal laboratory finding, symptom or disease.

AEFIs are grouped into five categories:

- -- **Vaccine product-related reaction**: An AEFI that is caused or precipitated by a vaccine due to one or more of the inherent properties of the vaccine product. Example: Extensive limb swelling following DTP vaccination.
- -- **Vaccine quality defect-related reaction**: n AEFI that is caused or precipitated by a vaccine that is due to one or more quality defects of the vaccine product including its administration device as provided by the manufacturer. Example: Failure by the manufacturer to completely inactivate a lot of inactivated polio vaccine Inactivated polio vaccine (IPV).
- -- **Immunization error-related reaction**: An AEFI that is caused by inappropriate vaccine handling, prescribing or administration and thus by its nature is preventable. Example: Transmission of infection by contaminated multidose vial.
- -- **Immunization anxiety-related reaction**: An AEFI arising from anxiety about the immunization. Example: Vasovagal syncope in an adolescent during/following vaccination.
- -- **Coincidental event**: An AEFI that is caused by something other than the vaccine product, immunization error or immunization anxiety. Coincidental events reflect the natural Created with love by ForumIAS- the knowledge network for civil services.

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occurrence of health problems in the community with common problems being frequently reported.

### **Q.44)** Consider the following statements **Chandrashekhar limit**:

- 1. A star having mass less than the Chandrashekhar limit (1.4 times the Sun) eventually collapses to form a black hole.
- 2. Massive star having mass more than the Chandrashekhar limit eventually collapses to become a White dwarf.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Both statements are incorrect.

The **Chandrasekhar Limit** is now accepted to be approximately 1.4 times the mass of the sun; any white dwarf with less than this mass will stay a white dwarf forever, while a star that exceeds this mass is destined to end its life in that most violent of explosions: a supernova. Once the dust clears, the only thing remaining will be a very dense star known as a neutron star, these can often be rapidly spinning and are known as pulsars. If the star which explodes is especially large, it can even form a black hole.

# Astronomers at Indian Institute of Astrophysics (IIA) exploring the massive intriguing globular cluster in our Galaxy called NGC 2808 have spotted rare hot UV-bright stars in it using the ltraviolet Imaging Telescope (UVIT) onboard the AstroSat.

These stars whose inner core is almost exposed, making them very hot, exist in the late stages of evolution of a Sun-like star.

## Q.45) Consider the following statements regarding the Smart Anti-Airfield Weapon (SAAW):

- 1. India has signed a transfer of technology (ToT) deal with Russia for development SAAW in
- 2. It is a smart weapon capable of engaging ground enemy airfield assets up to a range of 100

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

Explanation: Statement 1 is incorrect. The Defence Research and Development Organisation has successfully conducted captive and release trial of indigenously developed Smart Anti-Airfield Weapon (SAAW) from Hawk-I of Hindustan Aeronautics Limited (HAL) off the Odisha coast on 21 January 2021.

SAAW is indigenously designed and developed by DRDO's Research Centre Imarat (RCI) Hyderabad.

Statement 2 is correct. This is 125 Kg class smart weapon, capable of engaging ground enemy airfield assets such as radars, bunkers, taxi tracks, and runways etc. up to a range of 100 Created with love by ForumIAS- the knowledge network for civil services.

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kms. The high precision guided bomb is light weight as compared to weapon system of the same class. The weapon was earlier successfully test fired from Jaguar aircraft.

#### **Q.46)** Consider the following statements regarding **Bulk Drugs**:

- 1. Bulk drug is the key ingredient of a medicine which leads to the desired therapeutic effect.
- 2. India's pharmaceutical industry is import dependent for bulk drug raw materials. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. A **bulk drug, also called an active pharmaceutical ingredient (API)**, is the key ingredient of a drug or medicine, which lends it the desired therapeutic effect or produces the intended pharmacological activity.

Statement 2 is correct. The Indian pharmaceutical industry is the 3rd largest in the world by volume. It has high market presence in several advanced economies such as the US and EU. The industry is well known for its production of affordable medicines, particularly in the generics space. However, the country is significantly dependent on the import of basic raw materials, viz., Bulk Drugs that are used to produce medicines.

# The Applications of several companies have been approved under Production Linked Incentive (PLI) Scheme for Promotion of Domestic Manufacturing of critical Key Starting Materials (KSMs)/Drug Intermediates and Active Pharmaceutical Ingredients (APIs) in the country.

### Q.47) Consider the following statements regarding the **Decision support systems (DSS)**:

- 1. It compiles and analyses large amounts of data.
- 2. It improves efficiency in dealing with operations and management by informed decision-making.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

**Decision support systems (DSS)** are interactive software-based systems intended to help managers in decision-making by accessing large volumes of information generated from various related information systems involved.

It **gathers and analyzes data**, synthesizing it to produce comprehensive information reports. A decision support system differs from an ordinary operations application, whose function is just to collect data.

Decision support systems allow for more informed decision-making, timely problem-solving, and improved efficiency in dealing with issues or operations, planning, and even management. # The Commission for Air Quality Management (CAQM) in NCR and adjoining areas has begun the process of setting up a Decision Support System (DSS) having a web, GIS and multi-model based operational and planning decision support tool.



#### Q.48) What is Atrial Septal Defect (ASD)?

- a) A hole in the septum between the two upper chambers of your heart
- b) Inability of the sinoatrial node to generate electric impulses in heart
- c) Blockage in Aorta due to accumulation of fat
- d) High blood pressure causing the damage to walls of Atrium

#### Correct answer: A

**Explanation:** An **atrial septal defect (ASD)** is a hole in the wall (septum) between the two upper chambers of your heart (atria). The condition is present at birth (congenital). This defect allows oxygen-rich blood to leak into the oxygen-poor blood chambers in the heart.

Nitinol-based occluder devices, which are presently used to heal **Atrial Septal Defect (ASD)** or hole in the heart that affects 8 out of every 1000 living babies born, are currently imported to meet demands in India.

Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), an autonomous institute of the Department of Science & Technology (DST), under the Technical Research Centre (TRC), has entered into Technology Transfer Agreements with Pune based Biorad Medisys for two biomedical implant devices--- an Atrial Septal Defect Occluder and an Intracranial Flow Diverter Stents developed by the institute in collaboration with National Aerospace Laboratories, Bangalore using superelastic NiTiNOL alloys.

#### Q.49) Consider the following statements regarding the Quantum Properties:

- 1. Superposition is essentially the ability of a quantum system to be in multiple states at the same time.
- 2. Entanglement is an extremely strong correlation that exists between quantum particles. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

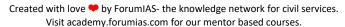
#### Correct answer: C

**Explanation:** Both statements are correct.

All computing systems rely on a fundamental ability to store and manipulate information. Current computers manipulate individual bits, which store information as **binary 0 and 1 states**. **Quantum computers** leverage quantum mechanical phenomena to manipulate information. To do this, they rely on quantum bits, or qubits.

Three quantum mechanical properties — **superposition**, **entanglement**, **and interference** — are used in quantum computing to manipulate the state of a qubit.

- --Superposition is essentially the ability of a quantum system to be in multiple states at the same time that is, something can be "here" and "there," or "up" and "down" at the same time.
- --Entanglement is an extremely strong correlation that exists between quantum particles so strong, in fact, that two or more quantum particles can be inextricably linked in perfect unison, even if separated by great distances.
- --Finally, quantum states can undergo interference due to a phenomenon known as phase. Quantum interference can be understood similarly to wave interference; when two waves are in phase, their amplitudes add, and when they are out of phase, their amplitudes cancel.



Q.50) Consider the following statements regarding the Active Matter Systems:

- 1. Its constituent elements consume energy.
- 2. The system is continuously in state of equilibrium.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **Active matter** describes systems whose constituent elements **consume energy** and are thus out-of-equilibrium. Examples include flocks or herds of animals, collections of cells, and components of the cellular cytoskeleton.

Statement 2 is incorrect. Due to continuous energy input, such systems are driven far from equilibrium and exhibit fascinating collective behaviors like clustering, giant mass fluctuations and anomalous transport.

Q.51) Which of the following is/are feature(s) of the blockchain technology?

- 1. All network participants have access to the distributed ledger and its record of transactions.
- 2. No participant can change or tamper with a transaction after it's been recorded to the shared ledger.

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

**Blockchain** is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. An asset can be tangible (a house, car, cash, land) or intangible (intellectual property, patents, copyrights, branding). Virtually anything of value can be tracked and traded on a blockchain network, reducing risk and cutting costs for all involved.

- -- All network participants have access to the distributed ledger and its immutable record of transactions.
- -- No participant can change or tamper with a transaction after it's been recorded to the shared ledger. If a transaction record includes an error, a new transaction must be added to reverse the error, and both transactions are then visible.
- # The Election Commission of India is collaborating with the Indian Institute of Technology to develop a blockchain system for voting.

Q.52) What is 'Ooceraea joshii' that has been in news recently?

- a) New ant species discovered in India
- b) A crater on Mars
- c) An invasive species of fungus
- d) An asteroid set to pass through solar system in 2029



#### Correct answer: A

**Explanation:** Two new species of a rare ant genus have been discovered in India. The species of the ant genus **Ooceraea found in Kerala, and Tamil Nadu** add to the diversity of this rare genus. They differ from others of the same genus on the basis of the number of antennal segments.

One of them found in the Periyar Tiger Reserve of Kerala, has been named Ooceraea joshii, in honour of Prof. Amitabh Joshi, a distinguished evolutionary biologist.

## **Q.53)** Which of the following statements is/are correct regarding transactions on a **blockchain**?

- 1 The transactions are duplicated and distributed across the entire network of computer systems on the blockchain.
- 2. If a transaction record includes an error, a new transaction must be added to reverse the error, and both transactions are then visible.

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct. **Blockchain** is a system of recording information in a way that makes it difficult or impossible to change, hack, or cheat the system.

A blockchain is essentially a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the blockchain. Each block in the chain contains a number of transactions, and every time a new transaction occurs on the blockchain, a record of that transaction is added to every participant's ledger.

No participant can change or tamper with a transaction after it's been recorded to the shared ledger. If a transaction record includes an error, a new transaction must be added to reverse the error, and both transactions are then visible.

The **blockchains** are programmable. To speed transactions, a set of rules — called a **smart contract** — is stored on the blockchain and executed automatically.

#### Q.54) Which of the following constitute a Silent Mutation?

- a) Change in the amino acid without change in the nucleotide bases
- b) Change in the sequence of nucleotide bases without a subsequent change in the protein
- c) Change in sequence nucleotide bases and subsequent amino acid
- d) None of the above

#### Correct answer: B

**Explanation: DNA is made up of molecules called nucleotides**. Each nucleotide contains a phosphate group, a sugar group and a nitrogen base. The four types of nitrogen bases are adenine (A), thymine (T), guanine (G) and cytosine (C). The order of these bases is what determines DNA's instructions, or genetic code.

A mutation is an alteration in the nucleotide sequence of the genome of an organism. A **silent mutation** is a change in the sequence of nucleotide bases which constitutes DNA, without a subsequent change in the amino acid or the function of the overall protein.

Q.55) Consider the following statements regarding the Side-Scan Sonar:

- 1. It is used to conduct surveys for maritime archeology.
- 2. The higher frequencies yield better range but less resolution in side scan sonar.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. A **side scan sonar** uses high-frequency sound pulses that are bounced off the sea floor to create an image of the sea floor morphology shape) and show differences in seabed texture and substrate types.

Side scan may be used to conduct surveys for maritime archeology; in conjunction with seafloor samples, it is able to provide an understanding of the differences in material and texture type of the seabed surface.

Statement 2 is incorrect. Typical frequencies used in side scan sonar range from 100 to 500 kHz with higher frequencies producing a higher resolution image. The higher frequencies yield better resolution but less range.

# Indian scientists will undertake a scientific expedition using side scan Sonar and Silo seismic survey to date the chain of corals and sediments forming the Ram Setu.

### **Q.56)** Consider the following statements:

- 1. Australia is the world's top producer of lithium.
- 2. Lithium-ion batteries are not subject to ageing.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **Li-ion batteries** are subject to ageing even if not in use. During their lifetime Li-ion batteries exhibit a gradual decrease in discharge capacity which is manifested as a loss of autonomy for the powered device. This is observed both during use and on storage.

Statement 2 is incorrect. In 2019, the world's Top 5 lithium producers were: Australia - 52.9% of global production, Chile - 21.5%, China - 9.7%, Argentina - 8.3% and Zimbabwe - 2.1%.

### Q.57) Which of the following is/are Neglected Tropical Diseases (NTD)?

- 1. Hepatitis C
- 2. Rabies
- 3. Trachoma

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above



#### Correct answer: B

**Explanation:** Neglected tropical diseases (NTDs) include several parasitic, viral, and bacterial diseases that cause substantial illness for more than one billion people globally.

The 20 NTDs listed by World Health Organisation are: Buruli ulcer, Chagas disease, Dengue and severe dengue, Dracunculiasis, Echinococcosis, Foodborne trematode infections, Human African trypanosomiasis, Leishmaniasis, Leprosy, Lymphatic filariasis, Mycetoma, chromoblastomycosis and other deep mycoses, Onchocerciasis, Rabies, Scabies and other ectoparasitoses, Schistosomiasis, Soil-transmitted helminthiases, Snakebite envenoming, Taeniasis and cysticercosis, Trachoma and Yaws.

# January 30, 2021 will mark the second annual World Neglected Tropical Diseases (NTD) Day. India joins the world to Combat Neglected Tropical Diseases. On this day the Qutub Minar will be lit up along with other landmarks across the world.

#### Q.58) Consider the following statements regarding the Chandrashekhar Limit:

- 1. It is the maximum mass a white dwarf star can have and still remain a white dwarf.
- 2. It is named after a Bharat Ratna and Nobel laureate scientist Subrahmanyan Chandrasekhar.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The **Chandrasekhar Limit of 1.4 solar masses**, is the theoretical maximum mass a white dwarf star can have and still remain a white dwarf. Above this mass, electron degeneracy pressure is not enough to prevent gravity from collapsing the star further into a neutron star or black hole.

Statement 2 is incorrect. The limit is named after the **Nobel laureate Subrahmanyan Chandrasekhar**, who first proposed the idea in 1931.

He was not a recipient of Bharat Ratna but was honored with Padma Vibhushan in 1968.

#### **Q.59)** Consider the following statements:

- 1. Nuclear medicine has application in the field of diagnosis through imaging of organs.
- 2. Ionized radiation is used in treatment of cancer disease.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Nuclear medicine** uses radiation to provide diagnostic information about the functioning of a person's specific organs, or to treat them.

In using **radiopharmaceuticals for diagnosis**, a radioactive dose is given to the patient and the activity in the organ can then be studied either as a two-dimensional picture or, using tomography, as a three-dimensional picture. Diagnostic techniques in nuclear medicine use radioactive tracers which emit gamma rays from within the body.

Statement 2 is correct. Therapeutic applications of radioisotopes typically are intended to destroy the targeted cells. In **radiation therapy for cancer**, the patient's tumor is bombarded with ionizing radiation, typically in the form of beams of subatomic particles, such as protons, neutrons, or alpha or beta particles, which directly disrupt the atomic or molecular structure of the targeted tissue. Ionizing radiation introduces breaks in the double-stranded DNA molecule, causing the cancer cells to die and thereby preventing their replication.

# Bhabha Atomic Research Centre (BARC) has evolved a design for the first PPP Research Reactor for production of Nuclear Medicines. This premier research organization of the Department of Atomic Energy (DAE) is ready to share the technology of production of a variety of nuclear medicines.

### Q.60) What does the 'Bouguer anomaly' relate to?

- a) Speed of light
- b) Gravitational anomaly
- c) Economic stimulus
- d) Social security

#### Correct answer: B

**Explanation:** In geodesy and geophysics, the Bouguer anomaly (named after Pierre Bouguer) is a **gravity anomaly**, corrected for the height at which it is measured and the attraction of terrain. The height correction alone gives a free-air gravity anomaly.

Bouguer anomaly is the measured gravity corrected for the known or modeled gravity effects at a planetary scale.



#### **GEOGRAPHY**

#### Q.1) The Shoolpaneshwar Wildlife Sanctuary is in which of the following State?

- a) Bihar
- b) Gujarat
- c) Andhra Pradesh
- d) Rajasthan

#### Correct answer: B

**Explanation:** The Shoolpaneshwar Wild Life Sanctuary in Gujarat, bordering Madhya Pradesh and Maharashtra, derives its name "Shoolpaneshwar" from a historic temple of Lord Shiva, which once existed in this region on the banks of river Narmada.

The area is predominantly tribal with 'Vasavas' as the main tribal community. The local population heavily depends on the forest produce for socio-economic sustenance.

# The local tribals in the region are demanding a withdrawal of Centre's notification classifying 121 villages around the Shoolpaneshwar Wildlife Sanctuary.

#### Q.2) Consider the following statements regarding Moringa plant:

- 1. It is an exotic plant introduced in India by the Britishers.
- 2. Its global demand pertains to its medicinal and nutritional benefits.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **Moringa** (botanical name Moringa oleifera) is not an exotic plant in India rather is **native to areas of India, Pakistan, Bangladesh, and Afghanistan**.

Statement 2 is correct. It has seen a rising demand among the global consumers for its **nutritional, medicinal, culinary** uses. Globally, the demand for Moringa products, such as Moringa Leaf Powder and Moringa Oil, has been witnessing healthy growth. Moreover, international organizations and institutions are exploring the best ways on how to use Moringa as a nutritional supplement and in food fortification.

# In a bid to promote Moringa (botanical name Moringa oleifera) products exports from India, APEDA has been supporting private entities in creating necessary infrastructure.

#### Q.3) Consider the following statements regarding the Coal sector of India:

- 1. India is the largest global producer of Coal.
- 2. India imports coal to fulfill its domestic demand.
- 2. The Government of India has allowed the commercial mining of coal blocks.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **China is the largest Coal producer** in the world. India is currently producing about 729 million tonnes of coal.

Statement 2 is correct. Despite India being world's second largest coal producer and being the 5th largest country in terms of coal deposits, with coal reserves which may last at least 100 years more, domestic production is not able to meet the demand of coal in the country. India has imported 247 million tonnes of coal last year and had spent 1.58 lakh crore as foreign exchange.

