Forum | AS

10 PM Current Affairs Quiz Compilation

February, 2021

HISTORY

Q.1) Consider the following statements:

- 1. The first ever Census of an Indian city was conducted in 1872 by the British India Government.
- 2. The 1921 census reported the most recent decline in India's population since the previous census.

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 History of Census began with 1800 when England had begun its Census but the population of dependencies was not known at that time. In its continuation, based on this methodology census was conducted in town of Allahabad in 1824 and in the city of Banaras in the year 1827-28 by James Prinsep. The first complete census of an Indian city was conducted in 1830 by Henry Walter in Dacca.

A systematic and modern population census, in its present form was conducted non synchronously between 1865 and 1872 in different parts of the country. This effort culminating in 1872 has been popularly labeled as the first population census of India.

Statements 2 correct. The year **1921** is often referred to as the "Year of the Great Divide," the last period in which India's population declined, due to the effects of famine.

Census Years	Population	Change in Population Between Censuses	Percent Change Between Censuses
1901	238,396,327	_	- /
1911	252,093,390	13,697,063	5.8
1921	251,321,213	-772,177	-0.03
1931	278,977,238	27,656,025	11.0
1941	318,660,580	39,683,342	14.2
1951	361,088,090	42,427,510	13.3
1961	439,234,771	78,146,681	21.6
1971	548,159,652	108,924,881	24.8
1981	683,329,097	135,169,445	24.7
1991	846,421,039	163,091,942	23.9
2001	1,028,737,436	182,316,397	21.5
2011	1,210,193,422	181,455,986	17.6

Q.2) Consider the following statements regarding the Chauri-Chaura incident:

- 1. W. C. Rand, the British plague commissioner was assassinated at Chauri-Chaura.
- 2. Mahatma Gandhi called off the Civil Disobedience movement as a result of this incident. 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 **Chauri Chaura** incident occurred at Chauri Chaura in the Gorakhpur district of the United Province, (modern Uttar Pradesh) in British India on 4 February 1922, when a large group of protesters, participating in the Noncooperation movement, clashed with police, who opened fire. In retaliation the demonstrators attacked and set fire to a police station, killing all of its occupants.

Statement 2 is incorrect. The incident led to the deaths of three civilians and 23 policemen. Mahatma Gandhi, who was strictly against violence, halted the **Non-cooperation Movement** on the national level on 12 February 1922, as a direct result of this incident.

Q.3) The "Mon Shugu" handmade paper belongs to which of the following State/UT?

- a) Manipur
- b) Arunachal Pradesh
- c) Sikkim
- d) Ladakh

Correct answer: B

Explanation: Monpa Handmade paper 'Mon Shugu' is made from the bark of tree Shugu Sheng grown locally in Tawang and is identified by its distinctive translucent fibrous texture. The paper is weightless but its natural fibers add great tensile strength to this paper making it apt for various art works.

It has been used for writing Buddhist scriptures, manuscripts and for making prayer flags. Writing on this paper is also known to be tamper-proof. The Monpa Handmade paper industry set up in Tawang aims at engaging the local youths with this art professionally and earn.

The sale of the 1000-years old heritage Monpa handmade paper or "Mon Shugu" is quickly catching pace due to its special mention by Prime Minister in his radio program Mann ki Baat.

Q.4) Consider the following statements regarding **Saint Ravidas**:

- 1. He was a contemporary of the King Harshavardhana of Kannauj.
- 2. Mirabai was a disciple of Guru Ravidas.

Which of the statements given above is/ra 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. **Ravidas**, also called Raidas, (flourished 15th or 16th century), mystic and poet who was one of the most renowned of the saints of the North Indian bhakti movement.

Harshavardhana (606-647 A.D.) ascended the throne of Thaneshwar and Kannauj on the death of his brother, Rajyavardhana in seventh century.

Statement 2 is correct. Saint Ravidas is believed to be a disciple of the bhakti saint-poet Ramananda and a contemporary of the bhakti saint-poet Kabir. One of his famous disciples was the saint, **Mirabai**.

Adi Granth of Sikhs and **Panchvani** are the major documented sources of the literary works of Guru Ravidas.

GOVERNMENT SCHEMES/INITIATIVES

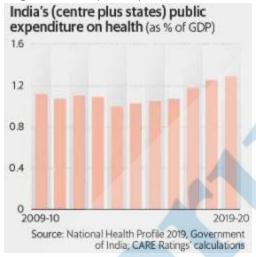
Q.1) Consider the following statements:

- 1. Health is listed under the Concurrent List in the Seventh Schedule to the Constitution.
- 2. India's public health expenditure has been consistently above two percent 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. The delivery of health care largely rests with the States, **Health being a state subject**. The allocation of funds to health sector inter-alia is dependent on the overall resource availability of the Government, competing sectoral priorities.

Statement 2 is incorrect. India's public health expenditure is **below two percent**. The recently released **Economic Survey** has suggested an increase in public spending from 1% to 2.5-3% of GDP — as envisaged in the National Health Policy 2017 to decrease the Out-Of-Pocket Expenditures (OOPE) from 65% to 30% of overall healthcare spend.



Q.2) Consider the following statements regarding the Medical Termination of Pregnancy Act, 1971:

- 1. A pregnancy maybe be terminated up to 12 weeks based on the opinion of one doctor, and up to 20 weeks based on the opinion of two doctors.
- 2. A grave injury to her mental or physical health is not a ground for termination of pregnancy.
- 3. Termination is also allowed at any point during the pregnancy if there is an immediate necessity to save the woman's life.

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: C

Explanation: Statement 1 is correct. Under the Indian Penal Code, 1860, voluntarily terminating a pregnancy is a criminal offence. The **Medical Termination of Pregnancy Act, 1971** allows for aborting the pregnancy by medical doctors (with specified specialisation) on certain grounds. A pregnancy maybe be terminated up to 12 weeks based on the opinion of one doctor, and up to 20 weeks based on the opinion of two doctors.

Statement 2 is incorrect. Termination is permitted only when continuance of the pregnancy would involve a risk to the life of the pregnant woman, cause grave injury to her mental or physical health (including rape and failure of birth control measures), or in the case of foetal abnormalities.

Statement 3 is correct. Termination is also allowed at any point during the pregnancy if there is an immediate necessity to save the woman's life.

The Medical Termination of Pregnancy (Amendment) Bill, 2020 was introduced and passed in Lok Sabha in 2020. It amends the Act to increase the upper limit for termination from 20 to 24 weeks for certain categories of women, removes this limit in the case of substantial foetal abnormalities, and constitutes Medical Boards at the state-level.

Q.3) Consider the following statements regarding the **15th Finance Commission**:

- 1. The commission's recommendations for the year 2020-21 which has accepted by the Union Government.
- 2. It is a statutory body formed 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: A

Explanation: Statement 1 is correct. The **15th Finance Commission** (Chair: Mr N. K. Singh) was required to submit two reports. Last year, the Commission had submitted its report containing recommendations for the year 2020-21 which was accepted by the Union Government and tabled in the Parliament on 30 January 2020. The final report with recommendations for the 2021-26 period has been tabled in Parliament today.

Statement 2 is incorrect. The Finance Commission is constituted by the **President under article 280 of the Constitution**, mainly to give its recommendations on distribution of tax revenues between the Union and the States and amongst the States themselves.

Q.4) Consider the following statements regarding the **PM AatmaNirbhar Swasth Bharat Yojana** proposed in Budget 2021-22:

- 1. The scheme will focus on developing capacity of the primary, secondary, and tertiary care Health Systems.
- 2. The scheme is to be implemented as an initiative under the National Health Mission.

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 Finance Minister announced that a new centrally sponsored scheme, **PM AatmaNirbhar Swasth Bharat Yojana**.

This will develop capacities of **primary, secondary, and tertiary care Health Systems**, strengthen existing national institutions, and create new institutions, to cater to detection and cure of new and emerging diseases.

Statement 2 is incorrect. PM AatmaNirbhar Swasth Bharat Yojana will be **in addition to the National Health Mission**. The main interventions under the scheme are:

- --Support for rural and urban Health and Wellness Centers
- --Setting up integrated public health labs in all districts and 3382 block public health units in 11 states;
- --Establishing critical care hospital blocks in 602 districts and 12 central institutions;
- --Strengthening of the National Centre for Disease Control (NCDC)
- -- Expansion of the Integrated Health Information Portal to all States/UTs
- --Setting up of a national institution for One Health, a Regional Research Platform for WHO South East Asia Region, 9 Bio-Safety Level III laboratories and 4 regional National Institutes for Virology.

Q.5) Which of the following initiative has been proposed in **Budget 2021-22 for infrastructure financing**?

- 1. A professionally managed 'Development Financial Institution' to be established statutorily to act as a provider, enabler and catalyst for infrastructure financing.
- 2. A 'National Monetization Pipeline' of potential Brownfield infrastructure assets will be launched.

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: Statement 1 is correct. A professionally managed **Development Financial Institution** is necessary to act as a provider, enabler and catalyst for infrastructure financing. Accordingly, a Bill to set up a DFI will be introduced.

Government has provided a sum of Rs 20,000 crore to capitalise this institution and the ambition is to have a lending portfolio of at least Rs 5 lakh crore for this DFI in three years time.

Statement 2 is correct. The Union Finance Minister announced launch of a **"National Monetization Pipeline"** of potential brownfield infrastructure assets stating that Monetizing operating public infrastructure assets is a very important financing option for new infrastructure construction.

The Minister informed that an Asset Monetization dashboard will also be created for tracking the progress and to provide visibility to investors.

Q.6) Consider the following statements regarding the National Education Society for Tribal Students (NESTS):

- 1. It is an autonomous body under the Ministry of Education.
- 2. The NESTS is mandated to run the Eklavya Model Residential Schools across 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. **National Education Society for Tribal Students** (**NESTS**) was established in April, 2019 as an autonomous organization under the Ministry of Tribal Affairs to run and manage the **Eklavya Model Residential Schools (EMRS)**; Statement 2 is correct.

EMRSs are a flagship intervention of the Ministry of Tribal Affairs to provide quality education to tribal students in remote tribal areas. The programme being implemented since 1998 have created a niche in the tribal education landscape of the country. However, the scheme was revamped in 2018 to improve the geographical outreach of the programme and introduce several qualitative changes to improve learning outcomes in the schools.

Currently there are 588 schools sanctioned across the country in 28 States/UT with around 73391 students enrolled in the Schools. Another 152 schools shall be sanctioned by the year 2022.

Q.7) Which of the following is/are objective(s) of the Jal Jeevan Mission (URBAN)?

- 1. Universal coverage of water supply to all households through functional taps in all statutory towns
- 2. Coverage of sewerage/septage management in AMRUT cities.
- 3. All projects under the mission will be implemented through 100% funding from Central 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: A

Explanation: Statement 1 and 2 are correct. Finance Minister in Budget 2021-22 announced a **JAL JEEVAN MISSION (URBAN)** which has been designed to provide universal coverage of water supply to all households through functional taps in all 4,378 statutory towns in accordance with SDG Goal- 6. Providing coverage of sewerage/septage management in 500 AMRUT cities is the other focus area.

Rejuvenation of water bodies to augment sustainable fresh water supply and creating green spaces and sponge cities to reduce floods and enhance amenity value through an Urban Aquifer Management plan are other key areas of the Mission.

Statement 3 is incorrect. For Union Territories, there will be 100% central funding. For North Eastern and Hill States, central funding for projects will be 90%. **Central funding** will be 50%

for cities will less than 1 lakh population, one third for cities with 1 lakh to 10 lakh population and 25% for cities with million plus population.

Mission will be monitored through a technology-based platform on which beneficiary response will be monitored along with progress and output-outcome.

Funding from Government for projects will be in three tranches of 20:40:40. Third instalment onwards will be released based on outcomes achieved and credible exclusion will be exercised while funding.

Q.8) Consider the following statements regarding the National Medicinal Plants Bard (NMPB):

- 1. It is an autonomous organization under the Ministry of Health and Family Welfare.
- 2. It is supporting research & development projects on medicinal plants in government as well as private universities/research institutions across 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: B

Explanation: Statement 1 is incorrect. In order to promote medicinal plants sector, the Government of India set up **National Medicinal Plants Board (NMPB)** in 2000. Currently the board is located in Ministry of **AYUSH** (Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homoeopathy), Government of India.

The primary mandate of NMPB is to develop an appropriate mechanism for coordination between various ministries/ departments/ organizations in India and implements support policies/programs for overall (conservation, cultivation, trade and export) growth of medicinal plants sector both at the Central /State and International level.

Statement 2 is correct. The National Medicinal Plants Bard (NMPB), under its Central Sector Scheme on 'Conservation, Development and Sustainable Management of Medicinal Plants' is supporting research & development projects on various aspects of medicinal plants to government as well as private universities/research institutions/organizations across the country.

Q.9) Consider the following statements regarding 'KRITAGYA- a National level hackathon':

- 1. It aims to promote innovation in agriculture and allied sectors in the country.
- 2. It has been organised by the NITI Aayog.

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. **KRITAGYA- Nationala level hackathon** on agriculture technology aimed to promote innovation in agriculture and allied sectors in the country.

Advantages of organising Agri-Hackathon are to give opportunity to the students along with faculties, innovators for showcasing their innovative approaches & technologies in agriculture and allied sector

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KRI-TA-GYA explains, KRI for Krishi (Agriculture), TA for Taknik (Technology) and GYA for Gyan (Knowledge).