Statement 3 is correct. The auction of coal blocks for **commercial mining was launched in**June 2020 with 38 blocks in the first tranche. Out of 38 blocks, the auction process successfully completed for 19 blocks in November 2020.

# Commercial mining allows the private sector to mine coal commercially without placing any end-use restrictions. The private firms have the option of either gasification of the coal or exporting it. They can also use it in their own end-use plants or sell them in the markets.

### Q.4) Monpa tribe belongs to which of the following State/UT?

- a) Arunachal Pradesh
- b) Himachal Pradesh
- c) Uttarakhand
- d) Ladakh

#### Correct answer: A

**Explanation: Monpa people** are of Mongoloid descent and live in the regions of Tawang and West Kameng in **Arunachal Pradesh**.

The art of making **Monpa handmade paper** originated over 1000 years ago. Gradually the art became an integral part of local custom and culture in Tawang in Arunachal Pradesh. Once produced in every household in Tawang, this handmade paper was a major source of livelihood for the locals.

However, the handmade paper industry almost disappeared in the last 100 years; prompting KVIC to plan revival of this ancient art.

# KVIC has commissioned a Monpa handmade paper making unit in Tawang which not only aims at reviving the art but also engaging the local youths with this art professionally and earn.

#### **Q.5)** Consider the following statements:

- 1. India is the world's largest producer and exporter of turmeric.
- 2. Erode turmeric is recognized a Geographical Indication (GI).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **India is the largest manufacturer, consumer and exporter of Turmeric**. Turmeric occupies about 6% of the total area under spices and condiments in India.

**Curcumin**, a substance found in turmeric, in the pharmaceutical for treating critical ailments like cancer, food and cosmetic industries is a major factor driving the growth of the global Created with love ♥ by ForumIAS- the knowledge network for civil services.

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curcumin market. The rise in demand of curcumin is largely due to the growing awareness among consumers regarding its anti-oxidant and anti-inflammatory properties.

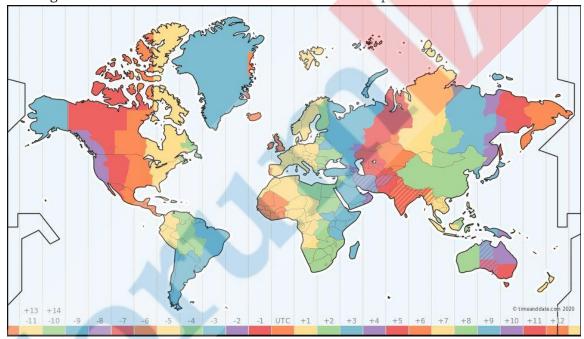
Statement 2 is correct. **Erode's** unique slender turmeric has a GI tag for its distinctive fragrance and color.

**Q.6)** Which of the following country (or part of it) **celebrates the New Year before** the rest of them?

- a) Japan
- b) Australia
- c) China
- d) Myanmar

#### Correct answer: B

**Explanation:** Japan Standard Time is 9 hours ahead of UTC and Australian Eastern Standard Time (AEST) is 10 hours ahead of Coordinated Universal Time (UTC). Eastern region of Australia celebrates the New Year before Japan.



### Q.7) Where is Palk Bay located?

- 1. North of Palk Strait
- 2. South of Adam's bride (RamSetu)

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Both options are incorrect. Palk Bay is north of RamSetu and south of Palk Strait.



The **Palk Bay** is a 15,000 sq km biodiversity conglomeration nestled between the island nation of Sri Lanka and South East Peninsula India with a coastal length of 250 km on the Indian side.

The bay is landlocked with three openings--one big eastern opening into the Bay of Bengal and two narrow openings into the Gulf of Mannar. The bay is a highly productive ecosystem. it has 302 species of marine algae, 580 species of fishes, five marine turtle species and 11 seagrass species and several species of mangroves. The bay is also among one of the biggest fishing spots in south India.

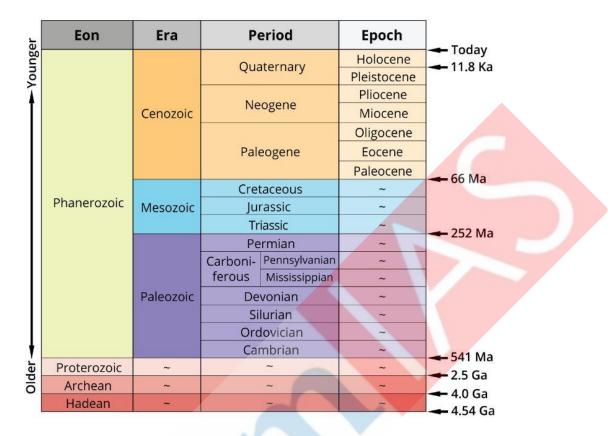


Q.8) Which of the following us the current Epoch of geological time as per the International Union of Geological Sciences (IUGS)?

- a) Holocene
- b) Anthropocene
- c) Oligocene
- d) Miocene

#### Correct answer: A

**Explanation:** The **International Union of Geological Sciences (IUGS)**, the international organization that names and defines epochs, recognises Holocene as the current Epoch. Therefore, officially, the current epoch is called the **Holocene**, which began 11,700 years ago after the last major ice age. However, the **Anthropocene** Epoch is an unofficial unit of geologic time, used to describe the most recent period in Earth's history when human activity started to have a significant impact on the planet's climate and ecosystems.



Q.9) Which of the following is/are potential consequence of melting ice sheets?

- 1. Increase in global temperature
- 2. Increase in greenhouse gases in environment

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** An **ice sheet** is a mass of glacial land ice extending more than 50,000 square kilometers (20,000 square miles). The two ice sheets on Earth today cover most of **Greenland and Antarctica**.

Ice sheets contain enormous quantities of frozen water. If the Greenland Ice Sheet melted, scientists estimate that sea level would rise about 6 meters (20 feet). If the Antarctic Ice Sheet melted, sea level would rise by about 60 meters (200 feet).

- -- Since ice sheets are covered in white snow and ice that **reflect heat back into space**, they balance out other parts of the world that absorb heat. Less ice means less reflected heat, meaning more intense heatwaves worldwide. But it also means more extreme winters: as the polar jet stream—a high-pressure wind that circles the Arctic region—is destabilized by warmer air, it can dip south, bringing bitter cold with it.
- -- Arctic ice and permafrost—ground that is permanently frozen—store large amounts of methane, a greenhouse gas that contributes to climate change. When it thaws, that methane is released, increasing the rate of warming.

# A recent research by UK scientists have found that the rate of ice loss from the Earth has increased drastically within the past three decades, from 0.8 trillion tonnes per year in the 1990s to 1.3 trillion tonnes per year by 2017.

#### Q.10) Consider the following statements regarding the Musk Deer:

- 1. It is distributed throughout the Western Ghats in India.
- 2. It is the State animal of Uttarakhand.
- 3. It is protected under the Schedule I of the Wildlife Protection Act 1972.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **Musk Deer** inhabits alpine forests and scrub. The Deer is typically found at elevations between 2,200 and 4,300 metres (7,250 to 14,200 feet), and is rarely found below 1,000 metres (3,280 feet).

The Indian states in which Alpine and/or Himalayan Musk deer are found include Jammu and Kashmir, Himachal Pradesh, Uttar Pradesh, Sikkim, and Arunachal Pradesh.

Statement 2 is correct. Musk Deer is the State animal of Uttarakhand state. It was showcased in front of its tableau at the Republic Day parade.

Statement 3 is correct. Musk Deer is listed under the **Schedule I of the Wildlife Protection Act 1972**.

Musk or Kasturi is a commonly traded wildlife product. Derived from the musk pod of the highly endangered musk deer, a high altitude Himalayan species persecuted in most of its distribution area, it is considered to be a natural perfume fixative and used in the Aryuveda, Tibetan and Unani systems of medicine.

#### **Q.11)** Consider the following statements:

- 1. India is the largest exporter of spices.
- 2. Chili accounts for more than half of India's export of spices in value.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. India has the largest domestic market for spices in the world. Traditionally, spices in India have been grown in small land holdings, with organic farming gaining prominence in recent times.

India is the world's **largest producer**, **consumer and exporter of spices**; the country produces about 75 of the 109 varieties listed by the International Organization for Standardization (ISO) and accounts for half of the global trading in spices.

Statement 2 is incorrect. India is the world's largest exporter of chili and turmeric, the exports of which have recorded a steady progress, over the years.

During 2019-20, chili export contributed to more than 40 per cent in volume and 29 per cent in value of India's total spice exports. Turmeric held a share of 11 per cent in volume and 6 per cent in value of the export basket.

# Spices Board conducted the Virtual Buyer Seller Meet (BSM) for Chili and Turmeric, with focus on Andhra Pradesh, which saw participation from 245 stakeholders. This was the 14th BSM conducted by the Board in FY 2020-21.



#### **ECONOMICS**

Q.1) Consider the following statements regarding the Index of Eight Core Industries (ICI):

- 1. It is released monthly by the National Statistical Commission.
- 2. It is a production volume index.
- 3. The base year in the current series of ICI is 2011-12.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. It is compiled and released by **Office of the Economic Adviser (OEA)**, Department of Industrial Policy & Promotion (DIPP), and Ministry of Commerce & Industry.

Statement 2 is correct. The monthly **Index of Eight Core Industries (ICI)** is a production volume index. ICI measures collective and individual performance of production in selected eight core industries viz. Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement and Electricity.

Statement 3 is correct. The choice of the base year of ICI is according to the choice of base year for the IIP. The base year in the current series of ICI is 2011-12.

# The combined Index of Eight Core Industries stood at 125.9 in November, 2020, which declined by 2.6 (provisional) per cent as compared to the Index of November, 2019. Its cumulative growth during April to November, 2020-21 has been (-) 11.4%.

**Q.2)** Consider the following statements regarding the recently launched **Digital Payment** index (DPI) for India:

- 1. It has been launched by the National Payments Corporation of India (NPCI).
- 2. DPI will capture the extent of digitisation of payments across the country.
- 3. DPI has been constructed with March 2018 as the base period.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 and 3 only
- c) 3 only
- d) 1 and 3 only

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **Reserve Bank of India** has constructed a composite **Digital Payments Index (DPI)** comprising of 5 broad parameters: (i) Payment Enablers (weight 25%), (ii) Payment Infrastructure – Demand-side factors (10%), (iii) Payment Infrastructure – Supply-side factors (15%), (iv) Payment Performance (45%) and (v) Consumer Centricity (5%).

Statement 2 is correct. The RBI-DPI aims to measure the deepening and **penetration of digital payments** in the country over different time periods.

Statement 3 is correct. The RBI-DPI has been constructed with **March 2018 as the base period**, i.e. DPI score for March 2018 is set at 100. The DPI for March 2019 and March 2020

work out to 153.47 and 207.84 respectively, indicating appreciable growth. Going forward, RBI-DPI shall be published on RBI's website on a semi-annual basis from March 2021 onwards with a lag of 4 months.

## Q.3) Consider the following statements regarding the International Financial Services Centres Authority (IFSCA):

- 1. It is a unified authority for the development and regulation of financial services and financial institutions in the International Financial Services Centre (IFSC) in India.
- 2. IFSCA is an Associate Member of the International Organization of Securities Commissions (IOSCO).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** The International Financial Services Centres Authority (IFSCA) has been established on April 27, 2020 under the **International Financial Services Centres Authority Act, 2019**.

Statement 1 is correct. The IFSCA is a unified authority for the **development and regulation** of financial products, financial services and financial institutions in the International Financial Services Centre (IFSC) in India. At present, the GIFT IFSC is the maiden international financial services centre in India.

Statement 2 is correct. The International Financial Services Centres Authority (IFSCA) has become an Associate Member of the **International Organization of Securities Commissions** (IOSCO).

The IOSCO is the international organization that brings together the world's securities regulators, covering more than 95% of the world's securities markets, and is the global standard setter for the securities sector.

**Q.4)** Consider the following statements regarding the **GST revenue** this financial year [2020-21] so far:

- 1. The GST revenues during December 2020 have been the highest since the introduction of GST.
- 2. The December 2020 is fifth month in a row in the current financial year to have GST revenue more than 1 Lakh crore.

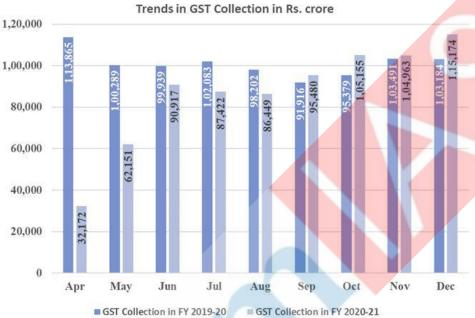
Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The gross GST revenue collected in the month of **December 2020 is Rs 1,15,174 crore**. The GST revenues during December 2020 have been the **highest since the introduction of GST** and it is the first time that it has crossed ₹ 1.15 lakh crore.

The highest GST collection till now was ₹ 1,13,866 crore in the month of April 2019. The revenues of April normally tend to be high since they pertain to the returns of March, which marks the end of financial year.



### **Q.5)** Consider the following statements:

- 1. Women in India spend three times more time than men in the unpaid domestic services for household members as per the Time Use Survey (TUS) 2019.
- 2. The Code on Wages 2019 prohibits gender discrimination in matters related to wages of employees for the same work.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Time Use Survey (TUS)** provides a framework for measuring time dispositions by the population on different activities. National Statistical Office (NSO) conducted the first Time Use Survey in India during January – December 2019.

81.2 per cent women participate in unpaid domestic services spending an average 299 minutes each day. The participation rate of men in domestic services is low at 26.1 per cent spending around 97 minutes per day while conducting this activity.

Statement 2 is correct. The **Code on Wages 2019** prohibits gender discrimination in matters related to wages and recruitment of employees for the same work or work of similar nature. Work of similar nature is defined as work for which the skill, effort, experience, and responsibility required are the same.

## Q.6) Which of the following is/are part of the Government Final Consumption Expenditure (GFCE)?

- 1. expenditure on durable goods which are used in defence sector
- 2. compensation of employees
- 3. net purchase of goods and services by government

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation: General government final consumption expenditure** includes all government current expenditures for purchases of goods and services (including compensation of employees).

By convention, expenditure on durable goods, which are used for defence, are also treated as part of consumption expenditure of the Government.

# The National Statistical Office has projected that GDP in the FY 2020-21 would total almost 134.4-lakh crore in constant prices, reflecting a 7.7% contraction from the preceding year's figure.

#### **Q.7)** What is the purpose of the **Equalisation Levy**?

- a) Taxing business to business transactions of foreign e-commerce companies from India
- b) Taxing high net worth individuals (HNI) in India
- c) Taxing evasion from Goods & Services Tax
- d) Taxing Multinational Companies in India transacting with parent foreign Company

#### Correct answer: A

**Explanation: Equalisation Levy** was introduced in India through Budget 2016. It taxes the income accruing to foreign e-commerce companies from India. It is aimed at taxing business to business transactions.

Services covered under Eualisation Levy are **Online advertisement and Any provision for digital advertising** space or facilities/ service for the purpose of online advertisement.

# The U.S. Trade Representative's findings of its "Section 301" investigations into the digital taxes, recently said that the digital taxes imposed by France, India, Italy and Turkey discriminate against big U.S. tech firms, such as Google, Facebook, Apple and Amazon.

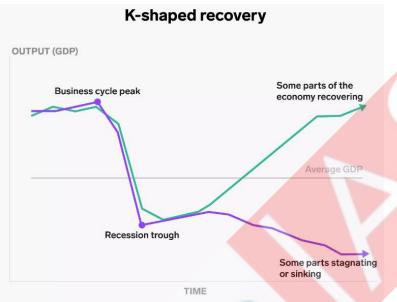
**Q.8)** The **K-shaped economic forecast** for economy has been in news recently, what does it imply?

- a) Segments of economy recovering at different rates after a slowdown/recession
- b) Global economy plunging into slowdown led by emerging economies (country)
- c) The statistical economic recovery on account of base effect
- d) The economic recovery on account of increased government spending

#### Correct answer: A

**Explanation:** A **K-shaped recovery is a post-recession scenario** in which one segment of the economy begins to climb back upward while another segment continues to suffer. If illustrated, the economic growth would roughly resemble the two diverging diagonal lines of the letter "K" - hence the name.

This is in contrast to an even, uniform recovery across sectors, industries, or groups of people. It is being predicted that economies across the world are experiencing a K-shaped recovery post lockdown due to COVID-19.



Q.9) Which of the following is a constituent of Expansionary Monetary Policy?

- 1. Lowering repo rate
- 2. Purchase of government securities by central bank from market Select the correct answer using the code given below:
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation: Expansionary monetary policy** is when a central bank uses its tools to stimulate the economy. That **increases the money supply**, lowers interest rates, and increases demand. It boosts economic growth. It lowers the value of the currency, thereby decreasing the exchange rate. It is the opposite of contractionary monetary policy.

The central bank may lower the repo rate, lower statutory reserve requirements or purchase government securities through open market operations in order to increase the money supply in the market.

#### **Q.10)** Consider the following statements regarding **EBITDA**:

- 1. It is used as a metric of corporate profitability.
- 2 It is inclusive of the revenue foregone due to taxes and depreciation.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2



Correct answer: C

**Explanation:** Both statements are correct.

EBITDA is essentially **net income (or earnings) with interest, taxes, depreciation, and amortization** added back. EBITDA can be used to analyze and compare profitability among companies and industries, as it eliminates the effects of financing and capital expenditures. # The State-owned undertakings Bharat Sanchar Nigam Ltd. (BSNL) and Mahanagar Telephone Nigam Ltd. (MTNL) have turned EBITDA positive in first 6 months of this financial year.

**Q.11)** Reserve Bank of India has recently formed a committee under chairmanship of **Jayant Kumar Dash** to study/recommend on which of the following matter?

- a) Regulation of Cryptocurrency
- b) Online/Digital lending in India
- c) Impact of Participatory notes on Indian economy
- d) Demonetization of higher denomination notes

#### Correct answer: B

**Explanation:** The **Reserve Bank of India (RBI)** has constituted a working group under chairmanship of **Jayant Kumar Dash, Executive Director, RBI on digital lending** — including online platforms and mobile apps — to study all aspects of digital lending activities in the regulated financial sector as well as by unregulated players.

The working group will evaluate digital lending activities and assess the penetration and standards of outsourced digital lending activities in RBI regulated entities; identify the risks posed by unregulated digital lending to financial stability, regulated entities and consumers; and suggest regulatory changes to promote orderly growth of digital lending.

It will also recommend measures for expansion of specific regulatory or statutory perimeter and suggest the role of various regulatory and government agencies. It will also recommend a robust fair practices code for digital lending players.

#### Q.12) Consider the following statements Nominal Gross Domestic Product:

- 1. It is a measurement of economic output that doesn't adjust for inflation.
- 2. As per First Advance Estimates of National Income released by National Statistical Office, the nominal GDP of India is estimated to have positive annual growth during 2020-21.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. Nominal gross domestic product is gross domestic product (GDP) evaluated at current market prices. It is a measurement of economic output that doesn't adjust for inflation. GDP is the monetary value of all the goods and services produced in a country.

Nominal GDP differs from real GDP in that it does not account for the effects of inflation or deflation.

Statement 2 is incorrect. The National Statistical Office (NSO), Ministry of Statistics and Programme Implementation has released the First Advance Estimates of National Income at both Constant (2011-12) and Current Prices, for the financial year 2020-21.

Nominal GDP or GDP at Current Prices in the year 2020-21 is likely to attain a level of Rs 194.82 lakh crore, as against the Provisional Estimate of GDP for the year 2019-20 of Rs 203.40 lakh crore, released on 31st May 2020. The growth in nominal GDP during 2020-21 is estimated at -4.2 per cent.

Q.13) Consider the following statements regarding the Wholesale Price Index (WPI):

- 1. It is a monthly price index released by the National Statistical Office.
- 2. Services sector is not covered under the WPI.
- 3. Manufactured Products has highest weightage in the WPI.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 3 only

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **Wholesale Price Index (WPI)** measures the average change in the prices of commodities for bulk sale at the level of early stage of transactions. It is released by **Office of the Economic Adviser** on 14th of every month (or next working day) with a time lag of two weeks of the reference month and compiled with data received from institutional sources and selected manufacturing units across the country.

Statement 2 is correct. The Wholesale Price Index (WPI) is an index covering prices of products/commodities only pertaining to four sectors comprising agriculture, mining, manufacturing and electricity. The other sectors of GDP, in particular, **services sector** are not covered under WPI.

Statement 3 is correct. The weight of manufactured products is highest in WPI (2004-05) at 64.2%. The weight of the Primary Article is to 22.6% and the weight of Fuel & Power is 13.2%.

#### **Q.14)** Consider the following statements:

- 1. China is India's largest source of the Foreign Direct Investments (FDI).
- 2. India's trade deficit has been rising continuously for last five years.

Which of the statements given above is/are correct?

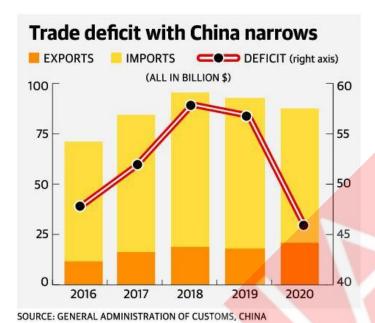
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. In the last financial year (2019-20), India attracted \$14.67 billion in FDI from **Singapore**, whereas it was \$8.24 billion from Mauritius; the top two sources of FDI in India.

Other large sources of FDI in India in recent years include USA, Mauritius, Netherlands, UK, France and Japan.

Statement 2 is incorrect. India's trade deficit with China has been decreasing for the last couple of years according to new figures from **China's General Administration of Customs (GAC)**.



- Q.15) What was the mandate of the P J Nayak Committee?
- a) Review Governance of Boards of Banks in India
- b) Review of Payments and Settlements System of India
- c) Instruction of Small Banks and Payments Bank in India
- d) Review of Monetary policy framework of RBI

#### Correct answer: A

**Explanation:** The **Committee to Review Governance of Boards of Banks** in India chaired by P J Nayak, the former CEO and Chairman of Axis Bank, was constituted by the RBI Governor in 2014.

Recent reports suggest that the upcoming budget may include proposals for a **Bank Investment Company (BIC)**, anchoring the government's shareholding in its banks. It was proposed by the P J Nayak Committee constituted by the RBI in 2014 to examine governance at public and private sector banks.

The committee had recommended that the Government should set up a Bank Investment Company (BIC) to hold equity stakes in banks which are presently held by the Government. BIC should be incorporated under the Companies Act, necessitating the repeal of statutes under which these banks are constituted, and the transfer of powers from the Government to BIC through a suitable shareholder agreement and relevant memorandum and articles of association.

**Q.16)** Consider the following statements regarding the **'Risk-o-meter'** guidelines by Securities & Exchange Board of India (SEBI):

- 1. It requires mutual fund companies to label the funds based on the risk they carried.
- 2. The meter is color coded having three risk levels of high, low and moderate. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2

### d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. SEBI, based on the recommendation of Mutual Fund Advisory Committee (MFAC), has reviewed the guidelines for **product labeling in mutual funds** and the following has been decided:

- --Risk Level of a scheme will be depicted by "Risk-o-meter".
- --Risk-o-meter shall have following six levels of risk for mutual fund schemes: Low Risk, Low to Moderate Risk, Moderate Risk, Moderately High Risk, High Risk and Very High Risk.

Statement 2 is incorrect. Riskometer is an upgrade from the 'coloured product labels' introduced in March 2013 that required mutual fund companies to color code the funds based on the risk they carried.



### Q.17) Consider the following statements regarding the Initial Public Offering (IPO):

- 1. It is the process of offering shares of a private corporation to the public in a new stock issuance.
- 2. It is regulated in India by the Securities & Exchange Board of India (SEBI).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** An initial public offering (IPO) refers to the process of offering shares of a private corporation to the public in a new stock issuance. A company that was privately-owned until then becomes a publicly-traded company.

**Securities and Exchange Board of India (SEBI)** is a statutory body and a market regulator, which controls the securities market in India. The basic function of SEBI is to protect the interests of investors in securities and to promote and regulate the securities market.

Companies must meet requirements by exchanges and the SEBI to hold an initial public offering (IPO).

#### Q.18) What Is a Bad Bank?

- a) A bank with non-performing assets more than its Tier-1 capital
- b) A bank not maintaining mandated Capital Adequacy Ratio

- c) A bank set up to buy the bad loans of another financial institution
- d) An international bank outside the oversight of national regulatory authorities

#### Correct answer: C

**Explanation:** A **bad bank** is a bank set up to buy the bad loans and other illiquid holdings of another financial institution. The entity holding significant nonperforming assets will sell these holdings to the bad bank at agreed price.

The bad bank is not involved in lending and taking deposits, but helps commercial banks clean up their balance sheets and resolve bad loans.

The **Economic Survey 2016-17** had also argued in favour of setting up a "Public Sector Asset Rehabilitation Agency" to help tackle the problem of bad loans.

## Q.19) Which of the following have been designated as **Domestic Systemically Important**Banks (D-SIBs) by the Reserve Bank of India?

- 1. State Bank of India
- 2. ICICI Bank
- 3. HDFC Bank

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The **State Bank of India, ICICI Bank and HDFC Bank** are the domestic systemically important banks (D-SIBs) or banks that are considered as "too big to fail".

The Reserve Bank had issued the Framework for dealing with Domestic Systemically Important Banks (D-SIBs) on July 22, 2014. The D-SIB framework requires the Reserve Bank to disclose the names of banks designated as D-SIBs starting from 2015 and place these banks in appropriate buckets depending upon their Systemic Importance Scores (SISs). Based on the bucket in which a D-SIB is placed, an additional common equity requirement has to be applied to it.

## Q.20) Consider the following statements regarding the All-India Consumer Price Index Numbers for Agricultural and Rural Labourers (CPI-AL/RL):

- 1. The Labour Bureau is responsible for compilation and maintenance of CPI-AL/RL.
- 2. Currently, the base year for CPI-AL/RL is 1986-87.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

The **Labour Bureau** is responsible for compilation and maintenance of Consumer Price Index Numbers for Agricultural Labourers and Rural Labourers (CPI-AL/RL) and Consumer Price Index Numbers for Industrial Workers (CPI-IW).



The current series of CPI Numbers for Agricultural and Rural Labourers (base 1986-87=100) replaced the earlier series on base 1960-61=100 in 1995.

# The All-India Consumer Price Index Numbers for Agricultural Labourers and Rural Labourers (Base: 1986-87=100) for the month of December, 2020 decreased by 13 points and 12 points to stand at 1047 and 1053 points respectively.

## Q.21) Which of the following institution is organizing the MASCRADE 2021 (Movement against Smuggled & Counterfeit Trade) Conference?

- a) NITI Aayog
- b) Federation of Indian Chambers of Commerce & Industry
- c) Department for Promotion of Industry and Internal Trade (DPIIT)
- d) World Trade Organisation

#### Correct answer: B

**Explanation:** Union Minister of Health and Family welfare recently inaugurated the **7th Edition of the International Conference "MASCRADE 2021"- Movement against Smuggled & Counterfeit Trade**, a flagship event organised by the FICCI (Federation of Indian Chambers of Commerce & Industry). The event is being held virtually this time in view of the pandemic precautions.

The aim of MASCRADE 2021 is to foster a healthy discussion on newer and practical strategies to mitigate the challenges of counterfeiting and smuggling especially in a post COVID era.

[Under the Drugs & Cosmetics Act, if any drug is deemed to be adulterated or spurious, then the offender or liable person may face imprisonment for a term which shall not be less than ten years but which may extend to imprisonment for life.]

# Q.22) Which of the following is/are the objective(s) of divestment of public sector undertakings?

- 1. To introduce, competition and market discipline
- 2. To reduce the financial burden on the Government
- 3. To depoliticise non-essential services

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** Disinvestment means sale or liquidation of assets by the government, usually Central and state public sector enterprises, projects, or other fixed assets.

**Factors responsible for low profits in the PSUs**: Price policy of public sector undertakings, Under-utilisation of capacity, Problems related to planning and construction of projects, Problems of labour, personnel and management, Lack of autonomy.

**Major objectives of disinvestment:** To reduce the financial burden on the Government, improve public finances, introduce, competition and market discipline, fund growth, encourage wider share of ownership and to depoliticise non-essential services.

**Q.23)** Which of the following is/are the objective(s) of the **Accommodative stance** of Monetary policy by Central bank?

- 1. Expansion of money supply in economy
- 2. Sale of government securities by the Central Bank

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Option 1 is correct. An **accommodative stance** means a central bank will cut rates to inject money into the financial system whenever needed.

Accommodative monetary policy is triggered to encourage more spending from consumers and businesses by making money less expensive to borrow through the lowering of short-term interest rates.

It has its use when economic growth/activity is slowing down, as money is easily accessible through banks, the money supply in the economy increases. This leads to increased spending. When businesses can easily borrow money, they have more funds to expand operations and hire more workers, which means that the unemployment rate will decrease.

Option 2 is incorrect. Sale of G-Secs will in effect reduces the money supply while accommodative stance aims to inject money in the economy.

#### Q.24) Consider the following statements regarding the Foreign Direct Investment (FDI):

- 1. It is an important source of non-debt finance for the economic development
- 2. It adds volatility in market and does not imply the establishment of a lasting interest in a business

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

### Correct answer: A

**Explanation:** Statement 1 is correct. **Foreign Direct Investment (FDI)** is a major driver of economic growth and an important source of non-debt finance for the economic development of India.

It is the primary sources of external capital as well as increased revenues for a country. It often results in the opening of factories in the country of investment, in which some local equipment – be it materials or labour force, is utilised.

Statement 2 is incorrect. There is a difference between **FDI and FPI (Foreign Portfolio Investments)**, wherein the investor purchases equity of foreign companies. FPI means only equity infusion, and does not imply the establishment of a lasting interest.

FDI can be Greenfield, wherein an organisation creates a subsidiary concern in another country and builds its business operations there from the ground up.

Alternatively, FDI can be brownfield - wherein an organisation expands by way of cross-border mergers, acquisitions and joint ventures - by either leasing or purchasing existing facilities for its production.

# During April to November, 2020, total FDI inflow of US\$ 58.37 billion has been received. It is the highest ever for first 8 months of a financial year and 22% higher as compared to first 8 months of 2019-20 (US\$ 47.67 billion).

Q.25) Which of the following is/are the characteristics of the Public Goods?

- 1. Non-excludable
- 2. Non-rivalrous

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation: Public goods** have two distinct aspects: non-excludability and non-rivalrous consumption.

**Non--excludability** means that the cost of keeping nonpayers from enjoying the benefits of the good or service is prohibitive, i.e., the good is available to all citizens.

**Non-rivalrous** means that the goods do not dwindle in supply as more people consume them, i.e., when a good is consumed, it doesn't reduce the amount available for others.



**Q.26)** Consider the following statements regarding findings of **Economy Survey 2020-21** on Indian economy:

- 1. The Financial Year 2021-22 is expected to be see a rise in GDP Growth rate after three years of continuous fall.
- 2. The Financial Year 2021-22 is expected to have a Current Account Surplus for the first time in last decade.

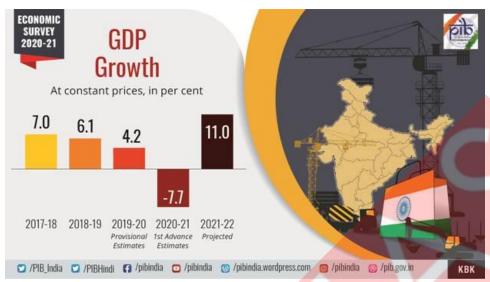
Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. India's real GDP to record a growth of 11 per cent in 2021-22 and nominal GDP by 15.4 per cent-the highest since independence. The GDP growth rate has been declining since 2016-17.





Statement 2 is incorrect. India is likely to post a current account surplus after a gap of 17 years, at 2 per cent of GDP during **2020-21**. India's current account deficit averaged 2.2 per cent of gross domestic product (GDP) in the last 10 years.

## Q.27) Consider the following statements regarding trends in Indian economy in pandemic year 2020-21:

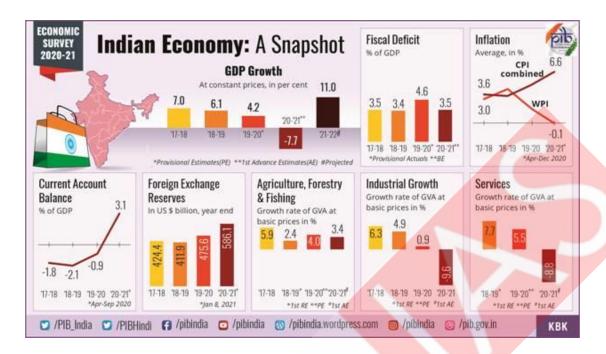
- 1. The Services sector have shown a positive growth rate despite the slowdown in economy.
- 2. The Agriculture, Forestry and Fishing sector is estimated to have negative growth rate. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Both statements are incorrect.

#### Trends in Indian Economy:

- --India expected to have a Current Account Surplus of 2% of GDP in FY21, a historic high after 17 years
- --On supply side, Gross Value Added (GVA) growth pegged at -7.2% in FY21 as against 3.9% in FY20:
- --Agriculture set to cushion the shock of the COVID-19 pandemic on the Indian economy in FY21 with a growth of 3.4%
- --Industry and services estimated to contract by 9.6% and 8.8% respectively during FY21



#### **Q.28)** Consider the following statements:

- 1. The National Statistical Office (NSO) prepares national accounts as well as publishes annual estimates of national product of India.
- 2. The share of Gross Value Added (GVA) of the Tertiary sector has been consistently above fifty percent of overall GVA for last five years.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. The **National Statistical Office (NSO), Ministry of Statistics and Programme Implementation** prepares national accounts as well as publishes annual estimates of national product, government and private consumption expenditure, capital formation, savings, estimates of capital stock and consumption of fixed capital, as also the state level gross capital formation of supra-regional sectors and prepares comparable estimates of State Domestic Product (SDP) at current prices.

Statement 2 is correct.

Year	Share in GVA at current prices (in %)			
	Primary	Secondary	Tertiary	All
2011-12	21.7	29.3	49.0	100.0
2012-13	21.3	28.7	50.0	100.0
2013-14	21.4	27.9	50.6	100.0
2014-15	20.9	27.3	51.8	100.0
2015-16	20.1	27.6	52.3	100.0
2016-17	20.4	27.0	52.6	100.0
2017-18	20.4	27.0	52.5	100.0
2018-19	19.8	26.8	53.4	100.0
2019-20	20.3	24.7	55.0	100.0

Q.29) Consider the following statements regarding the Eight Core Industries:

- 1. Combined weight of eight core industries is more than fifty percent in Index of Industrial Production (IIP).
- 2. Electricity has highest weightage in the Index of Eight Core Industries (ICI).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. The Quick Estimates of **Index of Industrial Production (IIP)** are released by NSO on 12th of every month with a six weeks lag and compiled with data received from source agencies, which in turn receive the data from the producing factories/ establishments.

Combined weight of eight core industries is **40.27 percent of IIP** with base 2011-12.

Statement 2 is incorrect. The monthly **Index of Eight Core Industries (ICI)** is a production volume index released by Office of the Economic Adviser (OEA). ICI measures collective and individual performance of production in selected eight core industries viz. Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement and Electricity.

Refinery Products has highest weightage in ICI.

Table :The Total weight for the Core Industries in IIP (2011-12) and Normalized weight

S.No.	Industries	Weights (% as in IIP 2011-12)	Weights(% in ICI)
1	Coal	4.1609	10.3335
2	Natural Gas (UT)	2.7690	6.8768
3	Crude Oil	3.6172	8.9833
4	Refinery Products	11.2896	28.0376
5	Fertilizers	1.0580	2.6276
6	Steel	7.2143	17.9166
7	Cement	2.1631	5.3720
8	Electricity	7.9940	19.8530
	Total	40.2660	100.0000

<sup>#</sup> The combined Index of Eight Core Industries stood at 133.8 in December, 2020, which declined by 1.3 (provisional) per cent as compared to the Index of December, 2019. Its cumulative growth during April to December, 2020-21 has been (-) 10.1%.