Statement 2 is incorrect. The hackathon was organised by the **Indian Council of Agricultural Research** (ICAR). Several innovations selected under this initiative focused on robotic harvesting of coconut/oil palm, real time detection of plant diseases and simultaneous site-specific application of pesticides and Women friendly equipment for small farm operations especially for sericulture and fish cutting.

Q.10) Consider the following statements regarding the Consumer Welfare Fund (CWF):

- 1. It has been established under the Consumer Protection Act, 2019.
- 2. Financial assistance from CWF is given to Voluntary Consumer Organization (VCOs) and States to promote welfare and interests of the consumers.

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 **Consumer Welfare Fund** has been setup under section 57 of the Central Goods and Services Tax (CGST) Act, 2017.

Earlier, the Central Excise and Salt Act, 1944 was amended in 1991 to enable the Central Government to create a Consumer Welfare Fund (CWF).

Statement 2 is correct. **Financial assistance from CWF** is given to various Institutions including Universities, Voluntary Consumer Organization (VCOs) and States to promote and protect the welfare and interests of the consumers, create consumer awareness and strengthen consumer movement in the country.

Q.11) Who among the following chairs the National Expert Group on Vaccine Administration for COVID-19 (NEGVAC)?

- a) Prime Minister
- b) Miniter of Health & Family Welfare
- c) Cabinet Secretary
- d) Member (Health), NITI Aayog

Correct answer: D

Explanation: A **National Expert Group on Vaccine Administration for COVID-19 (NEGVAC)** has been established, which provides guidance on all aspects of COVID-19 vaccination including prioritization of population groups, procurement and inventory management, vaccine selection, vaccine delivery and tracking mechanism etc.

NEGVAC is chaired by Member (Health), NITI Aayog and co-chaired by Secretary (H&FW). NEGVAC has representation of Secretaries from Ministry of External Affairs, Department of Expenditure, Dept. of Biotechnology, Dept. of Health Research, Dept. of Pharmaceuticals, Ministry of Electronics and Information Technology, representative from five State Governments and technical experts.

Q.12) Consider the following statements regarding the 'One Nation One Ration Card' (ONORC):

- 1. The beneficiaries can lift their entitled food grains from any ePoS (electronic Point of Sale device) enabled Fair Price Shop (FPS) across the country.
- 2. The Union Government has directed states to issue new ration cards to all beneficiaries to implement the ONORC scheme.

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 Department in association with State/UT Governments is implementing 'One Nation One Ration Card' (ONORC) plan for nation-wide portability of ration cards under the National Food Security Act, 2013 (NFSA). So far, the facility has been enabled in 32 States/UTs covering nearly 69 Crore beneficiaries, almost 86% of NFSA population of the country.

Under ONORC, the beneficiaries, if desire, can lift their entitled food grains from any ePoS (electronic Point of Sale device) enabled Fair Price Shop (FPS) of their choice by using their same/existing ration cards with biometric authentication on the ePoS device at the time of lifting the food grains through portability.

Statement 2 is incorrect. The scheme enables portability using the existing ration cards and no direction has been given to States/UTs for issuance of new ration cards to beneficiaries under ONORC.

However, for the sake of uniformity under ONORC operations, States/UTs have been advised to adopt a standard bi-lingual format for ration cards whenever they decide to issue/print new ration cards under NFSA in the future.

Q.13) What is the mandate of the Justice Rohini Commission?

- a) To examine sub-categorisation of Other Backward Classes
- b) To recommend on implementation of child labor laws in India
- c) To examine the working of the subordinate court system
- d) To recommend on reforms in India's criminal laws

Correct answer: A

Explanation: The Government of India constituted a Commission in 2017 to examine **subcategorisation of Other Backward Classes** with the objective to examine the extent of inequitable distribution of benefits of reservation among the castes or communities included in the broad category of Other Backward Classes with reference to such classes included in the Central List.

On January 21, the Centre has extended the tenure of the Commission for the tenth time, it is now to submit its report by July 31, 2021.

Q.14) Consider the following statements regarding the Integrated Disease Surveillance Project (IDSP):

- 1. It is a centralized system of disease surveillance for timely and effective public health action.
- 2. The data is collected on epidemic-prone diseases on weekly basis of suspected cases, presumptive cases and laboratory confirmed cases.

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 objective of the **Integrated Disease Surveillance Programme (IDSP)** is to strengthen/maintain **decentralized** laboratory-based IT enabled disease surveillance system for epidemic prone diseases to monitor disease trends and to detect and respond to outbreaks in early rising phase through trained Rapid Response Team (RRTs).

Statement 2 is correct. Under IDSP data is collected on **epidemic-prone diseases on weekly basis** (Monday-Sunday). The information is collected on three specified reporting formats, namely "S" (suspected cases), "P" (presumptive cases) and "L" (laboratory confirmed cases) filled by Health Workers, Clinicians and Laboratory staff respectively. The weekly data gives information on the disease trends and seasonality of diseases.

Whenever there is a rising trend of illnesses in any area, it is investigated by the Rapid Response Teams (RRT) to diagnose and control the outbreak.

Q.15) Consider the following statements regarding the Micro Irrigation Fund (MIF):

- 1. Ministry of Jal Shakti is the nodal ministry of the MIF operationalized under NABARD.
- 2. Its objective is to facilitate State government's efforts in mobilizing additional resources for expanding coverage under micro irrigation

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. **Micro Irrigation Fund** with a corpus of Rs.5000 crore has been operationalized in NABARD from 2019-20. Ministry of Agriculture and Farmers Welfare (MoA&FW), Government of India is the Nodal Ministry.

Statement 2 is correct. The objective of the fund is to facilitate State Govts. efforts in mobilizing additional resources for expanding coverage under micro irrigation.

States may also access MIF exclusively for innovative integrated projects (like high water duty crops like sugarcane/solar linked systems/Micro irrigation in command area etc.) including projects in PPP mode depending on State specific requirements. The GoI provides 3% interest subvention on loans extended to State Govt. under MIF.

Q.16) Consider the following statements regarding the National Agriculture Market (eNAM):

- 1. It is a pan-India electronic trading portal which networks the existing APMC mandis.
- 2. Small Farmers Agribusiness Consortium (SFAC) is the lead agency for implementing eNAM. 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. **National Agriculture Market (NAM)** is envisaged as a pan-India electronic trading portal which seeks to network the existing APMC and other market yards to create a unified national market for agricultural commodities.

NAM creates a national network of physical mandis which can be accessed online. It seeks to leverage the physical infrastructure of the mandis through an online trading portal, enabling buyers situated even outside the State to participate in trading at the local level.

Statement 2 is correct. **Small Farmers Agribusiness Consortium (SFAC)** is the lead agency for implementing eNAM under the aegis of Ministry of Agriculture and Farmers' Welfare.

- # Better market linkage was provided under e-NAM by Integrating 1000 markets across 18 States and 3 UT. So far, more than 1.69 crore Farmers & 1.55 Lakh traders registered on e-NAM platform. Union Budget has declared to further integrate 1000 more mandis with e-NAM.
- # e-NAM is now developing as "Platforms of Platform" to create a digital ecosystem that leverage the expertise of individual platforms across various segments of agri. value chain viz. developing and Integrating service platform with e-NAM (QC services, transportation & delivery services, sorting/grading services, packaging services, insurance, trade finance, warehouses etc.).

Q.17) What are PRAGYATA guidelines?

- a) Guidelines on Digital Education
- b) Advisories to increase yield of crops without use of fertilizers
- c) Advisory on Hygiene and Sanitation for the Hospitality Industry
- d) Guidelines on COVID-safe behaviour

Correct answer: A

Explanation: The Government has taken various steps to provide online education amidst COVID-19 pandemic. These include **PRAGYATA Guidelines on Digital Education**, Internet access under BHARAT NET scheme, etc.

The PRAGYATA guidelines include eight steps of online/ digital learning that is, Plan- Review-Arrange- Guide- Yak(talk)- Assign- Track- Appreciate.

The guidelines outline suggestions for administrators, school heads, teachers, parents and students on the following areas:

- --Concerns while planning online and digital education like duration, screen time, inclusiveness, balanced online and offline activities etc.
- --Modalities of intervention including resource curation, level wise delivery etc.
- --Physical, mental health and wellbeing during digital education
- --Cyber safety and ethical practices including precautions and measures for maintaining cyber safety
- --Collaboration and convergence with various initiatives

Q.18) Consider the following statements regarding the **Startup India Seed Fund Scheme** (SISFS):

- 1. It provides financial assistance to startups for proof of concept, prototype development as well as commercialization of product.
- 2. The startup must have been incorporated in within previous five years at the time of application to be eligible for 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: A

Explanation: Statement 1 is correct. **Startup India Seed Fund Scheme (SISFS)** aims to provide financial assistance to startups for proof of concept, prototype development, product trials, market entry and commercialization.

Statement 2 is incorrect. A startup, recognized by DPIIT, incorporated **not more than 2 years ago** at the time of application is eligible for funding.

Startup must have a business idea to develop a product or a service with market fit, viable commercialization, and scope of scaling. Further, Startup should be using technology in its core product or service, or business model, or distribution model, or methodology to solve the problem being targeted.

Startup India Seed Fund Scheme (SISFS) has been approved for the period of next four years starting from 2021-22.

Q.19) Which of the following is/are the objective(s) of the National AYUSH Mission?

- 1. To empower masses for 'self-care' to reduce the disease burden and out of pocket expenditure.
- 2. To strengthen institutional capacity at the state level.
- 3. Support cultivation of medicinal plants by adopting Good Agricultural Practices (GAPs) so as to provide sustained supply of quality raw-materials.

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: Centrally Sponsored Scheme of **National AYUSH Mission (NAM)** is a flagship scheme of Ministry of AYUSH. Its objectives:

--To provide cost effective AYUSH Services, with a universal access through upgrading AYUSH Hospitals and Dispensaries, co-location of AYUSH facilities at Primary Health Centres (PHCs), Community Health Centres (CHCs) and District Hospitals (DHs).

To establish a holistic wellness model based on AYUSH principles and practices to empower masses for 'self-care' to reduce the disease burden, out of pocket expenditure and to provide informed choice to the needy public.

- --To strengthen institutional capacity at the state level through upgrading AYUSH educational institutions, State Govt. ASU&H Pharmacies, Drug Testing Laboratories and ASU & H enforcement mechanism.
- --Support cultivation of medicinal plants by adopting Good Agricultural Practices (GAPs) so as to provide sustained supply of quality raw-materials and support certification mechanism for quality standards, Good Agricultural/Collection/Storage Practices.
- --Support setting up of clusters through convergence of cultivation, warehousing, value addition and marketing and development of infrastructure for entrepreneurs.

Q.20) Consider the following statements regarding the MCA21 project:

- 1. It enables secure access to Ministry of Corporate Affairs services in an assisted manner for corporate entities, professionals, and general public.
- 2. MCA21 is designed to fully automate all processes related to enforcement and compliance of the legal requirements under the SEBI Act, 1992.

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 **Ministry of Corporate Affairs (MCA)**, Government of India, has initiated the MCA21 project, which enables easy and secure access to MCA services in an assisted manner for corporate entities, professionals, and general public.

Statement 2 is incorrect. MCA21 project is designed to fully automate all processes related to enforcement and compliance of the legal requirements under the **Companies Act**, **1956**.

During the fiscal 2021-22, the Ministry of Corporate Affairs (MCA) will launch data analytics driven **MCA21 Version 3.0**. This Version will have additional modules for e-Adjudication, e-Consultation and Compliance Management.

MCA21 V3 Project is a technology-driven project, envisioned to strengthen enforcement, promote Ease of Doing Business, enhance user experience, facilitate seamless integration and data exchange among Regulators. The project will have Micro-services architecture with high scalability and capabilities for advanced analytics.

Q.21) Consider the following statements regarding the DNA Technology (Use and Application) Regulation Bill, 2019:

- 1. It allows the DNA testing only in offences under the Indian Penal Code, 1860 and completely bars its usage in civil matters.
- 2. The Bill provides for the establishment of a National DNA Data Bank and Regional DNA Data Banks, for every state, or two or more 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: The Standing Committee on the **DNA Technology (Use and Application) Regulation Bill,** 2019 has recently submitted its report.

Statement 1 is incorrect. Under the Bill, DNA testing is allowed only in respect of matters listed in the Schedule to the Bill. These include offences under the Indian Penal Code, 1860, and for **civil matters such as paternity suits**. Further, the Schedule includes DNA testing for matters related to establishment of individual identity.

Statement 2 is correct. The Bill provides for the establishment of a **National DNA Data Bank** and **Regional DNA Data Banks**, for every state, or two or more states. DNA laboratories are required to share DNA data prepared by them with the National and Regional DNA Data Banks. # The Standing Committee report suggests one National Data Bank only, to limit the chances of misuse of data.

Every Data Bank will be required to maintain indices for the following categories of data: (i) a crime scene index, (ii) a suspects' or undertrials' index, (iii) an offenders' index, (iv) a missing persons' index, and (v) an unknown deceased persons' index.

Q.22) Which of the following locations in India have the **Strategic Petroleum Reserves (SPR)** facilities?

- 1. Vishakhapatnam
- 2. Mangaluru
- 3. Padur

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: Indian Strategic Petroleum Reserve Limited (ISPRL), a Government of India Special Purpose Vehicle, has established Strategic Petroleum Reserves (SPR) facilities with total capacity of 5.33 Million Metric Tonnes (MMT) at 3 locations, namely **Vishakhapatnam, Mangaluru and Padur.**

As per the consumption pattern of 2019-20, the total capacity is estimated to provide for about 9.5 days of crude oil requirement. In addition, Oil Marketing Companies (OMCs) in the country have storage facilities for crude oil and petroleum products for 64.5 days, thus the current total national capacity for storage of crude oil and petroleum products currently is 74 days.