Q.30) Consider the following statements regarding the National Small Savings Fund (NSSF):

- 1. All deposits under small savings schemes are credited to the 'National Small Savings Fund' (NSSF), established in the Public Account of India.
- 2. The balance in the Fund is invested in corporate bonds.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. All deposits under small savings schemes are credited to the 'National Small Savings Fund' (NSSF), established in the Public Account of India with effect from 1.4.1999. All withdrawals by the depositors are made out of the accumulations in this Fund.

Statement 2 is incorrect. The balance in the Fund is invested in special **Government** securities as per norms decided from time to time by the Central Government. The special Central Government securities issued to NSSF constitute a part of the internal debt of the Government of India.

#### **POLITY**

#### Q.1) Consider the following statements regarding the Legislative powers of the President:

- 1. Constitution mandates the circumstances, which rendered it necessary for an ordinance to be promulgated, to be made public through gazette notification.
- 2. An ordinance can be withdrawn by President.
- 3. The President can only promulgate ordinance on the subjects on which Parliament is competent to make laws.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 3 only

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. There is no provision under the constitution mandating the circumstances to be made public. **Article 123(1)** states that —

If at any time, except when both Houses of Parliament are in session, the President is satisfied that circumstances exist which render it necessary for him to take immediate action, he may promulgate such Ordinances as the circumstances appear to him to require.

Statement 2 is correct. Article 123(2)(b) states that an Ordinance promulgated under this article shall have the same force and effect as an Act of Parliament, but every such Ordinance may be withdrawn at any time by the President.

Statement 3 is correct. Article 123(3) states that -

If and so far as an Ordinance under this article makes any provision which Parliament would not under this Constitution be competent to enact, it shall be void.

## **Q.2)** Consider the following statements regarding Constitutional provisions on the **sessions of Parliament**:

- 1. Six months shall not intervene between its last sitting in one session and the date appointed for its first sitting in the next session of a House of Parliament.
- 2. Each House of Parliament shall meet at least 50 times in a Financial Year.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **Article 85(1)** states that the President shall from time to time summon each House of Parliament to meet at such time and place as he thinks fit, but **six months** shall not intervene between its last sitting in one session and the date appointed for its first sitting in the next session.

Statement 2 is incorrect. The Constitution does not specify when or for how many days Parliament should meet.

Q.3) Consider the following statements regarding office of the Governor of States in India?

- 1. Governor is appointed by the President after consultation with the Chief Minister and Chief Justice of the High Court for that State.
- 2. The Governor shall not hold any other office of profit.
- 3. When the same person is appointed as Governor of two or more States, the emoluments and allowances payable to the Governor are paid by the Union Government.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 only
- c) 1 and 3 only
- d) 2 and 3 only

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. Article 155 and 156 of the Constitution mandates that the Governor of a State shall be appointed by the President by warrant under his hand and **seal**. Further, the Governor shall hold office during the pleasure of the President.

# President exercises his/her functions through aid and advice of the Union Council of Ministers. Statement 2 is correct. Article 158(2) states that the Governor shall not hold any other office of profit.

Statement 3 is incorrect. Article 158(3A) states that where the same person is appointed as Governor of two or more States, the emoluments and allowances payable to the Governor shall be allocated among the States in such proportion as the President may by order determine.

**Q.4)** Consider the following statements regarding Constitutional mandate on **Supreme Court**:

- 1. A minimum of five Judges are to sit for deciding any case involving a substantial question of law on interpretation of Constitution.
- 2. All authorities, civil and judicial, in the territory of India shall act in aid of the Supreme Court.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

Explanation: Statement 1 is correct. Article 145(3) states that the minimum number of Judges who are to sit for the purpose of deciding any case involving a substantial question of law as to the interpretation of this Constitution or for the purpose of hearing any reference under article 143 (Presidential reference) shall be five.

Statement 2 is correct. Article 144 states that all authorities, civil and judicial, in the territory of India shall act in aid of the Supreme Court.

Q.5) Education is listed in which of the following section of Seventh Schedule of Indian Constitution?

- a) Union List
- b) State List
- c) Concurrent List
- d) None of the above



#### Correct answer: C

Explanation: Education is listed under Entry 25 of the Concurrent List of the Seventh Schedule to Indian Constitution.

Through the 42nd Amendment Act, State List subjects like education, forest, protection of wild animals and birds, administration of justice, and weights and measurements were transferred to the Concurrent List.

The Union Education ministry has recommended relaxing detention norms to prevent drop-outs this year as well as a slew of measures to address learning loss due to the coronavirus-induced shutdown of schools.

#### **Q.6)** Consider the following statements:

- 1. As per Constitution, any law made by the State which abridges the Fundamental Rights and Directive Principles of State Policy shall be void.
- 2. Any amendment of the Constitution made under Article 368 does not fall under the definition of 'law' under Article 13 of Constitution.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The protection against the laws by Parliament is not provided to Directive Principles as it is explicitly provided to Fundamental Rights under Article 13.

Article 13(2) state that the State shall not make any law which takes away or abridges the rights conferred by this Part and any law made in contravention of this clause shall, to the extent of the contravention, be void.

Statement 2 is correct. Article 13(3): In this article, unless the context otherwise requires,—

- (a) "law" includes any Ordinance, order, bye-law, rule, regulation, notification, custom or usage having in the territory of India the force of law;
- (b) "laws in force" includes laws passed or made by a Legislature or other competent authority in the territory of India before the commencement of this Constitution and not previously repealed, notwithstanding that any such law or any part thereof may not be then in operation either at all or in particular areas.

Article 13(4) Nothing in this article shall apply to any amendment of this Constitution made under article 368.

### Q.7) Administrator(s) of which of the following Union Territory(s) is/are called Lieutenant Governor?

- 1. Andaman & Nicobar Islands
- 2. Puducherry
- 3. Lakshadweep

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above



#### Correct answer: A

**Explanation:** Union Territories are administrated by the President acting to such extent, as he thinks fit, through an Administrator appointed by him. **Administrators of Andaman and Nicobar Islands, Delhi and Puducherry are designated as Lieutenant Governors**. The new Union Territories of Jammu & Kashmir and Ladakh also have separate Lt Governors.

The Governor of Punjab is concurrently the Administrator of Chandigarh. The UT Dadra and Nagar Haveli and Daman and Diu; and UT Lakshadweep have Administrators.

#### **Q.8)** Consider the following statements:

- 1. The validity of any proceedings in Parliament cannot be called in question in Courts on the ground of any alleged irregularity of procedure.
- 2. No discussion can take place in Parliament with respect to the conduct of any Judge of the Supreme Court except on motion for the removal of the Judge.

Which of the statements given above is/are correct?

- A) 1 only
- B) 2 only
- C) Both 1 and 2
- D) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct and provided for under Article 121 and 122 of the Constitution.

**Article 121**: No discussion shall take place in Parliament with respect to the conduct of any Judge of the Supreme Court or of a High Court in the discharge of his duties except upon a motion for presenting an address to the President praying for the removal of the Judge.

**Article 122**: Courts not to inquire into proceedings of Parliament. (1) The validity of any proceedings in Parliament shall not be called in question on the ground of any alleged irregularity of procedure.

(2) No officer or member of Parliament in whom powers are vested by or under this Constitution for regulating procedure or the conduct of business, or for maintaining order, in Parliament shall be subject to the jurisdiction of any court in respect of the exercise by him of those powers.

#### Q.9) Who among the following is not a member of the Cabinet Committee on Security (CCS)?

- a) Minister of Finance
- b) Minister of External Affairs
- c) National Security Advisor
- d) Minister of Home Affairs

#### Correct answer: C

**Explanation:** Major decisions with respect to the significant appointments, issues of national security, defence expenditure of India, are taken by the **Cabinet Committee on Security** (**CCS**) in India.

The Prime Minister chairs the CCS which comprises the Minister of External affairs, Minister of Home Affairs, Minister of Finance, and the Minister of Defence.

Among other functions it also considers all cases involving capital expenditure of more than rupees one thousand crore in respect of Department of Defence Production; and Department of Defence Research and Development. CCS on Wednesday approved the manufacture of 83 Tejas

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light combat aircraft (LCA) by Hindustan Aeronautics Ltd. (HAL) for the Indian Air Force (IAF) at a cost of around Rs 47,000 crore.

#### **Q.10)** Consider the following statements:

- 1. State Election Commission is responsible for superintendence, direction and control over elections to Legislative Assembly and Legislative Councils.
- 2. The state governments shall obtain prior approval of the Election Commission of India, if any disciplinary action is initiated against the Chief Electoral Officers during their tenure.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. As per **Article 324** of the Constitution, the superintendence, direction and control of the preparation of the electoral rolls for, and the conduct of, all elections to Parliament and to the Legislature of every State and of elections to the offices of President and Vice-President is vested in the **Election Commission of India**.

Statement 2 is correct. Many instances have come to the notice of the Election Commission of India wherein Chief Electoral Officers and some other officials working directly in the office of Chief Electoral Officers have been victimised after the elections are over. Commission has addressed a communication to all concerned recently stating: -

- --The state/UT governments shall invariably **obtain prior approval of the Commission**, if any disciplinary action is initiated against the Chief Electoral Officers and other officers up to Joint Chief Electoral Officer during their tenure and also up to one year from the expiry of last election conducted by them.
- --Commission has also directed that the State/UT government shall not reduce facilities such as vehicle, security and other facilities/amenities provided to the office of the Chief Electoral Officer for proper discharge of his/her duties.

## Q.11) Which of the following country(s) is/are currently member(s) of the United Nations Security Council?

- 1. Mexico
- 2. Estonia
- 3. Japan

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** The UN Security Council is composed of 15 Members:

Five permanent members: China, France, Russian Federation, the United Kingdom, and the United States, and ten non-permanent members elected for two-year terms by the General Assembly (with end of term year): Estonia (2021), India (2022), Ireland (2022), Kenya (2022),

Mexico (2022), Niger (2021), Norway (2022), Saint Vincent and the Grenadines (2021), Tunisia (2021) and Viet Nam (2021).

# Q.12) Which of the following project is being externally aided by the International Fund for Agricultural Development (IFAD)?

- 1. Andhra Pradesh Drought Mitigation Project
- 2. Fostering Climate Resilient Upland Farming Systems in the North East
- 3. Odisha Particularly Vulnerable Tribal Groups Livelihoods Improvement Programme Select the correct answer using the code given below:
- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The **International Fund for Agricultural Development** is an international financial institution and a specialised agency of the **United Nations** that works to address poverty and hunger in rural areas of developing countries.

--Andhra Pradesh Drought Mitigation Project aims improve farmers' practices in using and producing drought-tolerant crop varieties, as well as in managing soil fertility and moisture.

Duration: 2016 - 2022, Total Project Cost: US\$ 148.84 million, IFAD Financing: US\$ 75.5 million

--Fostering Climate Resilient Upland Farming Systems in the North East is designed to provide farmers with better jhum cultivation practices, assist jhumia households to adopt alternative farming systems, particularly settled farming, support improved market access and value chain development.

Duration: 2017 – 2024, Total Project Cost: US\$ 168.51 million, IFAD Financing: US\$ 76.55 million

--Odisha Particularly Vulnerable Tribal Groups Livelihoods Improvement Programme aims to achieve better living conditions and to reduce poverty for the most vulnerable in Odisha's heavily forested Eastern Ghats and Northern Plateau regions.

Duration: 2015 - 2024, Total Project Cost: US\$ 130.4 million, IFAD Financing: US\$ 51.21 million

# The Agricultural and Processed Food Products Export Development Authority (APEDA) in association with Andhra Pradesh Drought Mitigation Project recently organized a Virtual Buyer Seller Meet with Millet Exporters and FPOs of Millet for establishing marketing linkages.

# Q.13) Which of the following country(s) is/are being supported under the "Natural Capital Accounting and Valuation of Ecosystem Services" (NCAVES) project?

- 1. India
- 2. China
- 3. Brazil

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The United Nations Statistics Division, the United Nations Environment Programme, the Secretariat of the Convention on Biological Diversity, and the European Union have launched the project "Natural Capital Accounting and Valuation of Ecosystem Services" (NCAVES).

The project funded by the European Union through its Partnership Instrument (PI), aims to assist the five participating partner countries, namely **Brazil, China, India, Mexico and South Africa**, to advance the knowledge agenda on environmental-economic accounting, in particular ecosystem accounting.

## Q.14) Which of the following country recently organized the One Planet Summit?

- a) France
- b) Germany
- c) India
- d) United Kingdom

#### Correct answer: A

Explanation: One Plane Summit was organized by France, in cooperation with the United Nations and the World Bank on 11 January 2021. It focused on biodiversity to mobilize commitments to protect ecosystems and make links to human health.

Convened under the theme of "Let's act together for nature!", the Summit brought together heads of state and government, leaders of international organizations, financial institutions, companies and NGOs, all ready to demonstrate that their commitments are leading to concrete actions to preserve and restore biodiversity, and to lead systemic transformations of economies.

# **Q.15)** What is the objective of **PREZODE initiative** that was launched recently?

- a) Prevent emerging zoonotic risks and pandemics
- b) Global alliance for fair and equitable distribution of COVID-19 vaccines
- c) Monitor the progress on Intended Nationally Determined Contributions under Paris Agreement
- d) An Arab peninsula peace initiative

#### Correct answer: A

**Explanation: PREZODE**, an initiative to prevent emerging **zoonotic risks and pandemics**, was announced on the occasion of the One Planet Summit for biodiversity held on 11 January. The PREZODE initiative aims to keep the risk of emerging zoonoses and pandemics in check. It is built on and strengthens existing cooperation between regions of the world (Africa, Asia, Caribbean, Indian Ocean, Mediterranean, Middle East, Latin America and Europe) that are most exposed to emerging zoonotic diseases.

PREZODE is designed to incorporate and reinforce networks in human health, animal welfare and the environment. In line with the One Health concept, it aims to better evaluate and detect emerging zoonotic threats and develop preventive measures with all players to protect humans, the planet, and socio-ecosystems.

#### Q.16) Consider the following statements regarding the pardoning power of President:

- 1. The President cannot grant pardon in cases where the punishment or sentence is by a Court Martial.
- 2. The power of president to grant pardon is final and not subject to Judicial review.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. Under the Constitution of India (Article 72), the President of India shall have the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence—

- --in all cases where the punishment or sentence is by a Court Martial;
- --in all cases where the punishment or sentence is for an offence against any law relating to a matter to which the executive power of the Union extends;
- --in all cases where the sentence is a sentence of death.

Statement 2 is incorrect. The power of pardon under Article 72 was reviewed in the cases of Maru Ram v Union of India and Kehar Singh v Union of India.

The Court explicitly held in that 'Article 72 falls squarely within the judicial domain and can be examined by the court by way of judicial review.' The Court qualified this finding by holding that the order of the President cannot be subjected to judicial review on its merits except within the strict limitations of Presidential order being arbitrary or wholly irrelevant, irrational, discriminatory or mala fide.

**Q.17)** In which of the following circumstance(s) the Parliament can make laws on subjects specified in the **State List of Seventh Schedule to the Constitution?** 

- 1. If the Legislative Council of a State has declared by resolution that it is necessary or expedient in the national interest that Parliament should make such a law.
- 2. If a Proclamation of Emergency is in operation.

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **Article 249** of the Constitution states that if the **Council of States** has declared by resolution supported by not less than two-thirds of the members present and voting that it is necessary or expedient in the national interest that Parliament should make laws with respect to any matter enumerated in the State List specified in the resolution, it shall be lawful for Parliament to make laws for the whole or any part of the territory of India with respect to that matter while the resolution remains in force.

Statement 2 is correct. **Article 250** provides for power of Parliament, while a Proclamation of Emergency is in operation, to make laws for the whole or any part of the territory of India with respect to any of the matters enumerated in the State List.

#### **Q.18)** Consider the following statements:

1. Constitution puts a limit of 14 days on President to either assent or reject a law after it has been passed by both houses of the Parliament.

- 2. The President cannot return for reconsideration a Money bill duly passed by the Parliament. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. There is **no time limit** put on the President to declare assent or reject a bill passed by the Parliament. This in effect is the **Pocket veto** power of the President of India.

Statement 2 is correct. President can either accept or reject a money bill but cannot return it for reconsideration.

**Article 111 of the Constitution** states that President may, as soon as possible after the presentation to him of a Bill for assent, return the Bill if it is not a Money Bill to the Houses with a message requesting that they will reconsider the Bill or any specified provisions thereof, and if the Bill is passed again by the Houses with or without amendment and presented to the President for assent, the President shall not withhold assent therefrom.

## **Q.19)** Consider the following statements:

- 1. Acquisition and requisitioning of property' is a state subject under the Seventh Schedule to the Constitution.
- 2. The Legislative Assembly Jammu & Kashmir can make laws with respect to any of the matters enumerated in the State List except Land, Public Order and Police.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. Though **land is a state subject, "acquisition and requisitioning of property" is in the concurrent list**. Both Parliament and state legislatures can make laws on this subject.

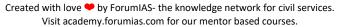
Statement 2 is incorrect. As per the **Jammu & Kashmir Reorganisation Act, 2019**; The Legislative Assembly of Union territory of Jammu and Kashmir, the Legislative Assembly may make laws for the whole or any part of the Union territory of Jammu and Kashmir with respect to any of the matters enumerated in the State List except the subjects mentioned at entries 1 and 2, namely **"Public Order" and "Police"** respectively.

#### **Q.20)** Consider the following statements regarding the **Sixth Schedule** areas:

- 1. None of the states of India north of the tropic of cancer have areas under the Sixth Schedule.
- 2. The Governor may, by public notification increase or decrease the area of an autonomous district under the Sixth Schedule.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only



- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **Sixth Schedule** which applies to the Tribal Areas of **Assam, Meghalaya, Tripura and Mizoram**, provides for autonomy in the administration of these areas through Autonomous District Councils (ADCs) and the Regional Councils empowered to make laws in respect of areas under their jurisdiction.

Tropic of Cancer passes through 8 Indian states including: Gujarat, Rajasthan, Madya Pradesh, Chhattisgarh, Jharkhand, West Bengal, Tripura and Mizoram.