Under Phase II of the SPR Programme, the Government has given 'in principle' approval in June 2018 for establishing two additional SPR facilities with total storage capacity of 6.5 MMT at two locations namely Chandikhol in Odisha (4 MMT) and Padur in Karnataka (2.5 MMT).

Q.23) Consider the following statements regarding the National Safety Council (NSC):

- 1. Its objective is to provide guidance and services to make workplaces safer and environment friendly.
- 2. Minister of Labour and Employment is the ex-officio chairperson of NSC.

Which of the statements given above is/are correct?

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

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d) Neither 1 nor 2

Correct answer: A

Explanation: The 24th Session of the Standing Labour Committee accepted the proposal concerning the constitution of the **National Safety Council (NSC)** in 1966.

Statement 1 is correct. Its objective is providing guidance and services to make workplaces safer, healthier and environment friendly, building capacity, developing material, methods, procedures and strengthening the national movement (including unorganized sector) on Safety, Health and Environment to prevent and mitigate the loss of life, human suffering and economic losses.

Statement 2 is incorrect. The affairs of the Council are managed by a Board of Governers. The Board consist of 51 members besides the Chairman. The Board is tripartite in nature with members from Government, Employers Organizations and Trade Union Organizations.

An eminent industrialist, nominates by the Govt. of India as the Chairman of NSC.

Q.24) Consider the following statements regarding the Innovations for Defence Excellence (iDEX):

- 1. It is a framework promulgated by Department of Defence Production, Ministry of Defence.
- 2. Support for Prototype and Research Kickstart (SPARK) grants are offered under iDEX to startups.

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.

Innovations for Defence Excellence (iDEX) is a framework promulgated by Department of Defence Production, Ministry of Defence and launched by the Hon'ble PM in April 2018. iDEX aims to achieve self - reliance and foster innovation and technology development in Defence and Aerospace by engaging Industries including MSMEs, start-ups, individual innovators, R&D institutes and academia.

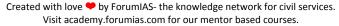
iDEX-DIO launches of **Defence India Startup Challenge (DISC)** with problem statements from Armed Forces, DPSUs & OFB. Winner start-ups/ individuals receive innovation grants in technological areas through the Prototype funding guidelines called "Support for Prototype and Research Kickstart" (SPARK), which entail provisioning of grants upto Rs 1.5 crore to the Startups on the basis of milestones through multiple tranches, for prototype development.

Q.25) Consider the following statements regarding the **Essential Commodities (Amendment)**Act, 2020:

- 1. The central government may regulate the supply of certain food items in times of natural calamity.
- 2. The any Central Government action of imposing any stock limit on agricultural produce must be based on price rise.

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 **Essential Commodities (Amendment) Act, 2020** provides that the central government may regulate the supply of certain food items including cereals, pulses, potatoes, onions, edible oilseeds, and oils, only under extraordinary circumstances. These include: (i) war, (ii) famine, (iii) extraordinary price rise and (iv) natural calamity of grave nature.

Statement 2 is correct. It requires that imposition of any stock limit on agricultural produce **must be based on price rise**. A stock limit may be imposed only if there is: (i) a 100% increase in retail price of horticultural produce; and (ii) a 50% increase in the retail price of non-perishable agricultural food items.

The increase will be calculated over the price prevailing immediately preceding twelve months, or the average retail price of the last five years, whichever is lower.

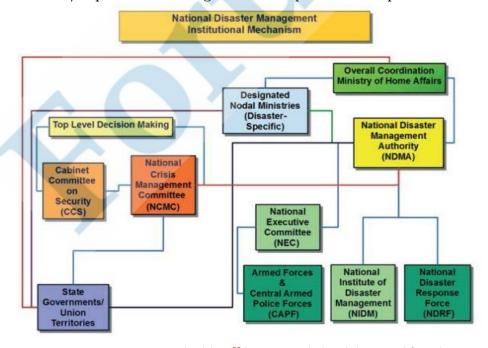
Q.26) Who among the following chairs the National Crisis Management Committee (NCMC)?

- a) Prime Minister
- b) Cabinet Secretary
- c) Home Minister
- d) Home Secretary

Correct answer: B

Explanation: The overall coordination of disaster management vests with the **Ministry of Home Affairs (MHA)**. The Cabinet Committee on Security (CCS) and the National Crisis Management Committee (NCMC) are the key committees involved in the top-level decision-making with regard to disaster management.

The NCMC is chaired by the Cabinet Secretary, it consists of Secretaries of Ministries/Departments and agencies with specific DM responsibilities.



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Q.27) What is the objective of the recently launched 'Asom Mala' project?

- a) Assam state highways and major district roads development
- b) Assam Tea industry promotion at global level
- c) Tribal development in Assam
- d) Connectivity of Assam to other states through Railways

Correct answer: A

Explanation: Prime Miniister in his recent visit to Assam launched 'Asom Mala', a programme for state highways and major district roads. The 'Asom Mala' has been started in line with 'Bharat Mala Project'. The programme is unique for its emphasis on effective maintenance through continuous field data collection and its linkage with the Road Asset Management System (ROMS).

He also laid foundation stone for two new medical colleges in B<mark>isw</mark>anath and Charaideo.

Q.28) Which of the following reform(s) have been linked to grant of **additional borrowing permissions** to States by the Union Government?

- 1. Integration of all remaining APMC mandis into the National Agriculture Market (eNAM) platform
- 2. Implementation of One Nation One Ration Card System
- 3. Completion of first assessment of 'District Level Business Reform Action Plan' 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: In view of the resource requirement to meet the challenges posed by the COVID-19 pandemic, the Government of India had in May, 2020 enhanced the **borrowing limit of the States by 2 percent of their GSDP**. Half of this special dispensation was linked to undertaking citizen centric reforms by the States.

The four citizen centric areas for reforms identified were Implementation of One Nation One Ration Card System, Ease of doing business reform, Urban Local body/ utility reforms and Power Sector reforms.

The reforms stipulated in Ease of Doing Business category are:

- --Completion of first assessment of 'District Level Business Reform Action Plan'
- --Elimination of the requirements of renewal of registration certificates/approvals/licences obtained by businesses under various Acts.
- --Implementation of computerized central random inspection system under the Acts wherein allocation of inspectors is done centrally, the same inspector is not assigned to the same unit in subsequent years, prior inspection notice is provided to the business owner, and inspection report is uploaded within 48 hours of inspection.

Till now, 17 States have carried out at least one of the four stipulated reforms and have been granted reform linked borrowing permissions. [08-02-21]

Q.29) Which of the following institution/Ministry is organising the annual international conferences – 'India Pharma & India Medical Device 2021'?

a) Ministry of Chemicals & Fertilizers

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- b) Ministry of Health & Family Welfare
- c) NITI Aayog
- d) Central Drugs Standard Control Organisation

Correct answer: A

Explanation: The Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers, Government of India jointly with FICCI & Invest India is organizing the 6th edition of annual programme on Pharmaceuticals & Medical Device sector – **'India Pharma & India Medical Device 2021'** scheduled on 25-26 February & 1-2 March, 2021.

The theme for this year India Pharma is 'Indian Pharma Industry - 'Future is Now' and for India Medical Device is 'India MedTech Future: Innovate & Make in India through Global Alliance'.

Q.30) Which of the following department/instituting has been entrusted for conducting the All-India Migrant Workers Survey?

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

Correct answer: A

Explanation: Labour Bureau, an attached office of the Ministry of Labour and Employment, has been entrusted with the task of conducting the All-India Survey on Migrant workers.

An Expert Group has been constituted by the Government of India on 09th September, 2020 to examine and finalize the schedules, sampling design and other technical details of the aforesaid survey being conducted by Labour Bureau.

This information was given by Minister of State (I/C) for Labour & Employment Lok Sabha.

Q.31) Consider the following statements regarding the Code on Occupational Safety, Health and Working Conditions, 2020:

- 1. It empowers the state government to exempt any new factory from the provisions of the Code in order to create more employment.
- 2. It provides for the establishment of a Social Security Fund for the welfare of unorganised workers.

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: Code on Occupational Safety, Health and Working Conditions, 2020 subsumes and replaces 13 labour laws relating to safety, health and working conditions. These laws include: Factories Act, 1948; Mines Act, 1952; Dock Workers Act, 1986; Contract Labour Act, 1970; and Inter-State Migrant Workers Act, 1979.

Statement 1 is correct. It empowers the state government to exempt any new factory from the provisions of the Code in order to create **more economic activity and employment**.

Statement 2 is correct. It provides for the establishment of a **Social Security Fund for the welfare of unorganised workers**. The amount collected from certain penalties under the Code (including the amount collected through compounding) will be credited to the Fund. The government may prescribe other sources as well for transferring money to the Fund.

Q.32) Consider the following statements regarding the Atomic Minerals Directorate for Exploration and Research (AMD):

- 1. It has exclusive right to conduct exploration for uranium in India.
- 2. It has recently estimated presence of vast Lithium Reserves in Uttarakhand. 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. **Atomic Minerals Directorate for Exploration and Research (AMD)**, a constituent unit of Department of Atomic Energy and Geological Survey of India are two agencies which are involved in mineral exploration.

AMD has exclusive right to conduct exploration for uranium, and other prescribed substances such as thorium, beryllium, lithium, zirconium, niobium, tantalum, rare-earths and others like ilmenite and rutile.

Statement 2 is incorrect. In response to media reports on discovery of Lithium reserves in Karnataka, AMD has clarified that exploration efforts have so far established 1600 tonnes lithium in inferred category (low level of confidence) in Allapatna – Marlagalla sector in Srirangapatna taluk, Mandya district, **Karnataka**.

This is a preliminary estimate and requires further exploration efforts to convert the estimated resources to exploitable category with high degree of confidence level and explore the possibility of augmenting Li resources in the area.

Q.33) Consider the following statements regarding the 'National Monsoon Mission' (NMM):

- 1. It is being implemented by Department of Science & Technology.
- 2. It aims to develop a state-of-the-art dynamical prediction system for monsoon rainfall. 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. **Ministry of Earth Sciences (MoES)**, Government of India has launched 'National Monsoon Mission' (NMM) with a vision to develop a state-of-the-art dynamical prediction system for monsoon rainfall on different time scales.

MoES has bestowed the responsibility of execution and coordination of this mission to the Indian Institute of Tropical Meteorology (IITM), Pune. For this national mission, IITM is collaborating with NCEP (USA), MoES organisations and various academic institutions/organizations under NMM.

Statement 2 is correct. The overall objective of NMM is to improve the monsoon prediction over India on all time scales and hence it is implemented for the whole country which includes all the States and UTs.

Following are the targets of Monsoon Mission:

- --Development of a seamless prediction system using monsoon mission model, on different time scales, like Seasonal (for whole Monsoon season), Extended range (up-to 4 weeks), Short range prediction (up-to 5days).
- --Initiate and coordinate working partnership between Indian and foreign institutes to develop a system for prediction of extremes and climate applications
- --Develop and implement system for climate applications having social impacts (such as agriculture, flood forecast, extreme events forecast, wind energy,etc.)
- --Advanced data assimilation system for preparing high quality data for model predictions.

Q.34) Consider the following statements regarding the Employees' State Insurance Scheme of India:

- 1. It is applicable to non-seasonal factories using power and employing ten or more persons.
- 2. It is a self-financing health insurance scheme with contributions raised from employees and their employers as a fixed percentage of wages.

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: Employees' State Insurance Scheme of India is an integrated social security scheme tailored to provide social protection to workers and their dependents, in the organised sector, in contingencies, such as, sickness, maternity and death or disablement due to an employment injury or occupational hazard.

The ESI Act, (1948) applies to following categories of factories and establishments in the implemented areas:

- --Non-seasonal factories using power and employing ten or more persons
- --Non-seasonal and non-power using factories and establishments employing twenty or more persons.

ESI Scheme, like most of the Social Security Schemes the world over, is a self-financing health insurance scheme. Contributions are raised from covered employees and their employers as a fixed percentage of wages.

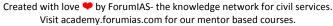
An interesting feature of the ESI Scheme is that the contributions are related to the paying capacity as a fixed percentage of the workers wages, whereas, they are provided social security benefits according to individual needs without distinction.

Q.35) The **Indian basket of crude oil** comprises which of the following grades of crude oil?

- 1. Dubai and Oman average
- 2. Brent crude
- 3. West Texas Intermediate

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: Crude oil is a fundamental source of energy for the world's economy. Besides being one of the most actively traded commodities, the price of crude oil is extremely sensitive to geopolitical and weather events. The most popular traded grades are Brent North Sea Crude (commonly known as Brent crude), Sour grade (Oman & Dubai average) and West Texas Intermediate (commonly known as WTI).

Indian basket of Crude Oil represents a derived basket comprising of Sour grade (Oman & Dubai average) and Sweet grade (Brent Dated) of Crude oil processed in Indian refineries. Prices of petrol and diesel have been made market-determined with effect since 2010 and 2014 respectively. Public Sector OMCs have implemented daily revision of retail selling price (RSP) of petrol and diesel in the entire country since 2017.

Q.36) Consider the following statements regarding the Unlawful Activities (Prevention) Act:

- 1. The central government may designate an individual as a terrorist if it prepares for terrorism or promotes terrorism.
- 2. It provides for seizing of properties that may be connected with terrorism with prior approval from Home Secretary.

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 **Unlawful Activities (Prevention) Act, 1967**, the central government may designate an organisation as a terrorist organisation if it: (i) commits or participates in acts of terrorism, (ii) prepares for terrorism, (iii) promotes terrorism, or (iv) is otherwise involved in terrorism. The **2019 amendment** to the act additionally empowered the government to designate individuals as terrorists on the same grounds.

Statement 2 is incorrect. Under the Act, an investigating officer is required to obtain the prior approval of the Director General of Police to seize properties that may be connected with terrorism. The 2019 amendment act added that if the investigation is conducted by an officer of the National Investigation Agency (NIA), the approval of the Director General of NIA would be required for seizure of such property.

Q.37) Consider the following statements regarding the National Child Labour Project:

- 1. It is a Central Sector Scheme for the rehabilitation of child labour.
- 2. Under this Scheme, the children in the age group of 9-14 years are withdrawn from work and mainstreamed directly to formal educational 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: A

Explanation: Statement 1 is correct. The **National Child Labour Project (NCLP)** Scheme is a Central Sector Scheme for the rehabilitation of child labour. Under this Scheme the District Project Societies (DPS) are set up at the district level under the Chairmanship of the Collector/District Magistrate for overseeing the implementation of the project.

Statement 2 is incorrect. The project societies are required to conduct survey to identify children working in hazardous occupations and processes. These children will then form the target group for the project society. Of the children identified those in the age group 5-8 years will have to be mainstreamed directly to formal educational system through the SSA.

Working children in the age group of **9-14 years will have to be rehabilitated through NCLP schools** established by the Project Society. The Special Training Centers (STCs) under NCLP are run by District Project Societies under the Chairmanship of District Collector/District Magistrate.

Q.38) Consider the following statements regarding the Theatre Level Operational Readiness Exercise (TROPEX 21):

- 1. It is a biennial exercise.
- 2. The units of the Indian Army, Indian Air Force and Coast Guard participate in the exercise. 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.

Indian Navy's largest war game – the **biennial Theatre Level Operational Readiness Exercise** (**TROPEX 21**) - which commenced in early January, is currently underway with participation of all operational units of Indian Navy including ships, submarines, aircraft as well as units of the Indian Army, Indian Air Force and Coast Guard. The exercise will culminate by third week of February.

The exercise is being conducted over a vast geographical expanse in the Indian Ocean Region including its adjunct waters and is aimed at testing combat readiness of the Navy in a complex multi-dimensional scenario set in the context of the current geo strategic environment.

Q.39) What is the objective of the Vigyan Jyoti programme?

- a) Encourage girl students to pursue their careers in Science, Engineering and Technology
- b) Boost community and private sector participation in government schools
- c) Quality education in the remote tribal regions of India
- d) Improving quality of school education through Integrated Teacher Training

Correct answer: A

Explanation: Vigyan Jyoti programme, an initiative to encourage girls to take interest in science and build career, was launched by the Department of Science & Technology (DST) to create a level-playing field for the **meritorious girls to pursue STEM**. It had been running successfully in 50 Jawahar Navodaya Vidyalayas (JNV) since December 2019 and has now been expanded to 50 more JNVs for the year 2021-22.

The programme addresses the underrepresentation of women in certain areas of STEM. As a first step, the programme has been started at school level for meritorious girls of Class IX to Class XII to encourage and empower them to pursue STEM courses in reputed institutions of the country.

The second phase of Vigyan Jyoti programme commenced on the occasion of International Day of Women and Girls in Science on February 11, 2021.

Q.40) Consider the following statements regarding the **DigiLocker**:

- 1. It is an initiative under the Digital India program by the Ministry of Electronics & Information Technology (MeitY).
- 2. The issued documents in DigiLocker system are deemed to be at par with original physical documents.

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.

Digilocker is an initiative under the Digital India program by the Ministry of Electronics & Information Technology (MeitY) where citizens can get authentic documents/ certificate in digital format from original issuers of these certificates.

It aims at eliminating or minimising the use of physical documents and will enhance effectiveness of service delivery, making these hassle free and friendly for the citizens.

The issued documents in DigiLocker system are deemed to be at par with original physical documents as per Rule 9A of the Information Technology (Preservation and Retention of Information by Intermediaries providing Digital Locker facilities) Rules, 2016.

IRDAI (Insurance Regulatory Authority of India) in a Circular dated 9th February, 2021, has advised all Insurance companies for issuance of Digital Insurance Policies via DigiLocker.

Q.41) Consider the following statements regarding the GOBAR-DHAN scheme:

- 1. This scheme focusing on generation of energy from cattle waste is an important element of Swachh Bharat Mission.
- 2. It is being implemented by the Ministry of Agriculture and Farmers' Welfare.

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 Government of India has launched a multi-ministrial programme named as 'GOBARDHAN waste to wealth', under Phase II of the Swachh Bharat Mission Grameen (SBM-G).

The objective of the scheme is to increase rural income, rural jobs and to keep villages clean through solid waste management. The scheme is intended to manage and convert cattle dung and solid waste in farms to compost, bio-slurry, bio-gas and bio-CNG.

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Statement 2 is incorrect. The programme is being implemented by the **Department of Drinking Water and Sanitation (DDWS)** in collaboration with the Department of Animal Husbandry and Dairying, NDDB and other Ministries.

Under the Gobar-dhan component, DDWS has included the small holder based Manure Management Model established by NDDB as one of the solid waste management models for implementation across the country wherein bio-degradable waste is envisaged to be managed through composting and bio-gas plants.

Q.42) Consider the following statements regarding the **CHIRAAG project**:

- 1. It is being implemented in the Himalayan states of India.
- 2. It aims to develop sustainable production systems that allow tribal households to practice round-the-year production of diversified and nutritious food.
- 3. The project is being implemented through 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. **CHIRAAG - Chhattisgarh Inclusive Rural and Accelerated Agriculture Growth Project** will be implemented in the southern tribal-majority region of the state where a large population is undernourished and poor. The project will benefit over 180,000 households from about 1,000 villages in eight districts of Chhattisgarh.

Statement 2 and 3 are correct. The **Government of India**, the **Government of Chhattisgarh** and the **World Bank** recently signed a \$100 million project to develop sustainable production systems that allow tribal households in remote areas of Chhattisgarh to practice round-the-year production of diversified and nutritious food.

To make agriculture nutrition supportive, the project will implement a series of activities that are climate resilient and profitable. Investments will be made in water-harvesting structures and irrigation facilities; integrated farming systems blending crops, fishery and livestock production; climate-smart production technologies and practices; developing value chains to ensure that surplus commodities reach profitable markets; and in making nutritious food available to tribal households.

The \$100 million loan from the International Bank for Reconstruction and Development (IBRD) has a maturity of 17.5 years, including a grace period of 5.5-years.

Q.43) KAPILA campaign relates to which of the following issue?

- a) Intellectual Property
- b) Development of indigenous breeds of cows
- c) Nutrition support for children under poverty
- d) Indigenization of the 5G technology

Correct answer: A

Explanation: KAPILA stands for **Kalam Program for Intellectual Property Literacy and Awareness** campaign. The campaign was launched in October 2020 under the Ministry of Education to create awareness regarding Intellectual Property Rights (IPR) in Higher Education Institutions (HEIs).

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It aims to develop training program on IPR for faculty and students of HEIs, sensitize and develop a vibrant Intellectual Property (IP) filing system and enable IPR protection on the inventions originating from the faculty and students of HEIs.

Q.44) Consider the following statements regarding the Information Technology Act, 2000:

- 1. It provides legal recognition for transactions carried out by means of electronic data interchange.
- 2. The sending of offensive messages through a computer or other communication devices is a criminal offence under the act.

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 Information Technology Act 2000 provides **legal recognition** for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as —electronic commercel, which involve the use of alternatives to paper-based methods of communication and storage of information, to facilitate electronic filing of documents with the Government agencies.

Statement 2 is incorrect. The **Shreya Singhal v. Union of India** judgement by a two-judge bench of the Supreme Court of India in 2015 struck down Section 66A of the Information Technology Act that criminalised the sending of offensive messages through a computer or other communication devices.

Q.45) Consider the following statements regarding the **FASTags**:

- 1. It employs Near Field Communication (NFC) technology for making toll payments directly from the prepaid account linked to it.
- 2. Ministry of Road Transport & Highways has decided that all lanes in the fee plazas on National Highways shall be declared as FASTag lanes.
- 3. The FASTags can only be sold by the State Bank of India.

Which of the statements given above is/are correct?

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

Correct answer: B

Explanation: Statement 1 is incorrect. FASTag is a device that employs **Radio Frequency Identification (RFID) technology** for making toll payments directly from the prepaid account linked to it. It is affixed on the windscreen of vehicle and enables to drive through toll plazas, without stopping for cash transactions.

Statement 2 is correct. Ministry of Road Transport & Highways has decided that all lanes in the fee plazas on National Highways shall be declared as "FASTag lane of the fee plaza" w.e.f midnight of 15th/16th February 2021.

Statement 3 is incorrect. Bank-specific FASTags are sold by various issuer banks whereas bank-neutral FASTags will be available across various NHAI points of sale, several petrol pumps, RTOs, and even e-commerce websites.

Q.46) Consider the following statements regarding the 'Rashtriya Sanskriti Mahotsav':

- 1. It is the national film festival of India held annually at Goa.
- 2. It is organised by the Ministry of Culture.

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. **Rashtriya Sanskriti Mahotsav** was conceived in the year 2015 and after the grand success of the First Rashtriya Sanskriti Mahotsav in November-2015, the Ministry of Culture decided to organize it with an intent to showcase the rich cultural heritage of the Country in all its rich and varied dimensions, viz Handicrafts, Cuisine, Painting, Sculpture and Performing Arts-Folk, Tribal, Classical and Contemporary- all in one place.

Statement 2 is correct. The **Ministry of Culture** is mandated with the task of preservation, promotion and propagation of Indian Culture, both tangible and intangible which inter-alia includes traditional folk dances and art forms, performing arts and rich tribal heritage. It organizes cultural programs, festivals and theatrical performances to fulfill this mandate.

Rashtriya Sanskriti Mahotsav, the flagship festival of this Ministry organized since 2015 with the active participation of Seven Zonal Culture.

The eleventh edition of Rashtriya Sanskriti Mahotsav is being held between 14th to 28th February, 2021 in West Bengal.

Q.47) Consider the following statements regarding the Motor Vehicles (Amendment) Act, 2019:

- 1. It defines golden hour as the time period of up to one hour following a traumatic injury, during which a death can be prevented through prompt medical care.
- 2. It protects Good Samaritans from any civil or criminal action for any injury/death of an accident victim, caused due to their assistance to the victim.

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 **Motor Vehicles (Amendment) Act, 2019** defines **golden hour** as the time period of up to one hour following a traumatic injury, during which the likelihood of preventing death through prompt medical care is the highest.

Statement 2 is correct. The act defines a **good samaritan** as a person who renders emergency medical or non-medical assistance to a victim at the scene of an accident. The assistance must have been in good faith, voluntary, and without the expectation of any reward. Such a person

will not be liable for any civil or criminal action for any injury to or death of an accident victim, caused due to their negligence in providing assistance to the victim.

World Bank Report titled "Traffic Crash Injuries and Disabilities: The Burden on India Society", prepared in association with the NGO – Save Life Foundation was released recently.

Q.48) Consider the following statements regarding the Skill Acquisition and Knowledge Awareness for Livelihood Promotion ("SANKALP") programme:

- 1. It is a programme of the Ministry of Skill Development with loan assistance from the World Bank.
- 2. It aims to improve short term skill training by strengthening institutions and inclusion of marginalised sections of the society.

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.

Skill Acquisition and Knowledge Awareness for Livelihood Promotion ("SANKALP") is a programme of the Ministry of Skill Development with loan assistance from the World Bank.

It aims to improve short term skill training qualitatively and quantitatively through strengthening institutions, bring in better market connectivity and inclusion of **marginalised** sections of the society. SANKALP was launched on 19th January 2018 and has a tenure till March 2023.

The outcomes in the project are measured through the Results Framework, and Disbursement Linked Indicators (DLIs) agreed between MSDE and World Bank.

Q.49) Consider the following statements regarding the recently released guidelines on Geospatial Data in India:

- 1. Every Geospatial data generated in India must be stored in servers located in India only cannot be uploaded to the cloud.
- 2. Indian Entities, whether in Government or outside, will be free to acquire, collect and generate geospatial data.

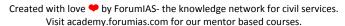
Which of the statements given above is/are correct?

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

Correct answer: B

Explanation: Statement 1 is incorrect. **Digital Maps/Geospatial Data** of spatial accuracy/value up to the threshold value **can be uploaded to the cloud** but those with accuracy finer than the threshold value shall only be stored and processed on a domestic cloud or on servers physically located within territory of India.

Threshold value for on-site spatial accuracy shall be one meter for horizontal or Planimetry and three meters for vertical or Elevation.



Statement 2 is correct. **Indian Entities**, whether in Government or outside, will be free to acquire, collect, generate, prepare, disseminate, store, share, publish, distribute, update, digitize and/or create Geospatial Data, including Maps, of any spatial accuracy within the territory of India including underwater within its territorial waters by using any Geospatial Technology, subject to regulations on attributes in the negative lists.

Q.50) Which of the following tax(s) is/are levied on Petrol in India?

- 1. Central Excise duty
- 2. State VAT/Sales tax
- 3. Goods and Services Tax

Select the correct answer using the code given below:

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

Correct answer: A

Explanation: Petroleum products—petrol, diesel, crude oil, natural gas and ATF—were not included in the GST list when it was introduced on 1 July, 2017. The GST Council excluded these products from the new indirect tax regime as state governments largely rely on them for their revenue.