Statement 2 is correct. The **Governor may, by public notification**, include/exclude any area, create a new autonomous district, increase/diminish the area of any autonomous district, unite two or more autonomous districts or parts thereof so as to form one autonomous district, alter the name of any autonomous district, define the boundaries of any autonomous district.

#### **Q.21)** Consider the following statements:

- 1. Constitution of India explicitly mentions the date of enactment of the Constitution.
- 2. 'Beating The Retreat' ceremony on 29th January officially denotes the end of Republic Day festivities.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. The **Preamble to the constitution** of India provides the date of adoption and enactment of the Constitution as 26th January, 1950.

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC and to secure to all its citizens:

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

*EQUALITY* of status and of opportunity;

and to promote among them all FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this 26th day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

Statement 2 is correct. **'Beating The Retreat'** officially denotes the end of Republic Day festivities. It is conducted on the evening of January 29, the third day after the Republic Day.

# Q.22) Consider the following statements regarding the Protection of Children from Sexual Offences Act, 2012:

- 1. The said Act defines a child as any person below eighteen years of age.
- 2. It provides for Special Courts that conduct the trial in-camera and without revealing the identity of the child.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only



- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Protection of Children from Sexual Offences Act, 2012** defines a child as any person below eighteen years of age, and defines different forms of sexual abuse, including penetrative and non-penetrative assault, as well as sexual harassment and pornography.

People who traffic children for sexual purposes are also punishable under the provisions relating to abetment in the said Act. The said Act prescribes stringent punishment graded as per the gravity of the offence, with a maximum term of rigorous imprisonment for life, and fine. Statement 2 is correct. The said Act provides for **Special Courts** that conduct the trial incamera and without revealing the identity of the child, in a child-friendly manner. The child is not to be called repeatedly to testify in court and may testify through video-link rather than in a courtroom. The said Act stipulates that a case of child sexual abuse must be disposed of within one year from the date the offence is reported.

# Q.23) Consider the following statements regarding the ordinance making power of the President:

- 1. An ordinance can only be promulgated when both houses of the Parliament are not in session.
- 2. Any ordinance promulgated can be withdrawn by the President at any time.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **Article 123 of the Constitution** grants the President certain law-making powers to promulgate Ordinances when either of the two Houses of Parliament is not in session and hence it is not possible to enact laws in the Parliament.

Statement 2 is correct. The President cannot promulgate an Ordinance unless he is satisfied that there are circumstances that require taking 'immediate action' and s/he can withdraw an ordinance at any time.

# Q.24) Constitution of India provides for **President's address to the Parliament** on which of the following occasion(s)?

- 1. The first session after each general election to the House of the People
- 2. At the commencement of the first session of each year
- 3. On introduction of a Constitutional amendment bill

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation: Article 87 of the Constitution** provides for Special address by the President. At the commencement of the first session after each general election to the House of the People and at the commencement of the first session of each year the President shall address both Houses of Parliament assembled together and inform Parliament of the causes of its summons. Originally, the President was required to address each session of Parliament. Therefore, during the provisional Parliament in 1950, President Rajendra Prasad gave an address before every session. The First Amendment to the Constitution in 1951 changed this position and made the President's address once a year.



#### INTERNATIONAL RELATIONS/ORGANISATIONS

- Q.1) Which of the following country(s) is/are member of the Arctic Council?
- 1. Japan
- 2. Finland
- 3. Sweden

Select the correct answer using the code given below:

- a) 1 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 3 only

#### Correct answer: B

**Explanation:** The Arctic Council consists of the **eight Arctic States**: Canada; Denmark; Finland; Iceland; Norway; Russia; Sweden; United States.

The Arctic states have territories within the Arctic and thus carry the role as stewards of the region. Their national jurisdictions and international law govern the lands surrounding the Arctic Ocean and its waters.



# International law identifies four global commons, namely the High Seas, the Atmosphere, the Antarctica and the Outer Space. Arctic is mostly governed by Arctic Council states.

- Q.2) Consider the following statements regarding the UN Security Council (UNSC) membership:
- 1. Every member country of the United Nation has at least once been a member of UNSC.
- 2. In 2020, India has been elected to the UNSC membership for the first time in 21<sup>st</sup> century. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. More than 50 United Nations Member States have **never** been Members of the Security Council.

A State which is a Member of the United Nations but not of the Security Council may participate, without a vote, in its discussions when the Council considers that country's interests are affected.

Statement 2 is incorrect. India has entered the UN Security Council as a non-permanent member for the eighth time in 2021-22.

India was also elected for the 2011-12 of UNSC membership.

#### **Q.3)** Consider the following statements:

- 1. India was a founding member of the Asian Development Bank (ADB) in 1966.
- 2. India is among the ADB's five largest shareholders.
- 3. The transport sector of India has received more Cumulative Lending, Grant, and Technical Assistance from ADB than the energy sector.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** Statement 1 is correct. India was a **founding member of the Asian Development Bank (ADB)** in 1966 and its operations in India commenced in 1986.

# ADB, India recently signed a \$100 million loan to upgrade power distribution system in Bengaluru.

Statement 2 is correct. ADB's five largest shareholders are Japan and the United States (each with 15.6% of total shares), the People's Republic of China (6.4%), **India (6.3%)**, and Australia (5.8%).

Statement 3 is correct. Since 1986, ADB has committed 239 sovereign loans totaling \$42.26 billion for India.

India's transport sector has received maximum assistance from the ADB. [Source: Asian Development Bank. ADB and India: Fact Sheet]

Sector	No.	Total Amount (\$ million) <sup>d</sup>	% <sup>d</sup>
Agriculture, Natural Resources, and Rural Development	50	1,536.97	3.20
Education	17	529.13	1.10
Energy	189	13,188.73	27.50
Finance	73	5,596.52	11.67
Health	9	316.83	0.66
Industry and Trade	18	512.42	1.07
Information and Communication Technology	3	150.95	0.31
Multisector	29	2,131.73	4.44
Public Sector Management	70	2,056.09	4.29
Transport	176	17,102.29	35.66
Water and Other Urban Infrastructure and Services	96	4,841.26	10.09
Total	730	47,962.91	100.00

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Using primary sector in reporting of commitments.
 Numbers may not sum precisely because of rounding.

# Q.4) Consider the following statements regarding the non-permanent membership of United Nations Security Council:

- 1. Each year the UN General Assembly elects ten non-permanent members for a two-year term.
- 2. Five seats in UNSC non-permanent membership are reserved for African and Asian States. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **Each year** the General Assembly elects **five non- permanent members (out of 10 in total)** for a two-year term.

Statement 2 is correct. In accordance with the General Assembly resolution 1991 (XVIII) of 17 December 1963, the 10 non-permanent seats are distributed on a regional basis as follows: **five for African and Asian States**; one for Eastern European States; two for the Latin American and Caribbean States; and two for Western European and other States.

# Q.5) Which of the following country(s) is/are the members(s) of the Indian Ocean Commission (IOC)?

- 1. Mauritius
- 2. Seychelles
- 3. Maldives

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

Explanation: The Indian Ocean Commission (IOC) is an intergovernmental organisation comprising five member states: The Union of Comoros, Réunion (an overseas region of France), Madagascar, Mauritius and Seychelles.

Created by the Port Louis Declaration in 1982, the IOC was institutionalized in Seychelles in 1984 by the General Cooperation Agreement, better known as the "Victoria Agreement".

Observer members of the IOC: India, China, Japan, Malta, European Union, United Nations and International Organization of the Francophonie.

# Q.6) Consider the following statements regarding the World Trade Organisation Trade Policy Review (TPR) of countries:

- 1. Its objective is to increase the transparency and understanding of countries' trade policies and practices, through regular monitoring.
- 2. It is focused only on goods trade of countries.
- 3. The frequency of each member's review varies according to its share of world trade.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 3 only

d) 1 and 3 only

#### Correct answer: D

**Explanation:** Statement 1 is correct. Surveillance of national trade policies is a fundamentally important activity running throughout the work of the WTO. The **objective of the WTO Trade Policy Review** is:

- --to increase the transparency and understanding of countries' trade policies and practices, through regular monitoring
- --to enable a multilateral assessment of the effects of policies on the world trading system.

Statement 2 is incorrect. Participants agreed to set up the reviews at the December 1988 ministerial meeting that was intended to be the midway assessment of the Uruguay Round. The first review took place the following year.

Initially they operated under GATT and, like GATT, they focused on goods trade. With the creation of the WTO in 1995, their scope was extended, like the WTO, to **include services and intellectual property**.

Statement 3 is correct. All WTO members are reviewed, the frequency of each country's review varying according to its share of world trade.

# India's seventh Trade Policy Review (TPR) began on Wednesday, 6th January 2021. India's last TPR took place in 2015.

# Q.7) Consider the following statements regarding the "Natural Capital Accounting and Valuation of Ecosystem Services" (NCAVES) project:

- 1. It is being funded under the Green Climate Fund (GCF).
- 2. It aims to assist SAARC nations to advance the knowledge on environmental-economic accounting.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

## Correct answer: D

**Explanation:** Both statements are incorrect.

The United Nations Statistics Division, the United Nations Environment Programme, the Secretariat of the Convention on Biological Diversity, and the European Union launched the project "Natural Capital Accounting and Valuation of Ecosystem Services" (NCAVES) in 2017.

The project funded by the **European Union** through its Partnership Instrument (PI), aims to assist the five participating partner countries, namely **Brazil, China, India, Mexico and South Africa**, to advance the knowledge agenda on environmental-economic accounting, in particular ecosystem accounting.

The main objective of the UNSD-led project is to mainstream natural capital accounting and the valuation of ecosystem services in data-driven decision and policy-making at the national, regional and local levels.

# NCAVES India Forum 2021 is being organised by the Ministry of Statistics and Programme Implementation (MoSPI). In India, the NCAVES project is being implemented by the MoSPI in close collaboration with the Ministry of Environment, Forest and Climate Change (MoEF&CC) and the National Remote Sensing Centre (NRSC).

Q.8) Which of the following defence equipment is/of the French origin?

- 1. Rafale Dassault
- 2. Mirage 2000
- 3. Ilyushin Il-78

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** Option 1 is correct. **Rafale** is a French twin-engine, canard delta wing, multirole fighter aircraft designed and built by Dassault Aviation. France, Qatar, India and Greece are the countries operating this fighter jet.

Option 2 is correct. The **Dassault Mirage 2000** is a French multirole, single-engine fourth-generation jet fighter manufactured by Dassault Aviation. France, India, UAE, Egypt are among the major countries operating this aircraft.

Option 3 is incorrect. The **Ilyushin Il-78** is a Soviet four-engine aerial refueling tanker based on the Il-76 strategic airlifter.

# Diplomatic Advisor to the French President is on a visit to India for the India-France Strategic Dialogue, held on January 7, 2021.

## **Q.9)** Consider the following statements:

- 1. Coalition for Epidemic Preparedness Innovations (CEPI) is an intergovernmental organisation launched by the World Health Organisation.
- 2. India is among the countries hosting a CEPI Centralized Laboratory Network for COVID-19 Vaccine Testing.

Which of the statements given above is/are correct?

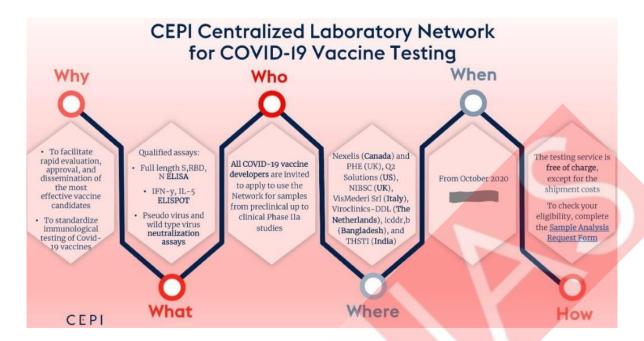
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **Coalition for Epidemic Preparedness Innovations** (**CEPI**) is an innovative partnership between public, private, philanthropic, and civil organizations, launched at Davos in 2017, to develop vaccines to stop future epidemics.

Statement 2 is correct. The CEPI in partnerships with seven clinical sample testing laboratories have created a **centralised global network** to reliably assess and compare the immunological responses generated by COVID-19 vaccine candidates.

The clinical sample testing laboratories selected for this collaborative vaccine network are: Nexelis (Canada) and Public Health England (PHE; UK), VisMederiSrl (Italy), Viroclinics Biosciences BV (The Netherlands), Q2 Solutions (USA), International Centre for Diarrhoeal Disease Research Bangladesh (ICDDR-B, Bangladesh), National Institute for Biological Standards and Control (NIBSC, UK), and **Translational Health Sciences and Technological Institute (THSTI, India)**.



**Q.10)** Which of the following is/are or proposed **railway line** connecting India directly to its neighboring country(s)?

- 1. Maitree Express
- 2. Jaynagar-Bijalpura-Bardibas rail project
- 3. Zaranj-Delaram project

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** Option 1 is correct. The first rail line between India and Dhaka was opened in 2008 when **Maitree express between Dhaka and Kolkata** was started. In 2017 Bandhan express was also started between Kolkata and Khulna.

Option 2 is correct. **Jaynagar-Bijalpura-Bardibas** railway line project connects India and Nepal. As first phase of this project, the rail line from Jayanagar in Madhubani district, Bihar has been connected to Kurtha in Nepal and will be extended up to Bijalpura by March 2021.

Option 3 is incorrect. The **Delaram-Zaranj Highway** is roadway in the Nimruz Province of Afghanistan connecting the Delaram District in Afghanistan to the border of Iran. India provided assistance to Afghanistan for construction of this highway which further connects to Chabahar port through Iran.

#### Q.11) What is 'Defeat Non-Communicable Disease Partnership'?

- a) An intergovernmental partnership under World Health Organisation (WHO)
- b) A collaborative partnership of WHO and European Union
- c) A global preventive healthcare initiative of India
- d) A public-private-people partnership anchored in the United Nations

#### Correct answer: D

**Explanation:** The **Defeat-NCD Partnership** is a 'public-private-people' partnership anchored in the United Nations (UN Institute of Training and Research, Geneva). It partners with governments, multilateral agencies, civil society, academia, philanthropic foundations and the private sector.

The Partnership aims to gather and mobilise global and national knowledge, tools, capacities, and finances to benefit low-resource countries.

## Q.12) Consider the following statements regarding the **Open Skies Treaty**:

- 1. It permits each state-party to conduct unarmed, reconnaissance flights over the others' territories to collect data on military forces and activities.
- 2. India a state-party to the Open Skies Treaty.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The **Open Skies Treaty** permits each state-party to conduct short-notice, unarmed, reconnaissance flights over the others' entire territories to collect data on military forces and activities.

Statement 2 is incorrect. India is not a member to this treaty.

Members: Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Turkey, Ukraine, the United Kingdom.

# In May 2020, the Trump administration announced its intention of withdrawing from the OST, accusing Russia of "flagrantly and continuously violating the Treaty in various ways for years", and left it in November 2020. Kyrgyzstan has signed, but not ratified the treaty.

# Q.13) Consider the following statements regarding the World Health Organisation' Executive Board:

- 1. The main function of the Board is to implement the decisions and policies of the Health Assembly.
- 2. India is currently the chair of the WHO Executive Board.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

## Correct answer: C

**Explanation:** Statement 1 is correct. The **WHO Executive Board** is composed of 34 technically qualified members elected for three-year terms. The annual Board meeting is held in January when the members agree upon the agenda for the World Health Assembly and the resolutions to be considered by the Health Assembly.

A second shorter meeting takes place in May, as a follow-up to the Health Assembly. The main functions of the Board are to implement the decisions and policies of the Health Assembly, and advise and generally to facilitate its work.

Statement 2 is correct. Dr. Harsh Vardhan, Union Minister for Health and Family Welfare digitally chaired the 148th session of WHO Executive Board, through Video Conference.

# Q.14) India is hosting which of the following country's defence forces in the Exercise Desert Knight-21?

- a) France
- b) United Kingdom
- c) United Arab Emirates
- d) Russia

#### Correct answer: A

Explanation: Indian Air Force and French Air and Space Force (Armée de l'Air et de l'Espace) will conduct a bilateral Air exercise, Ex Desert Knight-21 at Air Force Station Jodhpur from 20 to 24 Jan 21.

As part of Indo-French defence cooperation, Indian Air Force and French Air and Space Force have held six editions of Air Exercises named 'Garuda', the latest being in 2019 at Air Force Base Mont-de-Marsan, France.

## Q.15) Which of the following institution has released the Adaptation Gap Report 2020?

- a) United Nations Framework Convention on Climate Change
- b) United Nations Environment Programme
- c) Intergovernmental Panel for Climate Change
- d) World Meteorological Organization

#### Correct answer: B

Explanation: The fifth edition of the Adaptation Gap Report, released by the United Nations Environment Programme (UNEP) looks at progress in planning for, financing and implementing adaptation - with a focus on nature-based solutions.

The UNEP Adaptation Gap Report 2020 finds that while nations have advanced in planning, huge gaps remain in finance for developing countries and bringing adaptation projects to the stage where they bring real protection against climate impacts such as droughts, floods and sea-level rise.

Nature-based solutions - locally appropriate actions that address societal challenges, such as climate change, and provide human well-being and biodiversity benefits by protecting, sustainably managing and restoring natural or modified ecosystems - must also become a priority.

## Q.16) Consider the following statements regarding COVAX Facility:

- 1. Gavi is coordinating the development and implementation of the COVAX Facility.
- 2. COVAX Advance Market Commitment aims to enable access of low- and middle-income economies to donor-funded doses of COVID-19 vaccines.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2



#### d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

**COVAX** is the vaccines pillar of the Access to COVID-19 Tools (ACT) Accelerator. The ACT Accelerator is a ground-breaking global collaboration to accelerate the development, production, and equitable access to COVID-19 tests, treatments, and vaccines.

**Gavi** is coordinating the development and implementation of the COVAX Facility, the global procurement mechanism of COVAX. At the Global Vaccine Summit last year, Gavi launched the COVID-19 Vaccines Advance Market Commitment (COVAX AMC) as the first building block of the COVAX Facility.

The **Gavi COVAX AMC** is the innovative financing instrument that will support the participation of 92 low- and middle-income economies in the COVAX Facility – enabling access to donor-funded doses of safe and effective COVID-19 vaccines.