The retail rate of Petrol in India is inclusive of Central Excise tax, State VAT/Sales tax and Dealer commission.

- --Despite crude prices falling in 2015-16, petrol prices remained unchanged as the tax component of the price at the pump was raised.
- --When crude prices started to rise again from 2017, petrol prices also increased.
- --In 2020, when crude prices fell again, petrol prices at the pump did not remain unchanged as in 2015-16 but increased, because of a surge in taxes.

Q.51) Consider the following statements regarding the **GrapeNet**?

- 1. It is a web-based certification and traceability software system for monitoring fresh grapes exported from India to the United States of America.
- 2. GrapeNet has been integrated with Blockchain to help track all the activities and steps involved in the grape's lifecycle 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: B

Explanation: Statement 1 is incorrect. The **GrapeNet** is a web-based certification and traceability software system for monitoring fresh grapes exported from India to the **European Union**. APEDA can trace details of the consignment right up to the farm plot level.

Statement 2 is correct. In a bid to ensure cyber security protection for its traceability initiative, APEDA has adopted next generation **Blockchain and Cloud migration enabled GrapeNet System** which would ensure a secured, scalable and cost-effective interface for all the stakeholders in the exports value chain.

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The **Blockchain** will help track all the activities and steps involved in the grape's lifecycle process, right from the allocation of the farms for production of the grapes to the point of grapes being delivered to the customers. It will keep a record of all the processes involved which can be traced by the customers at the end of the chain to validate the authenticity of the grapes being provided to them.

Q.52) Consider the following statements regarding the **Petroleum and Explosives Safety** Organization (PESO):

- 1. It is the nodal agency for regulating safety of hazardous substances such as explosives, compressed gas and petroleum in India.
- 2. It administers the responsibilities delegated under the Explosives Act 1884 and Petroleum Act 1934.

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 **Petroleum and Explosives Safety Organization** (**PESO**), formerly known as Department of Explosives, since its inception on 05/09/1898, has been serving the nation as a nodal agency for regulating safety of hazardous substances such as explosives, compressed gases and petroleum.

Statement 2 is correct. With an overall objective of ensuring safety and security of public and property from fire and explosion, the Organisation as a statutory authority is entrusted with the administration of **Explosives Act**, 1884, **Petroleum Act**, 1934; **Inflammable Substances Act**, 1952 and the following Rules framed under these Acts.

Q.53) What is the purpose of the URJIT Cluster scheme?

- a) Solar energy development in rural India
- b) Tapping the overseas market for horticulture crops
- c) Support the inventions & innovations coming out of academic research activities
- d) Development of self-help groups in Schedule Tribe communities

Correct answer: C

Explanation: The **Department of Biotechnology (DBT)**, Ministry of Science and Technology, Government of India, is implementing the BIOTECH URJIT CLUSTER i.e. **University Research Joint Industry Translational Cluster** scheme in the country to synergize resources between institutions, Universities research laboratories, industries and SMEs for technology & product development and building enterprises.

The purpose of Biotech URJIT Cluster scheme is to complement and enhance the translational and commercialization potential of inventions & innovations coming out of academic research activities. These are being set up in 10 locations as per the Budget Announcement in February 2020.

Q.54) Consider the following statements regarding the eSanjeevani:

- 1. It is a telemedicine technology developed by the Council of Scientific and Industrial Research (CSIR).
- 2. It is being deployed nationally at Health and Wellness Centres under Ayushman Bharat Scheme

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. **eSanjeevani** is Government of India's flagship telemedicine technology developed by **Centre for Development of Advanced Computing (Mohali)**. It is an independent platform, browser-based application facilitating both doctor-to-doctor and patient-to-doctor tele-consultations.

Statement 2 is correct. eSanjeevani doctor to doctor telemedicine system is being deployed nationally for the Miinistry of Health & Family Welfare at 155,000 Health and Wellness Centres under **Ayushman Bharat Scheme** of Government of India.

Q.55) Consider the following statements regarding the **Jal Jeevan Mission** (**Urban**):

- 1. It aims to provide universal coverage of water supply to all households through functional taps in all statutory towns.
- 2. Ministry of Jal Shakti has launched Pey Jal Survekshan 2021 to collect data on drinking water in Indian cities.

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 **Jal Jeevan Mission-Urban** has been designed to provide universal coverage of water supply to all households through functional taps in all 4,378 **statutory towns** in accordance with SDG Goal- 6.

JJM(U) will promote circular economy of water through development of city water balance plan for each city focusing on recycle/reuse of treated sewage, rejuvenation of water bodies and water conservation. 20% of water demand to be met by reused water with development of institutional mechanism.

Statement 2 is incorrect. Under the mission, a **Pey Jal Survekshan** will be conducted in cities to ascertain equitable distribution of water, reuse of wastewater and mapping of water bodies with respect to quantity and quality of water through a challenge process.

Ministry of Housing and Urban Affairs has launched a Pilot Pey Jal Survekshan 2021 under the Jal Jeevan Mission- Urban. As a first step, the Ministry has decided to launch the Survekshan in 10 cities- Agra, Badlapur, Bhubaneswar, Churu, Kochi, Madurai, Patiala, Rohtak, Surat and Tumkur.

Q.56) Consider the following statements regarding the **Production Linked Incentive (PLI) Scheme** for Telecom and Networking Products:

- 1. Eligibility for support under the Scheme will be subject to achievement of a minimum threshold of investment and sales of manufactured goods in past.
- 2. The scheme is focused on domestic consumption and does not promote export of the products.

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 **Production Linked Incentive (PLI) Scheme** intends to promote manufacture of **Telecom and Networking Products** in India and proposes a financial incentive to boost domestic manufacturing and attract investments in the target segments of telecom and networking products in order to encourage Make in India.

Support under the Scheme will be provided to companies/entities engaged in manufacturing of specified telecom and networking products in India. **Eligibility** will be further subject to achievement of a minimum threshold of cumulative incremental investment over a period of four years and incremental sales of manufactured goods net of taxes (as distinct from traded goods) over the Base Year 2019-2020. The cumulative investment can be made at one go, subject to annual cumulative threshold as prescribed for four years being met.

Statement 2 is incorrect. The scheme will also **encourage exports** of telecom and networking products 'Made in India'.

Globally Telecom and Networking Products exports represent an US\$100 billion market opportunity, which can be exploited by India. With support under the scheme, India will augment capacities by attracting large investments from global players and at the same time encourage promising domestic champion companies to seize the emerging opportunities and become big players in the export market.

Q.57) Which of the following surveys being undertaken by Labour Bureau?

- 1. All India Survey on Migrant workers
- 2. All India survey on Domestic Workers
- 3. All India survey on employment generated by Professionals

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 surveys being undertaken by **Labour Bureau** are:

--**All India Survey on Domestic Workers** is to estimate the proportion of DW in the workforce by major states and all-India and percentage distribution of these DWs / households that employ them by important socio-demographic key characteristics.

- --All India Survey on Migrant Workers is to estimate the number of migrant workers in India and also to collect information on their living conditions, working conditions and other socioeconomic conditions.
- --All India Survey on Employment Generated by Professionals is to estimate the total number of active professionals in the country & (to capture the employment generated by these professionals.
- --All-India Quarterly Establishment based Employment Survey is to measure relative change in employment situation over successive quarters in sizeable segment of Non-Farm economy covering 8 important sectors of the Indian economy.
- # Labour Bureau is an attached office of Ministry of Labour & Employment.

Q.58) Consider the following statements regarding the **Mission COVID Suraksha**:

- 1. It aimed to accelerate Indian COVID-19 Vaccine Development.
- 2. The mission is being implemented by the Indian Council of Medical Research (ICMR). 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 **Mission COVID Suraksha** was launched by the Government of India to accelerate Indian **COVID-19 Vaccine Development**. The COVID-19 Vaccine development Mission with end-to-end focus from preclinical development through clinical development and manufacturing and regulatory facilitation for deployment, would consolidate all available and funded resources towards an accelerated product development. Statement 2 is incorrect. Led by **Department of Biotechnology** and implemented by a dedicated Mission Implementation Unit at Biotechnology Industry Research Assistance Council (BIRAC), the existing activities under National Bio Pharma Mission (NBM) and Ind-CEPI Mission provide complementary strengths to this Mission.

Q.59) Consider the following statements regarding the NITI Aayog:

- 1. It is a statutory body.
- 2. Maximum of four members of the Union Council of Ministers are nominated by the Prime Minister as ex-officio members.
- 3. The chairperson of the Aayog is appointed by the Prime Minister for a fixed tenure.

Which of the statements given above is/are correct?

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

Correct answer: B

Explanation: Statement 1 is incorrect. The **National Institution for Transforming India**, also called NITI Aayog, was formed via a **resolution** of the Union Cabinet on January 1, 2015. NITI Aayog is the premier policy 'Think Tank' of the Government of India, providing both directional and policy inputs.

Statement 2 is correct. Maximum of 4 members of the Union Council of Ministers to be nominated by the Prime Minister as ex-officio members of the NITI Aayog.

Statement 3 is incorrect. **Prime Minister is the chairperson of the NITO Aayog**. Vice-chairperson and CEO are appointed by the Prime Minister.

Prime Minister Shri Narendra Modi will chair the sixth meeting of the Governing Council of NITI Aayog on 20th February 2021. The agenda of the meeting includes deliberations on agriculture, infrastructure, manufacturing, human resource development, service delivery at grassroots level and health & nutrition.

Q.60) Consider the following statements regarding the Nurturing Neighbourhoods Challenge:

- 1. It aims to provide technical support and capacity-building to develop solutions that enhance the quality of life of young children in cities.
- 2. Only the Smart Cities under the Smart City mission are eligible for the challenge.

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: The Smart Cities Mission, Ministry of Housing and Urban Affairs, announced twenty-five (25) shortlisted cities for the 'Nurturing Neighbourhoods Challenge' cohort, in collaboration with the Bernard van Leer Foundation (BvLF) and technical partner WRI India. Statement 1 is correct. The Nurturing Neighbourhoods Challenge is a **3-year initiative** that

aims to work with Indian cities and their partners to pilot and scale ways to improve public space, mobility, neighborhood planning, access to early childhood services and amenities, and data management across city agencies.

The Challenge aims to propagate an early childhood centric approach among Indian cities, helping urban planners, architects, engineers, and city managers to implement pilots and scale up solutions using the Infant, Toddler, Caregiver-Friendly Neighborhood (ITCN) Framework.

Statement 2 is incorrect. The Challenge is open to all Indian cities with population above 5 lakhs, Smart Cities, and capitals of States/Union Territories.

Q.61) Consider the following statements regarding the Mahatma Gandhi National Fellowship (MGNF) Program:

- 1. It is a Certificate Program in Public Policy and Management offered by Indian Institutes of Technology (IITs).
- 2. It is an initiative of the NITI Aayog.

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: The **Mahatma Gandhi National Fellowship (MGNF)** is a Certificate Program in Public Policy and Management offered by IIMs. It has been designed at the initiative of the

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Ministry of Skill Development and Entrepreneurship (MSDE), Government of India (GoI) and implemented in collaboration with State Skill Development Missions (SSDMs).

It is a two-year academic program. It aims to address the challenge of the non-availability of personnel for the implementation of various skill development programs at national, state, and district levels.

Q.62) Consider the following statements regarding the **Technological Advancement for Rural Areas (TARA) scheme:**

- 1. It aims to provide short term core support to Science based Voluntary Organizations to promote and nurture them as incubators in rural areas.
- 2. It is being implemented by the Science for Equity, Empowerment, and Development (SEED) Division, Department of Science & Technology (DST).

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. This scheme under **SEED programmes** is essentially to provide **long term core support** to Science based Voluntary Organizations/field institutions to promote and nurture them as "S&T Incubators" / "Active Field Laboratories" in rural and other disadvantaged areas to work and provide technological solutions and effective delivery of technologies for livelihood generation & societal benefits.

Statement 2 is correct. **Science for Equity, Empowerment and Development (SEED) Division** has been set up under the Department of Science and Technology, established with the broad objectives of providing opportunities to motivated scientists and field level workers to take up action oriented and location specific projects aiming towards socio-economic upliftment of poor and disadvantaged sections of the society through appropriate technological interventions especially in the rural areas.

The TARA scheme is under the Science for Equity, Empowerment, and Development (SEED) Division, Department of Science & Technology (DST).

Q.63) Consider the following statements regarding the **Pradhan Mantri Kaushal Vikas Yojana** (PMKVY):

- 1. It is a Skill Certification Scheme to enable a large number of Indian youths to take up industry-relevant skill training.
- 2. Individuals with prior learning experience or skills are also not certified under the scheme. 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. **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE). The

objective of this Skill Certification Scheme is to enable a large number of Indian youths to take up industry-relevant skill training that will help them in securing a better livelihood.

Statement 2 is incorrect. Individuals with prior learning experience or skills are also assessed and certified under **Recognition of Prior Learning (RPL)**. RPL is a platform to assess and certify an individual, already skilled in a particular job role/trade. This skill may have been acquired by the individual via formal/informal or non-formal training and experience in the past.

Other important schemes being implemented by MSDE which are not linked to placement are: Jan Shikshan Sansthan (JSS) Scheme, National Apprenticeship Promotion Scheme (NAPS); and Craftsmen Training Scheme (CTS).

Q.64) Which of the following is/are correctly matched?

- 1. SWAYAM DTH channels telecasting of high-quality educational programmes
- 2. DIKSHA National Digital Infrastructure for Teachers
- 3. Swayam Prabha Online platform hosting courses from Class 9 till post-graduation 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: Option 1 and 3 initiative's functions are interchanged.

SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. This is done through a platform that facilitates hosting of all the courses, taught in classrooms from Class 9 till post-graduation to be accessed by anyone, anywhere at any time.

SWAYAM PRABHA is a group of 34 DTH channels devoted to telecasting of high-quality educational programmes on 24X7 basis using the GSAT-15 satellite.

DIKSHA serves as National Digital Infrastructure for Teachers. It enables, accelerates and amplies solutions in realm of teacher education. It seeks to aid teachers to learn and train themselves for which assessment resources will be available. It will help teachers to create training content, profile, in-class resources, assessment aids, news and announcement and connect with teacher community.

Q.65) Consider the following statements regarding the Bureau of Indian Standards (BIS):

- 1. It is a statutory authority.
- 2. It is the National Standard Body of India.
- 2. BIS is a member of the International Organization for Standardization (ISO).

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: All of the above are correct statements.

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The Bureau of Indian Standards Act, 2016, has been implemented since 12 October 2017. The highlights of the new BIS Act are:

- -- Positions BIS as the **National Standards Body**.
- --Allows multiple conformity assessment schemes in line with global practices.
- --Enables the Government to include products under mandatory certification on grounds of health, safety, environment, national security and prevention of deceptive practices.
- --Enables the Government to bring Hallmarking of precious metal articles under mandatory certification.

The International Organization for Standardization (ISO) is an independent, nongovernmental membership organization and the world's largest developer of voluntary International Standards. BIS is a founder member of ISO and is actively involved in development of International Standards by acting as Participating (P) member or Observer (O) member on various Technical Committees, Sub-Committees, Working Groups, etc.

Q.66) Consider the following statements regarding the National Translation Mission (NTM):

- 1. It aims to disseminate knowledge in all Indian languages listed in the eighth schedule of the Constitution through translation.
- 2. It is being implemented by the Department of Official Language, Ministry of Home 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: A

Explanation: Statement 1 is correct. National Translation Mission (NTM) is a Government of India scheme to establish translation as an industry in general and, to facilitate higher education by making knowledge texts accessible to students and academics in Indian languages in particular. The vision is to create a knowledge society by transcending language barriers. NTM aims to disseminate knowledge in all Indian languages listed in the VIII schedule of the Constitution through translation.

Statement 2 is incorrect. Central Institute of Indian Languages (CIIL) is the nodal agency and the chief facilitator for NTM and the Mission operates from the CIIL premises in Mysore.

The idea to celebrate International Mother Language Day (Feb 21) was the initiative of Bangladesh. It was approved at the 1999 UNESCO General Conference and has been observed throughout the world since 2000. The theme of the Day this year, "Fostering multilingualism for inclusion in education and society".

Q.67) Consider the following statements regarding the Technology Development Board (TDB):

- 1. It is a statutory authority.
- 2. It confers the National Technology Awards for commercialization of innovative indigenous technologies.

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 Government of India constituted the **Technology Development Board (TDB)** in September 1996, under the Technology Development Board Act, 1995, as a statutory body, to promote development and commercialization of indigenous technology and adaptation of imported technology for wider application.

The TDB is the first organization of its kind within the government framework with the sole objective of commercializing the fruit of indigenous research. The Board plays a pro-active role by encouraging enterprises to take up technology-oriented products.

A total of 12 companies have been selected for the **National Technology Awards 2020** for commercialization of successful commercialization of innovative indigenous technologies.

They have been selected under three categories --indigenous technologies, MSME, and startups. Every year, for furtherance of its mandate, TDB seeks applications for prestigious National awards for commercialization of technologies under these three categories.

Q.68) Consider the following statements regarding the National Centre for Good Governance (NCGG):

- 1. It assists the government in bringing about governance reforms through studies, training and knowledge sharing.
- 2. NCGG Governing Body is chaired by the Cabinet Secretary.

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 Centre for Good Governance (NCGG)** is an autonomous institute under the aegis of Department of Administrative Reforms and Public Grievances, Government of India.

The NCGG has been set up to assist in bringing about **governance reforms** through studies, training, knowledge sharing and promotion of good ideas. It seeks to carry out policy relevant research and prepare case studies; curate training courses for civil servants from India and other developing countries; provide a platform for sharing of existing knowledge and proactively seek out and develop ideas for their implementation in the government, both at the National and International Level.

NCGG is governed by a **Governing Body, under the Chairmanship of the Cabinet Secretary**. The Management Committee is chaired by Secretary, Department of Administrative Reforms and Public Grievances.

A two-day international virtual workshop on "Good Governance Practices in a Pandemic" between Civil Services Commission (CSC), Maldives and National Centre for Good Governance, DARPG, Government of India is being organized on 23rd and 24th February 2021.

Q.69) Consider the following statements regarding the recently launched National Urban Digital Mission (NUDM):

- 1. It aims to build the shared digital infrastructure to strengthen the capacity of the urban ecosystem to solve complex problems.
- 2. It has been launched by the NITI Aayog in partnership with the World 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. **National Urban Digital Mission** aims to build the shared digital infrastructure that will strengthen the capacity of the urban ecosystem to solve complex problems at scale and speed. It is built as a public good and provides the ecosystem actors the foundational digital building blocks, ready-to-use platforms, standards, specifications and frameworks.

Statement 2 is incorrect. The National Urban Digital Mission (NUDM) has been launched by the **Ministry of Housing and Urban Affairs** along with the Ministry of Electronics and Information Technology.

The NUDM will be anchored by the Centre for Digital Governance (CDG) at the National Institute of Urban Affairs (NIUA).

Q.70) Consider the following statements regarding the **Intensified Mission Indradhanush 3.0** (IMI):

- 1. The focus of the IMI 3.0 will be the children and pregnant women who have missed their vaccine doses during the COVID-19 pandemic.
- 2. It aimed to vaccinate the target population with all the available vaccines under Universal Immunisation Programme (UIP).

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 incorrect.

The focus of the **Intensified Mission Indradhanush 3.0** will be the children and pregnant women who have missed their vaccine doses during the COVID-19 pandemic. They will be identified and vaccinated during the two rounds. Beneficiaries from migration areas and hard to reach areas will be targeted as they may have **missed their vaccine doses during COVID19**.

Intensified Mission Indradhanush 3.0 (IMI 3.0) aimed to reach the unreached population with all the available vaccines under **Universal Immunisation Programme (UIP)** and thereby accelerate the full immunization and complete immunization coverage of children and pregnant women.

As per the Guidelines released for IMI 3.0, the districts have been classified to reflect 313 low risk; 152 as medium risk; and 250 as high-risk districts. IMI 3.0 will have two rounds starting from February 22 and March 22, 2021 and will be conducted in pre-identified 250 districts/urban areas across 29 States/UTs in the country.

Q.71) Consider the following statements regarding the India Urban Data Exchange (IUDX):

- 1. It has been developed in partnership between the Smart Cities Mission and the Indian Institute of Science (IISc).
- 2. It is an open-source software platform to facilitate exchange of data amongst various stakeholders in a city.

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 **India Urban Data Exchange** has been developed in partnership between the Smart Cities Mission and the Indian Institute of Science (IISc), Bengaluru. IUDX serves as a seamless interface for data providers and data users, including ULBs, to share, request, and access datasets related to cities, urban governance, and urban service delivery.

IUDX is an **open-source software** platform which facilitates the secure, authenticated, and managed exchange of data amongst various data platforms, 3rd party authenticated and authorised applications, and other sources. As the number of cities on IUDX expands, this will scale up to uniform and seamless sharing between data producers and data consumers across urban India.

Q.72) Which of the following government entities are brought together through the PRAGATI (Pro-Active Governance and Timely Implementation) platform?

- 1. Prime Miniters Office
- 2. Ministry of Home Affairs
- 3. Chief Secretaries of States

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: C

Explanation: PRAGATI (Pro-Active Governance and Timely Implementation) is a unique integrating and interactive platform. The platform is aimed at addressing common man's grievances, and simultaneously monitoring and reviewing important programmes and projects of the Government of India as well as projects flagged by State Governments.

It is a three-tier system: PMO, Union Government Secretaries, and Chief Secretaries of the States.

A built-in feature of PRAGATI is that these directions will remain in the system for further follow up and review till the finality of the matter.

The PRAGATI platform uniquely bundles three latest technologies: Digital data management, video-conferencing and geo-spatial technology.

Prime Minister recently chaired the 36th PRAGATI meeting.

Q.73) Which of the following drugs/components are being covered under the **Production** Linked Incentive Scheme for Pharmaceuticals?

- 1. Orphan Drugs
- 2. Active Pharmaceutical Ingredients
- 3. Auto-immune Drugs

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 Union Cabinet has approved **Production Linked Incentive (PLI) Scheme for Pharmaceuticals** over a period of Financial Year 2020-21 to 2028-29.

The scheme will be part of the umbrella scheme for the Development of Pharmaceutical Industry. The objective of the scheme is to enhance India's manufacturing capabilities by increasing investment and production in the sector and contributing to product diversification to high value goods in the pharmaceutical sector.

The scheme shall cover pharmaceutical goods under three categories as mentioned below:

Category 1: Biopharmaceuticals; Complex generic drugs; Patented drugs or drugs nearing patent expiry; Cell based or gene therapy drugs; Orphan drugs; Special empty capsules like HPMC, Pullulan, enteric etc.; Complex excipients; Phyto-pharmaceuticals: Other drugs as approved.

Category 2: Active Pharmaceutical Ingredients / Key Starting Materials / Drug Intermediates.

Category 3: Repurposed drugs; Auto immune drugs, anti-cancer drugs, anti-diabetic drugs, anti-infective drugs, cardiovascular drugs, psychotropic drugs and anti-retroviral drugs; In vitro diagnostic devices; Other drugs as approved; Other drugs not manufactured in India.

Indian pharmaceutical industry is 3rd largest in the world by volume and is worth USD 40 billion in terms of value.

Q.74) The **Maritime India Summit 2021** is being organised by which of the following institution?

- a) Ministry of State for Ports, Shipping & Waterways
- b) NITI Aayog
- c) Indian Navy
- d) Indian Ocean Rim Association

Correct answer: A

Explanation: The **Maritime India Summit 2021**, maiden flagship initiative of the **Minister of State for Ports, Shipping & Waterways** Government of India is being organised from 2nd March to 4th March 2021, to promote both international and domestic investment in the Ports and Maritime Sector.

The event will be attended by various stakeholders in the maritime sector including senior and eminent policy planners, domestic and international investors, CEOs of Indian and global maritime companies, industry experts, thought leaders, technology providers, bankers and insurers, representatives of major ports and shipping lines from across the world.

Q.75) Consider the following statements regarding the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021:

- 1. It mandates social media intermediaries, to establish a grievance redressal mechanism for receiving resolving complaints from the users or victims.
- 2. The rules are applicable evenly to all Social Media Intermediaries and do not make any distinction based on number of users.

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: Amidst growing concerns around lack of transparency, accountability and rights of users related to digital media and after elaborate consultation with the public and stakeholders, the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021 has been framed in exercise of powers under section 87 (2) of the Information Technology Act, 2000 and in supersession of the earlier Information Technology (Intermediary Guidelines) Rules 2011.

Statement 1 is correct. The Rules seek to empower the users by mandating the intermediaries, including social media intermediaries, to establish a grievance redressal mechanism for receiving resolving complaints from the users or victims.

Intermediaries shall appoint a Grievance Officer to deal with such complaints and share the name and contact details of such officer. Grievance Officer shall acknowledge the complaint within twenty-four hours and resolve it within fifteen days from its receipt.

Statement 2 is incorrect. To encourage innovations and enable growth of new social media intermediaries without subjecting smaller platforms to significant compliance requirement, the Rules make a distinction between social media intermediaries and significant social media intermediaries.

This distinction is based on the number of users on the social media platform. Government is empowered to notify the threshold of user base that will distinguish between social media intermediaries and significant social media intermediaries. The Rules require the significant social media intermediaries to follow certain additional due diligence.

Q.76) Which of the following place(s) have been selected under the Phase IV of the Swachh Iconic Places (SIP) initiative of Swachh Bharat Mission Grameen (SBM-G)?

- 1. Kumbhalgarh Fort, Rajasthan
- 2. Kalighat Temple, West Bengal
- 3. Niti Village, Uttarakhand

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 Swachh Iconic Places (SIP) initiative of Swachh Bharat Mission Grameen (SBM-G) initiative aims at enhancing the experience of both domestic and foreign visitors by Created with love by ForumIAS- the knowledge network for civil services.

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improving the sanitation and cleanliness standards at and around the sites. The Department of Drinking Water and Sanitation (DDWS), Ministry of Jal Shakti has announced the selection of the following Twelve (12) iconic sites under **Phase IV of SIP**:

1. Ajanta Caves, Maharashtra; 2. Sanchi Stupa, Madhya Pradesh; 3. Kumbhalgarh Fort, Rajasthan; 4. Jaisalmer Fort, Rajasthan; 5. Ramdevra, Rajasthan; 6. Golconda Fort, Telangana; 7. Sun Temple, Konark Odisha; 8. Rock Garden, Chandigarh; 9. Dal Lake, Jammu & Kashmir; 10. Banke Bihari Temple Mathura, Uttar Pradesh; 11. Agra Fort, Uttar Pradesh; and 12. Kalighat Temple, West Bengal.