**Q.17)** Which of the following country(s) is/are receiving the **COVID-19 vaccine supplies** from India under grant assistance?

- 1. Maldives
- 2. Bangladesh
- 3. Myanmar

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The Government of India has received several requests for the supply of Indian manufactured vaccines from neighbouring and key partner countries. In response to these requests, and in keeping with India's stated commitment to use India's vaccine production and delivery capacity to help all of humanity fight the Covid pandemic, supplies under grant assistance to **Bhutan**, **Maldives**, **Bangladesh**, **Nepal**, **Myanmar and Seychelles will begin from 20 January 2021.** 

In respect of Sri Lanka, Afghanistan and Mauritius, we are awaiting their confirmation of necessary regulatory clearances.

# Q.18) Which of the following organisations(s) is/are members of the International Coordinating Group (ICG) on Vaccine Provision?

- 1. World Health Organisation
- 2. United Nations Children's Fund
- 3. International Federation of the Red Cross and Red Crescent Societies Select the correct answer using the code given below:
- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The **International Coordinating Group (ICG) on Vaccine Provision** was established in 1997, following major outbreaks of meningitis in Africa, as a mechanism to manage and coordinate the provision of emergency vaccine supplies and antibiotics to countries during major outbreaks.

ICGs have been established to provide access to vaccines for **Cholera**, **Ebola**, **Meningitis and Yellow fever**.

The ICG is made up of four member agencies: World Health Organization (WHO), UNICEF, the International Federation of Red Cross and Red Crescent Societies (IFRC), and Médecins Sans Frontières (MSF).

# WHO, UNICEF, IFRC and MSF recently announced the establishment of a Global Ebola Vaccine Stockpile to ensure response to outbreak.

# Q.19) Which of the following institution has released the report titled 'International Migration 2020 Highlights'?

- a) World Bank
- b) International Labour Organisation
- c) United Nations Educational, Scientific and Cultural Organization
- d) United Nations Department of Economic and Social Affairs

#### Correct answer: D

**Explanation:** International Migration report 2020 has been released by the **Population** Division of the United Nations Department of Economic and Social Affairs (UNDESA).

- --18 million people from India were living outside of their country of birth.
- -- India's large diaspora is distributed across a number of major countries of destination, with the UAE (3.5 million), the US (2.7 million) and Saudi Arabia (2.5 million) hosting the largest numbers of migrants from India.
- --Other countries with a large diaspora included Mexico and Russia (11 million each), China (10 million) and Syria (8 million).
- # The World Migration Report is a flagship publication series of the International Organization for Migration.

#### Q.20) Consider the following statements regarding India-Singapore relations:

- 1. India has a Comprehensive Economic Cooperation Agreement (CECA) with Singapore.
- 2. Both countries are members of the IORA (Indian Ocean Rim Association) and IONS (Indian Ocean Naval Symposium).
- 3. Singapore is among the countries that have received COVID-19 vaccines under grant assistance from India.

Which of the statements given above is/are correct?

- a) 1 and 2 Only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** Statement 1 is correct. India and Singapore signed the **Comprehensive Economic Cooperation Agreement (CECA) in 2005**. This robust relationship was elevated to a Strategic Partnership in 2015.



Statement 2 is correct. There is great convergence on a broad range of international issues and both are members of a number of forums, including **East Asia Summit**, **G20**, **Commonwealth**, **IORA** (Indian Ocean Rim Association) and IONS (Indian Ocean Naval Symposium).

Statement 3 is incorrect. The Government of India has received several requests for the supply of Indian manufactured vaccines from neighbouring and key partner countries. In response to these requests, and in keeping with India's stated commitment to use India's vaccine production and delivery capacity to help all of humanity fight the Covid pandemic, supplies under grant assistance to Bhutan, Maldives, Bangladesh, Nepal, Myanmar and Seychelles will begin from 20 January 2021.

In respect of Sri Lanka, Afghanistan and Mauritius, India is awaiting their confirmation of necessary regulatory clearances.

# Defence Minister Rajnath Singh recently held a bilateral meeting with Singapore Defence Minister Dr Ng Eng Hen through video conferencing.

Q.21) Which of the following organization has published the Global Risks Report 2021?

- a) World Economic Forum
- b) World Bank
- c) United Nations Educational, Scientific and Cultural Organization
- d) United Nations Framework Convention on Climate Change

#### Correct answer: A

**Explanation:** The **16th edition of the World Economic Forum's Global Risks Report** analyses the risks from societal fractures—manifested through persistent and emerging risks to human health, rising unemployment, widening digital divides, youth disillusionment, and geopolitical fragmentation.

Report findings are based on the Global Risks Perception Survey (GRPS) undertaken by more than 650 members of leadership communities of WEF (World Economic Forum).



**ForumIAS** 

Q.22) Consider the following statements regarding the **Partnerships for Accelerating Clinical Trials (PACT)** programme:

- 1. It has been launched for supporting COVID-19 vaccine development activities in partnering countries.
- 2. The initiative is being implemented by the Department of Science & Technology.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The **PACT (Partnerships for Accelerating Clinical Trials)** programme has been launched for supporting COVID-19 vaccine development activities in partnering countries.

Statement 2 is incorrect. The initiative is being implemented by **Biotechnology Industry Research Assistance Council (BIRAC)** and Clinical Development Services Agency (CDSA) under the aegis of the National Biopharma Mission and Ind-CEPI Mission of DBT.

India has also provided training to several neighbouring countries to enhance and strengthen their clinical capabilities, under the Partnerships for Accelerating Clinical Trials (PACT) programme.

**Q.23)** Consider the following statements regarding **India-European Union** relations:

- 1. Indian has signed a Broad-based Trade and Investment Agreement (BTIA) with the European Union.
- 2. India EU Maritime Security Dialogue is an annual dialogue held alongside the India-EU Summit.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** Statement 1 is incorrect. **India and the EU** began negotiations on a broad-based Bilateral Trade and Investment Agreement (BTIA) in Brussels, Belgium in 2007. The agreement is yet to be signed and is stuck due to difference od stance on issues like IPR, environmental regulations, services sector negotiations, sanitary and phytosanitary measures and technical barriers to trade (SPS-TBT).

Statement 2 is incorrect. The inaugural **India - EU Maritime Security Dialogue** has been held recently.

India and the EU held their first maritime security dialogue in a virtual format on 20 January 2021. The consultations involved exchanges on developments in maritime security environment, regional cooperation activities, developments of mutual interest and opportunities for cooperation between India and the EU.

# The first India-EU Summit was held in Lisbon on 28 June 2000 which marked a watershed in the development of the relationship. Since then, fifteen annual bilateral Summits have been held between India and the EU.

Q.24) Which of the following organisation publishes the Global Innovation Index (GII)?

- a) World Intellectual Property Organization (WIPO)
- b) World Economic Forum (WEF)
- c) World Bank
- d) Organisation for Economic Co-operation and Development (OECD)

#### Correct answer: A

**Explanation:** The **Global Innovation Index (GII)** is co-published by **Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO)**, a specialized agency of the United Nations. The Global Innovation Index (GII), since 2007, has been providing detailed metrics about the innovation performance of countries and economies around the world.

# Global Innovation Index (GII) 2020 ranked India at 48th place, up four positions since 2019.

India has maintained its growth in publications—the traditional indicator of scientific excellence. The number of publications has increased exponentially over the last 10 years.

According to data from the US agency, the **National Science Foundation (NSF)**, India is currently in third place, only behind China and the United States, with 135,788 scientific articles in the year 2018.

Q.25) Consider the following statements regarding the recently launched global initiative "The Great Reset":

- 1. It has been launched by the World Bank.
- 2. It aims at global stakeholder's cooperation in managing the direct social and economic consequences of the COVID-19 crisis

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The third and final priority of a Great Reset agenda is to harness the innovations of the Fourth Industrial Revolution to support the public good, especially by addressing health and social challenges.

There is an urgent need for global stakeholders to cooperate in simultaneously managing the direct consequences of the COVID-19 crisis. To improve the state of the world, the **World Economic Forum is starting The Great Reset initiative.** 

Statement 2 is correct. The Great Reset agenda would have three main components:

- -- The first would steer the market toward fairer outcomes. To this end, governments should improve coordination (for example, in tax, regulatory, and fiscal policy), upgrade trade arrangements, and create the conditions for a "stakeholder economy."
- -- The second component would ensure that investments advance shared goals, such as equality and sustainability. Here, the large-scale spending programs that many governments are implementing represent a major opportunity for progress. Example: European Commission has unveiled plans for a €750 billion (\$826 billion) recovery fund.
- -- The third and final priority of a Great Reset agenda is to harness the innovations of the Fourth Industrial Revolution to support the public good, especially by addressing health and social challenges.

**Q.26)** Consider the following statements:

- 1. 'Futures of Education' is an initiative of UNESCO that aims to rethink education and shape the future.
- 2. The theme of the International Education Day 2021 is 'Recover and Revitalize Education for the COVID-19 Generation'.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **UNESCO's Futures of Education** initiative aims to rethink education and shape the future. The work will be guided by a high-level International Commission of thought-leaders from diverse fields and different regions of the world.

In November 2021 the commission will publish a report designed to share a forward-looking vision of what education and learning might yet become and offer a policy agenda.

Statement 2 is correct. The United Nations General Assembly proclaimed 24 January as International Day of Education, in celebration of the role of education for peace and development.

The third International Day of Education (January 24 2021) is being celebrated under the theme 'Recover and Revitalize Education for the COVID-19 Generation'.

# Q.27) Consider the following statements regarding the United Nations Security Council (UNSC):

- 1. Under the Charter of the United Nations, all Member States are obligated to comply with Council decisions.
- 2. The presidency of the Council is held by the permanent members only in turn, for one month each.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

## Correct answer: A

**Explanation:** Statement 1 is correct. The **Security Council** has primary responsibility for the maintenance of international peace and security. It has 15 Members, and each Member has one vote. Under the Charter of the United Nations, all Member States are obligated to comply with Council decisions.

Statement 2 is incorrect. The presidency of the Council is held by each of the **members** (**permanent and non-permanent**) in turn for one month, following the English alphabetical order of the Member States names. *Tunisia is the president for January 2021*.

All existing committees and working groups are comprised of the fifteen members of the Council. While standing committees are chaired by the President of the Council, rotating on a monthly basis, other committees and working groups are chaired or co-chaired by designated members of the Council who are announced on an annual basis by a Note of the President of the Security Council.

Q.28) Which of the following organisation holds the annual Davos Dialogues/Summit?

- a) United Nations Conference on Trade and Development
- b) International Monetary Fund
- c) World Bank
- d) World Economic Forum

#### Correct answer: D

**Explanation:** Davos summit organised by the **World Economic Forum (WEF)** is an annual event held at Davos in Switzerland, which sees the participation of world leaders, politicians, economists and business leaders.

Prime Minister Narendra Modi and Chinese President Xi Jinping will be among the top world leaders to attend the World Economic Forum (WEF)'s Davos Agenda Summit. The six-day event will be held online from January 24 to 29.

The 'Davos Agenda' 2021 will also mark the launch of WEF's "Great Reset Initiative".

Q.29) Consider the following statements regarding the International Energy Agency (IEA):

- 1. Its mandate is to help its members respond to major oil supply disruptions.
- 2. A candidate country to the IEA must be a member country of the Organization for Economic Co-Operation and Development (OECD).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. The IEA was established in 1974, in the wake of the 1973-1974 oil crisis, **to help its members respond to major oil supply disruptions**, a role it continues to fulfill today. IEA's mandate has expanded over time to include tracking and analyzing global key energy trends, promoting sound energy policy, and fostering multinational energy technology cooperation.

Statement 2 is correct. The IEA operates within the broader framework of the **Organization for Economic Co-Operation and Development (OECD)**. A candidate country to the IEA must be a member country of the OECD.

The IEA is made up of 30 member countries. In addition, thanks to its successful open door policy to emerging countries, the IEA family also includes eight association countries (including India).

# The Framework for Strategic Partnership between the International Energy Agency (IEA) members and the Government of India was signed on 27th January, 2021 to strengthen mutual trust and cooperation & enhance global energy security, stability and sustainability.

Q.30) Consider the following statements regarding the Future Investment Initiative (FII):

- 1. It has been launched by the United Nations Conference on Trade and Development.
- 2. It is held annually in Riyadh, Saudi Arabia.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2

#### d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **Future Investment Initiative** is hosted by the Public Investment Fund of Saudi Arabia.

Statement 2 is correct. It is an annual investment forum held in **Riyadh, Saudi Arabia**, to discuss trends in the world economy and investment environment.

Union Minister for Health and Family Welfare recently addressed the 4th edition of the Future Investment Initiative Forum. The purpose of the forum being hosted in Riyadh was to find solutions on how business and government can expand access to healthcare, train healthcare workers, remove regulatory barriers and encourage investment in advanced health technologies.

#### Q.31) The Common Trust Network is an initiative of which of the following organisation?

- a) International Air Transport Association
- b) World Economic Forum
- c) World Shipping Council
- d) Organisation for Economic Co-operation and Development

#### Correct answer: B

**Explanation:** The **World Economic Forum** in collaboration with **Commons Project Foundation** have launched the Common Trust Network in collaboration with a broad voluntary network of public and private stakeholders.

The Common Trust Network is designed to (1) empower individuals with digital access to their health information, (2) make it easier for individuals to understand and comply with each destination's requirements, and (3) help ensure that only verifiable lab results and vaccination records from trusted sources are presented for the purposes of cross-border travel and commerce.

# Union Minister of Health & Family Welfare addressed the event on Restoring Cross Border Mobility by World Economic Forum's Common Trust Network recently.

## **Q.32)** Consider the following statements regarding **India-France relations**:

- 1. India has a civil nuclear agreement with France.
- 2. Year 2021-22 has been declared as the Indo-French Year of the Environment.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. An agreement on **civil nuclear cooperation** was signed between India and France on 30 September 2008 during the visit of then PM to France.

Statement 2 is correct. Minister for Environment, Forest and Climate Change, Shri Prakash Javadekar and Ms Barbara Pompili, the French Minister for Ecological Transition launched the **Indo-French Year of the Environment** in New Delhi recently.

The basic objective is to strengthen Indo-French cooperation in sustainable development, increase the effectiveness of actions in favor of global environment protection and give them greater visibility.

The Indo-French Year of the Environment over the period 2021-2022 would be based on five main themes: environmental protection, climate change, biodiversity conservation, sustainable urban development, and the development of renewable energies and energy efficiency.

Q.33) Which of the following organisation releases the 'Fiscal Monitor'?

- a) World Economic Forum
- b) World Bank
- c) UN Conference on Trade & Development
- d) International Monetary Fund

#### Correct answer: D

**Explanation:** The **Fiscal Monitor** was launched in 2009 by IMF to survey and analyze the latest public finance developments, update fiscal implications of the crisis and medium-term fiscal projections, and assess policies to put public finances on a sustainable footing.

The Fiscal Monitor is prepared twice a year by the IMF's Fiscal Affairs Department. Its projections are based on the same database used for the World Economic Outlook (WEO) and the Global Financial Stability Report (GFSR).

#### Fiscal Monitor Update, January 2021:

- --Global fiscal support of \$14 trillion has contributed to saving lives and livelihoods and has mitigated the effects of the pandemic on consumption and output.
- --Global public debt is estimated to reach 98 percent of GDP at the end of 2020, compared with 84 percent for the same date based on projections in the October 2019 Fiscal Monitor.
- --Fiscal responses have been shaped by access to financing: average overall deficits as a share of GDP in 2020 are projected at -13.3 percent for advanced economies, -10.3 percent for emerging market and middle-income economies, and -5.7 percent for low-income developing countries.

#### Q.34) Which of the following country hosted the Climate Adaptation Summit (CAS) 2021?

- a) Japan
- b) Netherlands
- c) South Korea
- d) Canada

#### Correct answer: B

**Explanation:** The online international Climate Adaptation Summit (CAS) 2021 on 25 and 26 January, hosted by the Netherlands, convenes global leaders and local stakeholders. It saw the launch of a comprehensive Adaptation Action Agenda that sets out clear commitments to deliver concrete new endeavours and partnerships to make our world more resilient to the effects of climate change.

CAS Online built on the advances of the UN Climate Action Summit by showcasing pioneering solutions to the climate emergency, and sustaining momentum through to UNFCCC's COP26 in Glasgow in 2021.

#### Q.35) Consider the following statements regarding the World Customs Organisation (WCO):

1. It is an intergovernmental body functioning under the World Trade Organisation.



2. India is a member of the WCO.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. The **World Customs Organization (WCO)**, established in 1952 as the Customs Co-operation Council (CCC) is an independent intergovernmental body whose mission is to enhance the effectiveness and efficiency of Customs administrations. Statement 2 is correct. WCO 183 Members, three-quarters of which are developing countries, are responsible for managing more than 98% of world trade. **India is a member of the WCO since 1971.** 

# The Central Board of Indirect Taxes and Customs (CBIC) observed the International Customs Day, 2021 on 27<sup>th</sup> January. The theme for this year as given by World Customs Organisation (WCO) is "Customs bolstering Recovery, Renewal and Resilience for a sustainable supply chain".

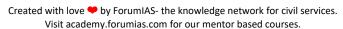
Q.36) Which of the following institution has published the report "The Inequality Virus"?

- a) Oxfam International
- b) World Health Organisation
- c) World Bank
- d) UN Human Rights Council

#### Correct answer: A

Explanation: The Inequality Virus report has recently been released by the Oxfam International at the Davos Dialogues of World Economic Forum.

The report states that Covid has the potential to increase economic inequality in almost every country at once — the first time this has happened since records began over a century ago. The report has found that as the pandemic stalled the economy, forcing millions of poor Indians out of jobs, the richest billionaires in India increased their wealth by 35 per cent.



#### **HISTORY**

**Q.1)** Which of the following **Delhi Durbar(s)** is/are correctly matched to the coronations of Emperors or Empresses?

Delhi Durbar 1877 - Queen Victoria
 Delhi Durbar 1903 - King George V

3. Delhi Durbar 1911 - King Edward VII

Select the correct answer using the code given below:

- a) 1 only
- b) 2 and 3 only
- c) 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** The Delhi Durbars were grand events organised by the Viceroys to **mark the coronations of Emperors or Empresses**. Hence, these were also known as the Coronation Durbars.