Phase I Iconic sites: 1. Ajmer Sharif Dargah; 2. CST Mumbai; 3. Golden Temple, Amritsar; 4. Kamakhya Temple, Assam; 5. Maikarnika Ghat, Varanasi; 6. Meenakshi Temple, Madurai; 7. Shri Mata Vaishno Devi, Katra, J&K; 8. Shree Jagannath Temple, Puri; 9. The Taj Mahal, Agra; 10. Tirupati Temple, Tirumala

Phase II Iconic sites: 1. Gangotri; 2. Yamunotri; 3. Mahakaleshwar Temple, Ujjain; 4. Char Minar, Hyderabad; 5. Church and Convent of St. Francis of Assissi, Goa; 6. Adi Shankaracharya's abode Kaladi in Ernakulam; 7. Gomateshwar in Shravanbelgola; 8. Baijnath Dham, Devghar; 9. Gaya Tirth in Bihar; 10. Somnath Temple in Gujarat.

Phase III Iconic sites: 1. Sree Dharma Sastha Temple; 2. Mana Village, Uttarakhand; 3. Vidur Kuti Temple, Uttar Pradesh; 4. Shri Sarveshwar Mahadev Temple; 5. Shri Nag Vasuki Temple; 6. Kanvashram, Uttar Pradesh; 7. Ema Keithel, Manipur; 8. Hazarduari Palace, West Bengal; 9. Pangong Tso; 10. Sri Raghvendra Swamy Mutt Mantralayam

Q.77) Consider the following statements regarding the recently launched City Innovation Exchange (CiX) platform:

- 1. It will connect cities to innovators across the national ecosystem to design innovative solutions for their pressing challenges.
- 2. It is to be used as a platform for trading of Municipal 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. The **City Innovation Exchange (CiX)** platform was launched recently by Secretary, Ministry of Housing and Urban Affairs.

The CiX will connect cities to innovators across the national ecosystem to design innovative solutions for their pressing challenges. The platform will ease the discovery, design& validation of solutions through a robust, transparent and user centric process that will reduce barriers for innovators and cities to discover fitting solutions.

Statement 2 is incorrect. No such provision has been made. The platform will bring together **Citizen Organisations-Academia- Businesses- Government** to co-create for the future of Urban India in a transparent and sustainable manner.

Q.78) Which of the following institution is organizing the Global Bio-India 2021 congregation?

- a) World Health Organization
- b) Agricultural and Processed Food Products Export Development Authority
- c) Department of Biotechnology, Ministry of Science & Technology
- d) Food Safety and Standards Authority of India



Correct answer: C

Explanation: To showcase the strength and opportunities of the India's biotechnology sector at national level and to the global community, the **second edition of Global Bio-India** will be organised from 1-3 March 2021 on digital platform. The theme for this year is "Transforming lives" and tag line "Biosciences to Bioeconomy".

Global Bio-India is one of the largest biotechnology stakeholders' conglomerates that is being co-organised by the **Department of Biotechnology**, **Ministry of Science & Technology** along with its Public Sector Undertaking, Biotechnology Industry Research Assistance Council (BIRAC) in partnership with industry association Confederation of Indian Industry (CII), Association of Biotechnology Led Enterprises (ABLE) and Invest India.

Q.79) Consider the following statements regarding the Indian National Centre for Ocean Information Services (INCOIS):

- 1. It is an autonomous body under the Ministry of Science & Techology.
- 2. It provides round-the-clock monitoring and warning services for the coastal population through the Indian Tsunami Early Warning Centre (ITEWC).

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. **Indian National Centre for Ocean Information Services (INCOIS)** was established as an autonomous body in 1999 under the Ministry of Earth Sciences (MoES) and is a unit of the Earth System Science Organization (ESSO).

Statement 2 is correct. Provides round-the-clock monitoring and warning services for the coastal population on tsunamis, storm surges, high waves, etc. through the in-house **Indian Tsunami Early Warning Centre (ITEWC).**

The Intergovernmental Oceanographic Commission (IOC) of UNESCO designated ITEWC as a Regional Tsunami Service Provider (RTSP) to provide tsunami warnings to countries on the Indian Ocean Rim.

The Indian National Centre for Ocean Information Services (INCOIS) is planning to take the help of the National Remote Sensing Centre (NRSC) for aerial mapping of the Andaman and Nicobar Islands and Lakshadweep to get a better picture of the ocean floor, also called 'bathymetric' study.

Q.80) Consider the following statements regarding the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021:

- 1. Significant social media intermediaries are to enable identification of the first originator of the information for investigation to authorities.
- 2. The Central Board of Film Certification will classify the content on OTT platforms into agebased categories.

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. **Significant social media intermediaries** providing services primarily in the nature of messaging shall enable identification of the first originator of the information that is required only for the purposes of:

--prevention, detection, investigation, prosecution or punishment of an offence related to sovereignty and integrity of India, the security of the State, friendly relations with foreign States, or public order or of incitement to an offence relating to the above or in relation with rape, sexually explicit material or child sexual abuse material punishable with imprisonment for a term of not less than five years.

Intermediary shall not be required to disclose the contents of any message or any other information to the first originator.

Statement 2 is incorrect. The OTT platforms, called as the publishers of online curated content in the rules, would **self-classify** the content into five age-based categories- U (Universal), U/A 7+, U/A 13+, U/A 16+, and A (Adult).

Platforms would be required to implement parental locks for content classified as U/A 13+ or higher, and reliable age verification mechanisms for content classified as "A".

Q.81) What is the objective of the recently launched E-Daakhil portal?

- a) Filing income tax returns
- b) Filing Goods & Services tax returns
- c) Admission of students to Central Government run schools
- d) E-filing of consumer complaints

Correct answer: D

Explanation: E-Daakhil portal launched by **National Consumer Dispute Redressal Commission** (NCDRC) for Consumer grievance redressal is now operational in 15 States/UTs.

The Consumer Protection Act, 2019, which has come into force from 20th July, 2020, has provision for e-filing of consumer complaints in the Consumer Commissions and online payment of the fees for filing a complaint. A web application for E-filing of consumer complaints named e-daakhil has been developed by NIC for the purpose.

The e-daakhil portal empowers the consumer and their advocates to file the consumer complaints along with payment of requisite fees online from anywhere for the redressal of their complaints. It also facilitates the consumer commissions to scrutinize the complaints online to accept, reject or forward the complaint to the concerned commission for further processing.

Q.82) Consider the following statements regarding the National Infrastructure Pipeline (NIP):

- 1. NIP covers both economic and social infrastructure projects.
- 2. NIP is to be funded wholly by the Central Government.

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. **National Infrastructure Pipeline (NIP)** covers both economic (Power, Telecom, Shipping etc.) and social (education, water, health etc.) infrastructure projects- based on the updated Harmonized Master List of Infrastructure.

Out of the total expected capital expenditure of Rs 111 lakh Crore, projects worth Rs 44 lakh Crore (40%) are under implementation, projects worth Rs 33 lakh Crore (30%) are at a conceptual stage, projects worth Rs 22 lakh Crore (20%) are under development (project identified and DPR prepared, but yet to draw-down funds) and the balance projects worth Rs 11 lakh Crore (10%) are unclassified.

Statement 2 is incorrect. The overall funding mix for the NIP is likely to be through the **Central** and state budgets, borrowings and private sector participation. The Centre (39 per cent) and states (40 per cent) are expected to have an almost equal share in implementing the projects, while the private sector has a 21 per cent share.

While presenting the **Union Budget 2021-22** the Union Minister for Finance announced that in order to achieve the target of National Infrastructure Pipeline (NIP) in the coming years the Government proposes following three steps: creation of institutional structures, big thrust on monetizing assets and enhancing the share of capital expenditure in Central and State budgets.

Q.83) Which of the following component(s) is/are covered under the **Production Linked**Incentive Scheme for IT Hardware?

- 1. Laptops
- 2. Tablets
- 3. Servers

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 Union Cabinet has approved the **Production Linked Incentive (PLI) Scheme for IT Hardware**. The scheme proposes production linked incentive to boost domestic manufacturing and attract large investments in the value chain of IT Hardware. The Target Segments under the proposed Scheme include **Laptops, Tablets, All-in-One PCs and Servers**. The Scheme shall, extend an incentive of 4% to 2% / 1% on net incremental sales (over base year 2019-20) of goods manufactured in India and covered under the target segment, to eligible companies, for a period of four years.

Q.84) Consider the following statements regarding the Digital Media Ethics Code Relating to Digital Media and OTT Platforms under the Information Technology Rules 2021:

- 1. The Ministry of Electronics and Information Technology (MEITY) will formulate an oversight mechanism for the code.
- 2. Publishers of news on digital media are required to observe the Programme Code under the Cable Television Networks Regulation Act.

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 Digital Media Ethics Code Relating to Digital Media and OTT Platforms are to be administered by **Ministry of Information and Broadcasting (MIB)**.

MIB shall formulate an oversight mechanism. It shall publish a charter for self-regulating bodies, including Codes of Practices. It shall establish an Inter-Departmental Committee for hearing grievances.

Statement 2 is correct. Publishers of news on digital media would be required to observe Norms of Journalistic Conduct of the Press Council of India and the **Programme Code under the Cable Television Networks Regulation Act** thereby providing a level playing field between the offline (Print, TV) and digital media.

Q.85) Who among the following are currently Ex-officio Members of the NITI Aayog?

- 1. Minister of Defence
- 2. Minister of Finance
- 3. Minister of External Affairs

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 **NITI Aayog** comprises of the Prime Minister of India as the Chairperson; Governing Council comprising the Chief Ministers of all the States and Lt. Governors of Union Territories. Further, Maximum of 4 members of the Union Council of Ministers nominated by the Prime Minister as ex-officio members of the NITI Aayog.

The current composition of the NITI Aayog includes the following as Ex-officio Members:

- --Shri Raj Nath Singh, Minister of Defence
- --Shri Amit Shah, Minister of Home Affairs
- --Smt. Nirmala Sitharaman, Minister of Finance and Minister of Corporate Affairs
- --Shri Narendra Singh Tomar, Minister of Agriculture and Farmers Welfare; Minister of Rural Development; Minister of Panchayati Raj.
- # The sixth meeting of the Governing Council of NITI Aayog was held recently.

Q.86) Which of the following is/are the central agencies for procurement of oilseeds & pulses?

- 1. National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED)
- 2. National Consumer Cooperative Federation of India Ltd. (NCCF)
- 3. Small Farmers Agro Consortium (SFAC)

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 announces, **Minimum Support Prices (MSP) for major agricultural commodities** each year in both the Crop seasons CACP recommends MSP for twenty-two (22) crops and Fair & Remunerative Price (FRP) for sugarcane.

Apart from Sugarcane for which FRP is declared by the Department of Food & Public Distribution, twenty-two crops covered under MSP are Paddy, Jowar, Bajra, Maize, Ragi, Arhar, Moong, Urad, Groundnut-in-shell, Soyabean, Sunflower, Seasamum, Nigerseed, Cotton, Wheat, Barley, Gram, Masur (lentil), Rapeseed/Mustardseed, Safflower, Jute and Copra.

In addition, MSP for Toria and De-Husked coconut is fixed by the Department on the basis of MSP's of Rapeseed/Mustardseed and Copra respectively.

NAFED, Central Warehousing Corporation (CWC) National Consumer Cooperative Federation of India Ltd. (NCCF), Small Farmers Agro Consortium (SFAC) are the central agencies for procurement of oilseeds & pulses. However, NAFED is also an additional central agency for procurement of cotton, in addition to Cotton Corporation of India (CCI) under the DAC.

Q.87) Consider the following statements regarding Scheme of Fund for Regeneration of Traditional Industries (SFURTI):

- 1. It aims to preserve heritage of traditional arts and crafts of minority communities.
- 2. The artisans are organized into Special Purpose Vehicle (SPV) which can be a Producer Company under Companies Act, 2013.

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. **Khadi and Village Industries Commission (KVIC)** is the nodal Agency for promotion of Cluster development for Khadi.

USTTAD scheme of Ministry of Minority Affairs aims to preserve heritage of traditional arts and crafts of minority communities and build capacity of traditional crafts persons and artisans.

Statement 2 is correct. SFURTI clusters are of two types i.e., **Regular Cluster** (500 artisans) with Government assistance of up to Rs.2.5 crore and **Major Cluster** (more than 500 artisans) with Government assistance up to Rs.5 crore.

The artisans are organized into SPVs which can be (i) a Society registered under Societies (Registration) Act, 1860, (ii) a Co-operative Society under an appropriate statute, (iii) a Producer Company under Section 465 (1) of Companies Act, 2013 (18 of 2013), (iv) a Section 8 Company under the Companies Act, 2013 (18 of 2013) or (v) a Trust.

Under the Scheme, the Ministry supports various interventions including setting up of infrastructure through Common Facility Centers (CFCs), procurement of new machineries, creating raw material banks, design intervention, improved packaging, improvement of marketing Infrastructure, improved skills and capacity development through training and exposure visits, etc.

HISTORY/ART/CULTURE

Q.1) Which of the following is/are listed under the in the UNESCO Representative list of Intangible Cultural Heritage of Humanity?

- 1. Tradition of Vedic chanting
- 2. Chhau dance
- 3. Kumbh Mela

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 Ministry of Culture formulated a scheme titled "Scheme for Safeguarding the Intangible Heritage and Diverse Cultural Traditions of India", with the objective of supporting various institutions, non-Government organisations, researchers and scholars so that they may engage in activities/ projects for strengthening, protecting, preserving and promoting the rich Intangible Cultural Heritage of India.

A total of 13 Intangible cultural heritage (ICH) elements from India have been inscribed till date on the UNESCO's Representative List of the Intangible Cultural Heritage of Humanity:

Tradition of Vedic chanting, Ramlila, Kutiyattam, Ramman, Mudiyettu Kalbelia folk songs and dances of Rajasthan, Chhau dance, Buddhist chanting of Ladakh, Sankirtana, Traditional brass and copper craft of utensil making among the Thatheras of Jandiala Guru, Yoga, Nawrouz and Kumbh Mela.