Option 1 is correctly matched. In **1876, Queen Victoria** in addition to her title of 'Queen of Great Britain and Ireland' assumed the title of 'Empress of India'. The Viceroy, Lord Lytton was asked to proclaim this on her behalf throughout India. He decided to hold an Imperial Assemblage at Delhi on 1st January 1877 for this purpose.

Option 2 is incorrectly matched. Delhi Durbar 1903 marked the succession of **Edward VII**. On the orders of King Edward VII, it was attended by the Duke of Connaught.

Option 3 is incorrectly matched. The Darbar of 1911 marked the succession of **King George V**. This Durbar was historic for two reasons; one it was the only one attended by the Emperor himself and second, this was where the shifting of the Imperial Capital from Calcutta to Delhi was announced.

- **Q.2)** Arrange the following event(s) in chronological order:
- 1. Swami Vivekananda at the First World's Parliament of Religions in Chicago
- 2. Chapekar brothers assassinated a British official W. C. Rand
- 3. Foundation of Indian National Congress

Select the correct answer using the code given below:

- a) 1-2-3
- b) 2-3-1
- c) 1-3-2
- d) 3-1-2

#### Correct answer: D

**Explanation:** On **28 December 1885**, the Indian National Congress was founded at Gokuldas Tejpal Sanskrit College in Bombay, with 72 delegates in attendance. Hume assumed office as the General Secretary, and Womesh Chunder Bonnerjee of Calcutta was elected President.

On **September 11, 1893** Swami Vivekanand delivered an iconic and eloquent speech at the Chicago Convention of Parliament of Religions. Introducing Hinduism to the world, Swami Vivekanand spoke about intolerance, religion and the need to end all forms of fanaticism.

Rand was appointed on February 10, 1897 as an Assistant Collector and Chairman, Poona Plague Committee. On **June 22, 1897**, Chapekar brothers – Damodar (27), Balkrisha (24) and

Vasudev (17 or 18) – shot Rand and Lieutenant Charles Ayerst (mistaking him for Rand before he was located in the preceding carriage).

#### **Q.3)** Which of the following is/are authored by **Thiruvalluvar**?

- 1. Tirukkural
- 2. Silappadikaram
- 3. Manimekalai

Select the correct answer using the code given below:

- a) 1 only
- b) 1 and 2 only
- c) 1 and 3 only
- d) 3 only

#### Correct answer: A

**Explanation: Thiruvalluvar, also called Valluvar**, was an ancient Tamil poet-saint known as the author of the Tirukkural ("Sacred Couplets").

Silappathikaram, (The Jeweled Anklet), an epic poem in Tamil, was written in the 5th-6th century AD by Prince Ilanko Adikal.

Manimekalai, the sequel to the Shilapaddikaram was written by Kulavanigam Chittalai Shattanar.

# Q.4) Which of the following state(s) of today was/were granted Statehood by the North Eastern Region (Re-Organisation) Act, 1971?

- 1. Tripura
- 2. Mizoram
- 3. Arunachal Pradesh

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** The **North-Eastern Areas (Reorganisation) Act, 1971** was a major reform of the boundaries of India's North-East region into States and union territories. It led to:

- --Establishment of the states of Manipur, Tripura. They were Union Territories before.
- --Establishment of the state of Meghalaya. It was an autonomous part of Assam before.
- --Establishment of the Union Territories of Mizoram and Arunachal Pradesh.
- # The erstwhile princely states of Tripura and Manipur were merged into the Indian Union in October 1949 and became full-fledged states on January 21, 1972.

#### Q.5) Consider the following statements regarding Subhash Chandra Bose:

- 1. He was jailed during Civil Disobedience movement and released in 1931 after Gandhi-Irwin pact was signed.
- 2. He was elected the President of Indian National Congress at Haripura session after two successive terms of Jawahar Lal Nehru.

Which of the statements given above is/are correct?

a) 1 only



- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Subhas Chandra Bose** was jailed during Civil Disobedience movement in 1930. He was released in 1931 after Gandhi-Irwin pact was signed. He protested against the Gandhi-Irwin pact and opposed the suspension of Civil Disobedience movement specially when Bhagat Singh and his associates were hanged.

Statement 2 is correct. **J. L. Nehru** was elected for two consecutive terms as Congress President in 1936 and 1937 followed by Subhas Bose's victory in 1938 Haripura session.

#### Q.6) What is the main theme of Sushruta Samhita (Sushruta's Compendium)?

- a) Surgery
- b) Sanskrit grammar
- c) Calculus
- d) Astronomy

#### Correct answer: A

**Explanation:** Sushruta was a physician in ancient India known today as the "Father of Plastic Surgery" for inventing and developing surgical procedures. His work on the subject, the Sushruta Samhita (Sushruta's Compendium) is considered the oldest text in the world on plastic surgery.

The Sushruta Samhita devotes chapter after chapter to surgical techniques, listing over 300 surgical procedures and 120 surgical instruments in addition to the 1,120 diseases, injuries, conditions, and their treatments, and over 700 medicinal herbs and their application, taste, and efficacy, which are also dealt with in depth.

## Q.7) The Risa traditional attire that has been in news recently belongs to which region?

- a) North east India
- b) Afghanistan
- c) Brazil
- d) Japan

#### Correct answer: A

**Explanation:** Government of **Tripura** have been promoting the traditional handwoven attire to support the indigenous industry. The **traditional Tripuri female attire comprises three parts** — **risa**, **rignai and rikutu**.

Risa is a handwoven cloth used as a female upper garment, and also as headgear, a stole, or a present to express respect. The risa is used in religious festivals such as Garia Puja by tribal communities.

# The complete Tripuri attire is claimed to have originated even before the time of the Manikya kings, who ruled Tripura for over 500 years starting from the 15th century.

#### **GEOGRAPHY/ENVIRONMENT**

- Q.1) Consider the following statements regarding the Asian Waterbird Census (AWC):
- 1. It is an integral part of the global waterbird monitoring programme, the International Waterbird Census (IWC) coordinated by Wetlands International.
- 2. It is an annual exercise taking place in the month of January.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Both statements are correct.

Every January, thousands of volunteers across Asia and Australasia visit wetlands in their country and count waterbirds. This citizen science programme is the **Asian Waterbird Census** (AWC). The AWC is an integral part of the global waterbird monitoring programme, the International Waterbird Census (IWC), coordinated by Wetlands International.

It runs in parallel with other regional programmes of the International Waterbird Census in Africa, Europe, West Asia, the Neotropics and the Caribbean.

# The recommended dates for the AWC are 2 – 18 January 2021.

#### Q.2) Consider the following statements regarding the Climate of India during 2020:

- 1. The year 2020 was the second warmest year on record of last decade after 2016.
- 2. The 2020 annual rainfall over the country as a whole was below its Long Period Average (1961-2010).

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: D

**Explanation:** The **Climate Research and Services (CRS)** of the India Meteorological Department (IMD) has issued a Statement on Climate of India during 2020.

Statement 1 is incorrect. The annual mean land surface air temperature averaged over India during 2020 was above normal. During the year, annual mean land surface air temperature averaged over the country was +0.290C above normal (based on the data of 1981-2010). The year 2020 was the eighth warmest year on record since nation-wide records commenced in 1901.

The five warmest years on record in order were: 2016 (+0.710C), 2009 (+0.550C), 2017 (+0.5410C), 2010 (+0.5390C), and 2015 (+0.420C).

Statement 2 is incorrect. The 2020 annual rainfall over the country as a whole was 109% of its Long Period Average (LPA) based on the data of 1961-2010.

**Q.3)** The **Nile River basin** includes parts of which of the following country(s)?

1. Ethiopia

- 2. South Sudan
- 3. Uganda

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** The Nile River flows from south to north through eastern Africa. It begins in the rivers that flow into **Lake Victoria**, and empties into the Mediterranean Sea more than 6,600 kilometers to the north, making it one of the longest river in the world.

In addition to Egypt, the Nile runs through or along the border of 10 other African countries, namely, Burundi, Tanzania, Rwanda, the Democratic Republic of the Congo, Kenya, Uganda, Sudan, Ethiopia, and South Sudan. Its three main tributaries are the White Nile, the Blue Nile, and the Atbara.

- # Ethiopia, Sudan and Egypt agreed recently to resume negotiations to resolve their complex dispute over the Grand Renaissance Dam hydropower project in the Horn of Africa.
- # The 145-meter-tall (475-foot-tall) Grand Renaissance Dam hydropower project, when completed, will be Africa's largest.



- Q.4) Consider the following statements regarding Indian Skimmer (Rynchops albicollis):
- 1. It is a waterbird that is more widespread in summer season.
- 2. It is endemic to the Western Ghats region of India.
- 3. It is listed as Endangered species under the IUCN Red List.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 and 3 only
- c) 3 only
- d) 1 and 3 only



#### Correct answer: C

**Explanation:** Statement 1 and 2 are incorrect. More widespread in winter, the **Indian** skimmer is found in the coastal estuaries of western and eastern India.

Once distributed across the Indian Subcontinent, Indian skimmers are mainly found along large rivers in India, Bangladesh, Pakistan, and Nepal. It occurs primarily on larger, sandy, lowland rivers, around lakes and adjacent marshes and, in the non-breeding season, in estuaries and coasts.

Statement 3 is correct. Indian Skimmer (Rynchops albicollis) is listed as **Endangered** species with decreasing population trend in the IUCN Red List.

#### Q.5) Consider the following statements regarding the National Board for Wildlife (NBWL):

- 1. It is a statutory body constituted under Wildlife Protection Act, 1972.
- 2. Standing Committee of the NBWL is chaired by the Prime Minister.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The **National Board for Wildlife (NBWL)** is constituted by the Central Government under Section 5 A of the **Wildlife (Protection) Act, 1972 (WLPA)**. Statement 2 is incorrect. The NBWL is chaired by the Prime Minister and is responsible for promotion of conservation and development of wildlife and forests.

Section 5B of the WLPA states that the National Board may, in its discretion, constitute a Standing Committee for the purpose of exercising such powers and performing such duties as may be delegated to the Committee by the National Board.

The Standing Committee consist of the **Vice-Chairperson**, the Member-Secretary, and not more than ten members to be nominated by the Vice-Chairperson from amongst the members of the National Board.

Minister of Environment, Forests & Climate Change is the Vice-Chairperson of the NBWL and chairs the Sub Committee.

# The Standing Committee of National Board of Wildlife (SC-NBWL) has recently approved the advisory for management of Human-Wildlife Conflict (HWC) in the country.

#### **Q.6)** Consider the following statements regarding the **Caracal**:

- 1. It is a wildcat endemic to rocky hills of Central India.
- 2. It is protected under the Schedule I of the Wildlife Protection Act 1972.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. Caracals live on rocky hills or grasslands in the **Middle East, Africa, and south Asia**. In India, it is found in some parts of Rajasthan and Gujarat.

Statement 2 is correct. The Caracal species of cat is protected under **Schedule I of Wildlife** (**Protection**) **Act, 1972**. It is listed as Least Concern species under the IUCN Red List.

# The Standing Committee of National Board of Wildlife (SC-NBWL) has approved the inclusion of Caracal, into the list of critically endangered species for taking up conservation efforts with financial support under Centrally sponsored Scheme-Development of Wildlife Habitat.

Q.7) Which of the following water bodies are correctly matched to respective States?

Tehri Dam - Uttarakhand
 Khindsi Lake - Maharashtra

3. Erai Dam - Madhya Pradesh

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** Option 1 is correctly matched. **Tehri Dam** is a multi-purpose rock and earth-fill embankment dam on the Bhagirathi River near Tehri in **Uttarakhand**.

Option 2 is correctly matched. **Khindsi Lake** is a lake near the city of Ramtek in the Nagpur district, **Maharashtra**.

Option 3 is incorrectly matched. **Irai/Erai Dam** is an earthfill and gravity dam on Irai River near Chandrapur and Tadoba Andhari Tiger Project in state of **Maharashtra**.

# Ministry of Ports, Shipping and Waterways is initiating the process of commencing operations of the Seaplane services, on the select routes, under a Special Purpose Vehicle (SPV) framework through prospective airline operators.

The proposed Origin-Destination pairs under Hub and Spoke model include various islands of Andaman & Nicobar and Lakshadweep, Guwahati Riverfront & Umranso Reservoir in Assam, Yamuna Riverfront / Delhi (as Hub) to Ayodhaya, Tehri, Srinagar(Uttrakhand), Chandigarh and many other tourist places of Punjab & HP; Mumbai (as Hub) to Shirdi, Lonavala, Ganpatipule; Surat (as Hub) to Dwarka, Mandvi & Kandla; Khindsi Dam, Nagpur & Erai Dam, Chandrapur (in Maharashtra).

#### **Q.8)** Consider the following statements regarding **Indian Pangolin**:

- 1. Indian Pangolin is widely distributed in India, except the arid region, high Himalayas and the North-East.
- 2. It is a protected species under the Schedule I of Wildlife (Protection) Act, 1972.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. Pangolin is understood to occur in various types of tropical forests as well as open land, grasslands and degraded habitats, including in close proximity to villages. The species can adapt well to modified habitats, provided its ant and termite prey remains abundant.



Indian Pangolin is widely distributed in India, except the arid region, high Himalayas and the North-East. It can be found at elevation up to 2500 m. The species also occurs in Bangladesh, Pakistan, Nepal and Sri Lanka.

Statement 2 is correct. Indian Pangolin is listed in **Schedule I** of Wildlife (Protection) Act, 1972 and as **Endangered** on IUCN Red List.

## Q.9) The Omkareshwar Dam is on which of the following River?

- a) Godavari
- b) Narmada
- c) Krishna
- d) Kaveri

#### Correct answer: B

Explanation: The Omkareshwar Dam is a gravity dam on the Narmada River upstream of Mandhata in Khandwa district, Madhya Pradesh.

The Government of India has announced the construction of the World's largest floating solar energy project of 600 MW at Omkareshwar dam. The International Finance Corporation, World Bank and Power Grid have granted in-principle consent for providing aid for the project development.

The project is likely to begin power generation by year 2022-23.

## Q.10) Which of the following State accounts for maximum Bauxite reserves in India?

- a) Odisha
- b) Andhra Pradesh
- c) Jharkhand
- d) Chhattisgarh

#### Correct answer: A

Explanation: Bauxite is basically an aluminous rock that contains hydrated aluminum oxide as main constituent and iron oxide, silica & titania as minor constituents present in varying proportions.

Among States, Odisha alone accounts for 51% of country's resources of bauxite followed by Andhra Pradesh (16%), Gujarat (9%), Jharkhand (6%), Maharashtra (5%) and Madhya Pradesh & Chhattisgarh (4% each). Major bauxite resources are concentrated in the East Coast bauxite deposits in Odisha and Andhra Pradesh.

# National Aluminium Company Limited (NALCO), a Schedule-A Navratna CPSE under Ministry of Mines is one of the largest integrated Bauxite-Alumina-Aluminium- Power Complex in Asia. The company contributes to production of 32% Bauxite, 33% Alumina 12% Aluminium in India.

#### Q.11) Consider the following statements regarding the Ganges River dolphin:

- 1. It is the National Aquatic Animal of India.
- 2. These dolphins can only live in freshwater and are essentially blind.
- 3. It is listed as Critically Endangered species in the IUCN Red List.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above



#### Correct answer: A

**Explanation:** Statement 1 is correct. The **Gangetic Dolphin** was declared as National Aquatic Animal on 5th October 2009.

Statement 2 is correct. The Ganges river dolphins can only live in freshwater and are essentially blind. They hunt by emitting ultrasonic sounds waves that bounce off of fish and other prey.

Statement 3 is incorrect. The Ganges River Dolphin is listed as **Endangered** in the IUCN Red List of Threatened Species.

#### Q.12) The Pong Dam reservoir is on which of the following River?

- a) Yamuna
- b) Brahmaputra
- c) Kali
- d) Beas

#### Correct answer: D

**Explanation:** A reservoir has been constructed on the **River Beas** in the wet land of Shivalik hills of Kangra district of Himachal Pradesh, which has been named as **Maharana Pratap Sagar**. It is also known as Pong reservoir or Pong Dam. This reservoir or lake is a famous wildlife sanctuary and one of the 25 international wetland sites declared by Ramsar Sammel in India.

Around 1,200 migratory birds have lost their lives under mysterious circumstances at Himachal Pradesh's Pong Dam in the recent weeks. The dead birds include endangered barheaded goose, black-headed gull, river tern, common teal, and shoveler.

The carcass samples have been sent to the Indian Veterinary Research Institute in Bareilly and Regional Disease Diagnostic Laboratory in Jalandhar for investigation.

#### Q.13) Gibraltar is an overseas territory of which of the following nation?

- a) France
- b) Britain
- c) United States of America
- d) Germany

#### Correct answer: B

**Explanation: Gibraltar is a British overseas territory** occupying a narrow peninsula of Spain's southern Mediterranean coast, just northeast of the Strait of Gibraltar. The territory is self-governing in all aspects, except for defence and foreign policy, which are managed by UK, and Gibraltarians have British citizenship.

Spain and UK have signed an agreement that would allow Gibraltar to be able to join EU programmes and policies such as Schengen with Spain acting as a guarantor.

#### Q.14) The Grand Ethiopian Renaissance Dam (GERD) is on which of the following River?

- a) Congo River
- b) Orange River
- c) Blue Nile River
- d) Nile River

#### Correct answer: C

**Explanation:** The **Grand Ethiopian Renaissance Dam (GERD)** is a 6,450 MW hydropower project on the **Blue Nile in Ethiopia**, located about 30 km upstream of the border with Sudan. It will be the largest hydropower project in Africa.



# Q.15) Which of the following country(s) is/are member(s) of the Gulf Cooperation Council (GCC)?

- 1. United Arab Emirates
- 2. Bahrain
- 3. Iraq

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: A

**Explanation:** The **Gulf Cooperation Council (GCC)** is a political and economic union of Arab states bordering the Gulf. It was established in 1981 and its 6 members are the **United Arab Emirates, Saudi Arabia, Qatar, Oman, Kuwait and Bahrain**.



# In June 2017, Saudi Arabia, the UAE, Bahrain and Egypt severed all diplomatic and trade ties. Qatar's only land border was closed; ships flying the Qatari flag or those serving Qatar were banned from docking at many ports; and much of the region's airspace was closed to Qatari aircraft.

# It has been reported recently that the United Arab Emirates could re-open trade and travel links with Qatar.

# Q.16) Consider the following statements regarding the Management Effectiveness Evaluation (MEE) of Protected Areas (PAs):

- 1. It evaluates whether National Parks and Wildlife Sanctuaries are protecting their values and achieving the goals and objectives agreed upon.
- 2. It is conducted in India by the Ministry of Environment, Forest and Climate Change with the technical assistance from Wildlife Institute of India.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: C

**Explanation:** Statement 1 is correct. **Protected area (PA) management effectiveness evaluation (MEE)** is defined as the assessment of how well NP&WLS are being managed—primarily, whether they are protecting their values and achieving the goals and objectives agreed upon. The term 'management effectiveness' reflects three main themes of PA management:

- --Design issues relating to both individual sites and PA systems
- --The adequacy and appropriateness of management systems and processes

--Delivery of the objectives of NP&WLS, including conservation of values.

Statement 2 is correct. India is among the select countries in the world that have institutionalized the MEE Process. Report on Management Effectiveness Evaluation (MEE) of 146 National Parks and Wildlife Sanctuaries in India, 2018-19 has been released recently based on the evaluation conducted by the MoEFCC with the technical assistance from Wildlife Institute of India.

# The results of present assessment are encouraging with overall mean MEE score of 62.01% which is higher than the global mean of 56%. With this round of evaluation, the MoEFCC successfully completed one full cycle of evaluating all terrestrial National Parks and Wildlife Sanctuaries of the country from 2006 to 2019.

Q.17) Which of the following country does not share land border the Saudi Arabia?

- a) Oman
- b) Qatar
- c) Bahrain
- d) United Arab Emirates

#### Correct answer: C

**Explanation: Bahrain** is an **island nation** comprises a small archipelago made up of 51 natural islands and an additional 33 artificial islands, centered around Bahrain Island.



Q.18) Which of the following country(s) does not share its land border with Vietnam?

- 1. China
- 2. Thailand
- 3. Cambodia

Select the correct answer using the code given below:

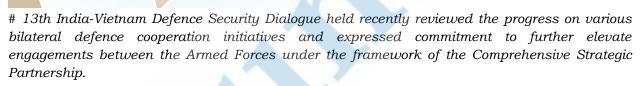
- a) 1 and 2 only
- b) 2 only
- c) 1 and 3 only
- d) All of the above



#### Correct answer: B

**Explanation: Vietnam** is bordered by China to the north, the South China Sea to the east and south, the Gulf of Thailand (Gulf of Siam) to the southwest, and Cambodia and Laos to the west.





#### Q.19) Where is Asola Bhatti Wildlife Sanctuary located?

- a) Aravalli Hill Range
- b) Shivalik Hills
- c) Vindhyachal Hills
- d) Satpura Range

#### Correct answer: A

**Explanation: Asola-Bhatti Wildlife Sanctuary** on Delhi-Haryana border lies in Southern Delhi as well as northern parts of Faridabad and Gurugram districts of Haryana state.

Sanctuary is located on Southern Ridge, the **northern terminal of Aravalli Hills**, one of the oldest mountain systems of the world. Biodiversity significance of Ridge lies in its merger with IndoGangetic plains.

## Q.20) The Leang Tedongnge cave is located in which of the following country?

- a) Indonesia
- b) Malaysia
- c) Tunisia
- d) Thailand



#### Correct answer: A

**Explanation:** Archaeologists have discovered the world's oldest known animal cave painting in **Indonesia** - a wild pig - believed to be drawn 45,500 years ago. It provides the earliest evidence of human settlement of the region.

Painted using dark red ochre pigment, the life-sized picture of the Sulawesi warty pig appears to be part of a narrative scene. The picture was found in the Leang Tedongnge cave in a remote valley on the island of Sulawesi.

Sulawesi is in a key location. It's the largest island in a group that scientists often refer to as Wallacea after the great 19/20th Century naturalist Alfred Wallace. The group sits on a dividing line, either side of which you find very different animals and plants.

Q.21) Which of the following is/are correctly matched?

- 1. Kalapani Uttarakhand
- 2. Susta Uttar Pradesh

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Option 1 is correctly matched. The **Kalapani** territory is an area part of Pithoragarh district in the **Uttarakhand** state, but is also claimed by Nepal.

Option 2 is incorrectly matched. **Susta** is a disputed territory between Nepal and India. It is administered by India as part of West Champaran district of **Bihar**.



# The history of the demarcation of the modern India-Nepal border began on March 4, 1816, after the signing of the Sugauli Treaty between British India and the state of Nepal.

Q.22) Which of the following is/are correctly matched?

- 1. Bhoramdeo Wildlife Sanctuary Chhattisgarh
- 2. Nugu Wildlife Sanctuary Karnataka
- 3. Sajnakhali Wildlife Sanctuary West Benga

Select the correct answer using the code given below:



- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation:** All of the above are correctly matched.

**Bhoramdev Wildlife Sanctuary (BWS)** is located near Kawardha city of **Chhattisgarh**. It is covered by hills and thick forests of the Maikal range of hills in Kabirdham district. The river 'Sakari' flowing through the Sanctuary is the source of drinking water for the wild animals living in BWS.

**Nugu Wildlife Sanctuary** is situated north of Bandipur National Park in Mysore District, **Karnataka**. Wildlife population includes elephant, leopard, jungle cat, wild pig, spotted deer, sambar deer, barking deer, mouse deer, jackal, hare, common mongoose, common otter, small Indian civet, common palm civet and porcupine.

**Sajnekhali Wildlife Sanctuary** at the confluence of Matla and Gumdi rivers is located next to the Sunderbans Tiger Reserve in **West Bengal**, this sanctuary is known for its diverse bird population.

Q.23) Consider the following statements regarding the Houbara Bustard (Asian Houbara):

- 1. It is endemic to South-East Asian countries.
- 2. It is listed as Vulnerable species in the IUCN Red List of Threatened Species.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. **Asian Houbara** is an extant (resident) of West Asia including Pakistan, Aghanistan and Extant (breeding) species of China; Kazakhstan; Kyrgyzstan; Mongolia; Tajikistan. The species lives in Arid Climate. It is omnivorous taking seeds, insects and other small creatures.

After breeding during the spring season, the Asian Houbara bustards migrate south to spend the winter in Pakistan, the Arabian Peninsula and nearby Southwest Asia.

Statement 2 is correct. Asian Houbara (Chlamydotis macqueenii) is listed as **Vulnerable** species in the IUCN Red List of Threatened Species.

**Q.24) Wallacea** is a bioregion in which of the following country?

- a) Indonesia
- b) Japan
- c) Australia
- d) Denmark

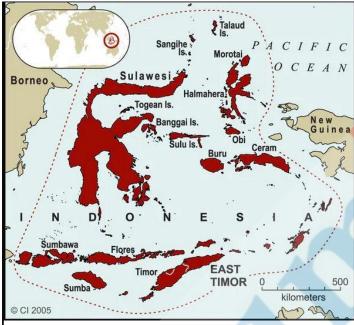
#### Correct answer: A

**Explanation: Wallacea is a distinct biogeographic realm** characterized by thousands of oceanic islands harboring a highly endemic faunal assemblage. Wallacea is a transition zone between the great Indo-Malayan and Australasian biogeographical realms.

It's called Wallacea, named after **Alfred Russel Wallace**, the 19th century English explorer and naturalist. He noticed that the islands of Kalimantan and Sulawesi as well as Bali and Lombok have very distinct animals even though the islands are next to each other.

He proposed an invisible line runs between Kalimantan and Sulawesi and Bali and Lombok separating the faunas. It is now known as Wallace's Line and the region between it and the island of New Guinea has come to be called Wallacea.

**Wallacea includes the large Indonesian island of Sulawesi, the Mollucas** - the various small to medium-sized islands to the east of Sulawesi and the "Banda Arc" islands - and the Lesser Sundas or Nusa Tenggara, south of Sulawesi and the Moluccas.



Wallacea Hotspot

Q.25) Which of the following is/are potential advantages of crop diversification?

- 1. Reduced economic uncertainty for cultivators
- 2. Makes crops more resistant to pests/diseases
- 3. Reduces the environmental degradation

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

#### Correct answer: D

**Explanation: Crop diversification** refers to the addition of new crops or cropping systems to agricultural production on a particular farm.

-- As crop prices become less stable and growing conditions become more difficult, many farmers struggle to ensure their financial security. However, farmers can reduce economic uncertainty by cultivating more than one type of crop.

- -- Single crop farming results in entire fields being susceptible to the same hazard, be it a pest or disease. Diversifying crops means that no one pest or disease can destroy a farm's entire harvest.
- -- Planting a variety of crops makes the soil healthier, which in turn reduces the need to use excessive amounts of fertilizer. In addition, diversification ensures that crops are more resistant to disease and therefore require fewer pesticides.

**Q.26)** Which of the following location(s) is/are correctly matched?

- 1. Karanbel Tripuri
- Madhya Pradesh

2. Sinauli

Rajasthan

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

Explanation: Option 1 is correctly matched. Archaeological Survey of India (ASI) under the Ministry of Culture recently inaugurated excavations Sites at Karanbel Tripuri and Tewar in District Jabalpur of Madhya Pradesh. Tripuri, an ancient city-state, and the capital of the later Kalachuris during the 8th-13th centuries.

Option 2 is incorrectly matched. **Sinauli** is an archaeological site **loc**ated in Baghpat, **Uttar Pradesh** famous for its Bronze Age solid disk wheel "chariots", the first ones to be recovered in archaeological excavation in South Asia.

Q.27) Consider the following statements regarding the Brown Fish-Owl:

- 1. It is a native resident species of India.
- 2. It is protected under Schedule I of Wildlife Protection Act, 1972.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. **Brown Fish-owl (Ketupa zeylonensis)** has a large range and is a native resident species in the South Asia and South East Asia.

Statement 2 is incorrect. This species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion under IUCN Red List, therefore it is listed as a **Least Concern** species. It is not listed in the Schedule I of Wildlife Protection Act, 1972.

# Recently National Zoological Park (NZP), Delhi witnessed a death of Brown Fish Owl in its captivity, which has been found positive for H5N8 Avian Influenza.

Q.28) A mass awareness campaign 'SAKSHAM' has been launched recently for what purpose?

- a) Promoting green and clean energy
- b) Promoting cleanliness and hygiene
- c) Supporting Divyang citizens through accessible infrastructure
- d) Promoting adult education in rural India

#### Correct answer: A

**Explanation:** With a view to create awareness among the consumers of fossil fuels, Petroleum Conservation Research Association (PCRA), Ministry of Petroleum and Natural Gas has launched a month-long campaign, highlighting the adverse health and environmental impacts of increasing carbon footprints.

The campaign will also spread awareness about 7 key drivers that include moving towards a gas-based economy, cleaner use of fossil fuels, greater reliance on domestic sources to drive bio-fuels, achieving renewable targets with the set deadlines, increased use of electric vehicles to decarbonize mobility, increased use of cleaner fuels like Hydrogen, and digital innovation across all energy systems.

## **Q.29)** The **Harike Wetland** is in which of the following State/UT?

- a) Punjab
- b) Jammu & Kashmir
- c) Himachal Pradesh
- d) Rajasthan

#### Correct answer: A

**Explanation: Harike Wetland** is situated on the confluence of the river Beas and Sutlez at the Ferozepur and Amritsar border the sanctuary encompass an area of approximately 86 sq km. The area was declared as a Wild Life Sanctuary in 1999 and because of its importance as a wetland of international stature, it was declared a Ramsar site by the International Body of Wetlands under in 1990.

The wetland is a significant abode for the migratory birds as every winter, the birds make their way to India through the central Asian flyway which covers a large continental area of Europe-Asia between the Arctic and Indian Oceans.

#### Q.30) The Shahid Beheshti Port is in which of the following country?

- a) Iran
- b) Djibouti
- c) Saudi Arabia
- d) Oman

#### Correct answer: A

**Explanation: Chabahar Port** is located in southeastern Iran, on the Gulf of Oman. It serves as Iran's only oceanic port, and consists of two separate ports named **Shahid Kalantari and Shahid Beheshti.** 

During the visit of the Prime Minister to Iran in May 2016, a Trilateral Agreement to establish International Transport and Transit Corridor was signed by India, Iran and Afghanistan. India is participating in the development of the first phase of the Shahid Behesti Port in Chabahar in cooperation with the Government of the Islamic Republic of Iran.

# India has recently supplied a consignment of two Mobile Harbour Cranes (MHC) to Iran's Chabahar port, with a total contract value of over USD 25 Million under a contract agreement for supply of 6 MHC.

#### Q.31) The Nagi Dam and Nakti Dam Bird sanctuaries are in which of the following State/UT?

- a) NCT of Delhi
- b) Bihar
- c) Madhya Pradesh
- d) Assam

#### Correct answer: B

**Explanation:** The Nagi Dam and Nakti Dam are two sanctuaries close to each other Jamui district of south **Bihar**. These sanctuaries are a home to wide variety of indigenous species and migratory birds that turn up during the winters from places like Eurasia, Central Asia, the Arctic Circle, Russia and Northern China.

About 1,600 Bar-headed Goose (Anser indicus) have been recorded from this site. According to Wetlands International (2002), 1% threshold of this species is 560; accordingly, about 3% of the population is found at this important bird area site. This site could also attract more than 20,000 birds, if fishing and other disturbances are curtailed during winter when most of the migrants are found in India.

# 'Kalrav', Bihar's 1st state-level festival started at the Nagi-Nakti bird sanctuaries in the Jamui district, Bihar.

## Q.32) The Ratle Hydro Electric (HE) Project is on which of the following River?

- a) Chenab
- b) Jhelum
- c) Ravi
- d) Sutlej

#### Correct answer: A

**Explanation:** The Union Cabinet, chaired by the Prime Minister, has given its approval for the investment of Rs.5281.94 crore for **850 MW Ratle Hydro Electric (HE) Project located on river Chenab, in Kishtwar** district of Union Territory of Jammu and Kashmir, by a new Joint Venture Company (JVC) to be incorporated between National Hydroelectric Power Corporation (NHPC) and Jammu & Kashmir State Power Development Corporation Ltd (JKSPDC).

#### Q.33) Consider the following statements regarding the Western Disturbances:

- 1. They originate in the Mediterranean region.
- 2. They are important to the development of the Kharif crop in north India. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: A

**Explanation:** Statement 1 is correct. The **Western disturbances**—originate over the east Mediterranean Sea and travel eastwards across West Asia, Iran-Afghanistan and Pakistan Created with love by ForumIAS- the knowledge network for civil services.

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before they reach the north-western parts of India. On their way, they pick up moisture from the Caspian Sea in the north and the Persian Gulf in the South

Statement 2 is incorrect. They enter India loaded with moisture, where the Himalayas obstruct them, causing rain and snow over northern India. Western disturbances occur during the cold, dry season and are important to the development of the Rabi crop in the northern subcontinent.

#### **Q.34)** Consider the following statements regarding the **Potash**:

- 1. India is the largest producer of Potash globally.
- 2. Potash is primarily used as a fertilizer and aids plants to use water more efficiently. Which of the statements given above is/are correct?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Correct answer: B

**Explanation:** Statement 1 is incorrect. As per National Mineral Inventory database the total resources of potash have been estimated at 22,508 million tonnes in India, all in remaining resource category. **Rajasthan** alone contributes 91% to the total resources, followed by Madhya Pradesh (5%) and Uttar Pradesh (4%). The entire requirement of potash to be utilized as fertilizer is met by imports.

**Canada** is the world's largest potash producer, accounting for 33% of the world's total in 2018. Four countries (Canada, Belarus, Russia and China) accounted for 80% of the world's potash production in 2018.

Statement 2 is correct. Potash is primarily used as a **fertilizer** (approximately 95%) to support plant growth, increase crop yield and disease resistance, and enhance water preservation. Potash is an essential nutrient for protein synthesis and it aids plants to use water more efficiently.

# A tripartite agreement was signed between Mineral Exploration Corporation Limited (MECL), Rajasthan State Mines & Minerals Limited (RSMML) and the Department of Mines & Geology (DMG), Govt. of Rajasthan for taking up feasibility studies of Solution Mining of Potash in the state of Rajasthan.

#### Q.35) What is MICE tourism?

- a) Business tourism
- b) Island tourism
- c) Augmented Reality tourism
- d) Space tourism

#### Correct answer: A

**Explanation:** The acronym MICE stands for **Meetings, Incentives, Conferences and Exhibitions**. It refers to a group of tourism that plans, books and organises conferences, seminars and other events. It is a version of business tourism that draws domestic and international business tourists to a destination.

The MICE industry is one of the hospitality industries most profitable sectors, as MICE travellers typically spend large amount of their budget on-site.

# Gujarat CM has announced the tourism policy for 2021-25. It seeks to make Gujarat a hub of "MICE" tourism.

#### Q.36) Where is Kholongchhu Hydroelectric Project located?

- a) Bhutan
- b) Myanmar
- c) Tibet (China)
- d) Vietnam

#### Correct answer: A

**Explanation:** The **Kholongchhu hydroelectric project** is a 600MW run-of-the-river hydropower facility under construction on the Kholongchhu River in **Bhutan**. It is being developed through a joint venture (JV) partnership between India and Bhutan.

The Concession Agreement for the 600 MW Kholongchhu (Joint Venture) Hydroelectric Project between the Royal Government of Bhutan and Kholongchhu Hydro Energy Limited was signed in 2020.

Hydropower sector is the flagship area of **India-Bhutan bilateral cooperation**. The 720 MW Mangdechhu hydroelectric project was jointly inaugurated earlier in August 2019 by the Hon'ble Prime Ministers of India and Bhutan. With this, four (04) hydroelectric projects of bilateral cooperation (336 MW Chukha HEP, 60 MW Kurichhu HEP, 1020 MW Tala HEP and 720 MW Mangdechhu HEP), totaling over 2100 MW, are already operational in Bhutan.