Q.2) What is Tholpavakoothu?

- a) Classical dance in temples of northern Tamil Nadu
- b) Ancient martial art of coastal Andhra Pradesh
- c) Traditional musical performance during festivals
- d) Shadow puppetry practiced in Kerala

Correct answer: D

Explanation: Tholpavakoothu or shadow puppetry is a temple art form which is prevalent in the Bhagavathy temples (mother Goddess) in Palakkad district and nearby regions in **Kerala**.

The story of Tholppavakoothu performance is from the Indian epic, **Ramayana**. In the olden days it was performed elaborately over a period of forty-one days. The narrative used for the performance is a mixture of prose and poetry called Adalpattu.

Tholppavas are made of the skin of deer and the puppet forms are made by making small holes in the leather that is then attached vertically to a bamboo stick.

Q.3) Consider the following statements regarding **Lingayats**:

- 1. They are followers of the 12th-century philosopher Saint Basava.
- 2. Lingayats are primarily resident of Karnataka.
- 3. They reject polytheism and Vedic rituals.

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: The **Lingayat people** are known for wearing a linga, an object representing a god; in this case, Shiva. They are found primarily in **Karnataka**, where they comprise a major population. They are also found in significant numbers in Maharashtra and Andhra Pradesh. This group formed in the 12th century by **Basava**, a philosopher and a social reformer. He taught against the caste system and its regulations.

Lingayats reject polytheism and the Vedas and follow the teachings of the **Vachana sahitya** instead.

Q.4) Which of the following region of India was ruled by Raja Suheldev?

- a) Assam
- b) West Bengal
- c) Bihar
- d) Uttar Pradesh

Correct answer: D

Explanation: Maharaja Suheldev was the erstwhile ruler of **Shravasti in Uttar Pradesh's Bahraich district**, who ruled in the 11th century.

The legend goes that that when invaders were conquering one region after another in India, it was Raja Suheldev of Shravasti who gathered heads of different communities likes Tharu and Banjara as well as small kings to block the invasion. It is said that it was his army which defeated and killed Ghazi Salar Masud, the nephew of Mahmud of Gazni at Bahraich.

Q.5) The Ali-Aye-Ligang festival is celebrated by which of the following community?

- a) Mishing tribe of Assam
- b) Tharu tribe of Uttarakhand
- c) Nyishi tribe of Arunachal Pradesh
- d) Oram tribe of Odisha

Correct answer: A

Explanation: Ali Aye Ligang literally means sowing of roots and fruits as Ali means seeds, Aye stands for fruits and Ligang means sowing.

Ali-Aye-Ligang festival is a spring festival associated with agriculture, especially with the beginning of the Ahu paddy cultivation celebrated by the **Mising/Mishing tribe of Assam**. They perform traditional rituals and dances. This festival is celebrated on the first Wednesday of the Phagun month, which starts from mid-February.

GEOGRAPHY/ENVIRONMENT

- Q.1) Consider the following statements regarding the Kosi River:
- 1. It joins Ganges river west of the Gandak river.
- 2. The Tamur Koshi and Arun River are tributaries of Kosi River. 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 **Kosi river** has its source in Tibet that includes the world's highest upland it then drains a large part of Nepal before emerging onto the Gangetic plains. Kosi flows east of Gandak River. It crosses into northern Bihar where it branches into distributaries before joining the Ganges near Kursela in Katihar district. Kosi flows east of the Gandak River.



Statement 2 is correct. From a major confluence of tributaries north of the Chatra Gorge onwards, the Koshi River is also known as Saptakoshi for its seven upper tributaries. These include the Tamur Koshi originating from the Kanchenjunga area in the east, **Arun River** from Tibet and Sun Koshi from the Gosainthan area farther west.

The Government of Nepal has allotted 679 MW Lower Arun Hydro Electric Project in Nepal to SJVN through competitive bidding.

Q.2) Which of the following animal(s) is/are listed in **Schedule I of the Wildlife (Protection)**Act, 1972?

- 1. Himalayan Black Bear
- 2. Leopard
- 3. Pangolin

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 species are protected under the **Schedule I of the Wildlife Protection Act**, 1972. As per the provisions of the Act, poaching of these animals and trading them by parts is punishable with minimum 03 years of imprisonment extendable up to 07 years.

The Wildlife Crime Control Bureau (WCCB) seized large wildlife contrabands recently in Jammu & Kashmir that included the Musk deer and Himalayan Black bear poached for musk pods, bear bile, which is used in **Traditional Chinese Medicines (TCM)**.

Pangolin is among the most heavily trafficked nonhuman mammal in the world mainly for their scales, used in traditional medicine.

Q.3) Consider the following statements regarding the **Dam Rehabilitation and Improvement Project (DRIP)**:

- 1. It is being implemented through financial assistance of the World Bank (WB), and Asian Infrastructure Investment Bank (AIIB).
- 2. The project aims to strengthen the dam safety institutional setup in participating states as well as at central level.

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 Dam Rehabilitation and Improvement Project (DRIP) Phase II & Phase III with the financial assistance of the World Bank (WB), and Asian Infrastructure Investment Bank (AIIB) is being implemented to improve the safety and operational performance of selected dams across the whole country, along with institutional strengthening with system wide management approach.

Statement 2 is correct. The Project will be implemented over a period of 10 years duration in two Phases, each of six years duration with two years overlapping from April, 2021 to March, 2031. DRIP Phase II & Phase III envisages the following objectives:

- --To improve the safety and performance of selected existing dams and associated appurtenances in a sustainable manner.
- --To strengthen the dam safety institutional setup in participating states as well as at central level, and

--To explore the alternative incidental means at few of selected dams to generate the incidental revenue for sustainable operation and maintenance of dams.

Q.4) Consider the following statements regarding the "Aadi Mahotsav":

- 1. It is organised by the Ministry of Culture.
- 2. It serves as an avenue of showcasing the tribal products and helping the artisans connect with the mainstream 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: B

Explanation: Statement 1 is incorrect. The **"Aadi Mahotsav" is a National Tribal Festival** being organized by TRIFED, Ministry of Tribal Affairs. It is an annual initiative that was commenced in 2017.

Due to the unprecedented circumstances caused due to the pandemic, TRIFED did not hold any Aadi Mahotsav in 2020 however, the tradition has now been resumed.

Statement 2 is correct. The Aadi Mahotsav acquaints people with and gives a peek into the rich tribal heritage and culture. This helps the underprivileged tribes get a bigger market for displaying and selling their arts and crafts. The Aadi Mahotsav is also an opportunity for the artisans to interact directly with art lovers and get first-hand feedback which can then better their creations and designs. Aadi Mahotsav establishes a direct connect between the masses and the tribal people.

Q.5) Consider the following statements regarding the **Fishing Cat**:

- 1. Wetlands are the major habitat of the Fishing Cat.
- 2. It is listed as a Critically Endangered species under the IUCN Red List of Threatened Species.
- 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: C

Explanation: Statement 1 is correct. **Wetlands** are the favorite habitats of the fishing cat. In India, fishing cats are mainly found in the mangrove forests of the Sundarbans, on the foothills of the Himalayas along the Ganga and Brahmaputra river valleys and in the Western Ghats.

Fishing cats have a patchy distribution along the Eastern Ghats. Apart from Sundarbans in West Bengal and Bangladesh, fishing cats inhabit the Chilika lagoon and surrounding wetlands in Odisha, Coringa and Krishna mangroves in Andhra Pradesh.

Statement 2 is incorrect. Fishing cat is protected under the **Schedule I of the Wildlife Protection Act, 1972.** The Convention on International Trade in Endangered Species (CITES) lists the fishing cat on Appendix II part of Article IV of **CITES**, which governs international trade in this species.

Statement 3 is correct. Fishing Cat (Prionailurus viverrinus) is listed as **Endangered** species with deceasing population trend in the IUCN Red List of Threatened Species,

Q.6) Consider the following statements regarding the **Organic Agriculture**:

- 1. The consumption of organic food increases the exposure to biological contaminants.
- 2. The organic farming has potential to preserve the Biodiversity.

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 have been many claims that eating organic foods increases exposure to micro-biological contaminants. Studies investigating **these claims have found no evidence** to support them. It is important to realize that all organic foods must meet the same quality and safety standards applied to conventional foods. [Food & Agriculture Organisation]

One of the suggested sources of micro-biological contamination is manure. The use of manure is common in both conventional and organic systems, the potential for contamination is therefore applicable to both.

Statement 2 is correct. Organic farmers are both custodians and users of biodiversity at all levels

- --At the gene level, traditional and adapted seeds and breeds are preferred for their greater resistance to diseases and their resilience to climatic stress.
- --At the species level, diverse combinations of plants and animals optimize nutrient and energy cycling for agricultural production.
- --At the ecosystem level, the maintenance of natural areas within and around organic fields and absence of chemical inputs create suitable habitats for wildlife.
- # Indian Council of Agricultural Research through ICAR-Indian Institute of Farming System Research, Modipuram operates a research scheme of All India Network Programme on Organic Farming (AI-NPOF) with 20 cooperating centres covering 16 States to develop package of practices for organic production of crops.

Q.7) Which of the following is/are potential advantages of the **Integrated Farming System** (IFS)?

- 1. Maximising return from the unit area
- 2. Increased farm income
- 3. Utilisation of the by-products of different components of the farming system 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 **integrated farming system** is a commonly used term to explain a more integrated approach to farming compared to monoculture approaches. It refers to agricultural

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systems that integrate livestock and crop production or integrate fish and livestock and may sometimes be known as integrated biosystems.

Advantages of Integrated Farming System:

- --Maximising return from the unit area
- --Utilising the by-products of one component of the farming system as an input in other for ensuring supplementary and complementary enterprise relationship
- --Sustainable soil fertility and productivity through organic waste recycling
- --Integration of allied activities will result in the availability of nutritious food enriched with protein, carbohydrate, fat, minerals and vitamins
- --Integrated farming will help in environmental protection through effective recycling of waste from animal activities like piggery, poultry and pigeon rearing
- --Reduced production cost of components through input recycling from the byproducts of allied enterprises
- # Indian Council of Agricultural Research (ICAR) has developed 63 Integrated Farming System (IFS) models by involving ICAR Institutes, State Agricultural Universities and farming community of 18 states.

Q.8) Consider the following statements regarding the Vembanad Lake:

- 1. It is the largest lake in Kerala.
- 2. Pamba River empties into the Vembanad Lake.

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. **Vembanad Lake, the largest and the longest lake in Kerala**, hosts the much-celebrated Nehru Trophy Boat Race on a major portion of this lake.

Statement 2 is correct. **Pamba River** is the third longest river in the South Indian state of Kerala after Periyar and Bharathappuzha, and the longest river in the erstwhile princely state of Travancore. Sabarimala temple dedicated to Lord Ayyappa is located on the banks of the river Pamba.

It enriches the lands of Pathanamthitta District and the Kuttanad area of Alappuzha District and few areas of Kottayam and finally empties into the Vembanad Lake.

Q.9) Consider the following statements regarding the seismic zoning map of India:

- 1. Zone V exhibits the highest seismic risk and zone II has the least.
- 2. Zone V seismic area is limited to Himalayan region 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

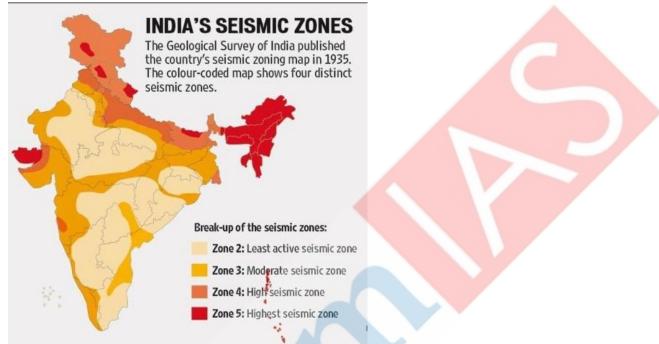
Correct answer: A

Explanation: Statement 1 is correct. The whole country has been divided into four zones viz. zone V, IV, III and II according to the seismic zoning map of India prepared by Bureau of



Indian Standards (BIS) based on the historical seismicity and strong ground motions. Out of these zones, Zone V exhibits the highest seismic risk and zone II has the least.

Statement 2 is incorrect. **Zone V** covers arts of Jammu and Kashmir (Kashmir valley); Western part of Himachal Pradesh; Eastern part of Uttarakhand, Kutch in Gujarat; part of Northern Bihar; all northeastern states of India and Andaman & Nicobar Islands.



National Centre for Seismology (NCS), under the Ministry of Earth Sciences (MoES), maintains a nation-wide seismological network comprising of 115 seismic stations to monitor the earthquake activity in and around the country.

Q.10) Consider the following statements regarding the Wetlands in India:

- 1. Gujarat has highest wetland area among all states of India.
- 2. Inland natural wetland area of India is more than the coastal natural wetland area. 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. Among Indian states, **Gujarat ranks first with 3.47 m ha** (about 23% of the total wetland area of country) comprising vast stretches of intertidal mudflats and salt pans.

Gujarat is followed by Andhra Pradesh, Uttar Pradesh and Maharasthra having more than 1 m ha area of wetlands.

Statement 2 is correct. **Inland natural wetland area accounts for around 43%** while coastal natural wetland area accounts for around 24% of the total wetland area.

Table . Wetland Types of India (after Panigrahy et al. 2012).

S. No.	Wetland Category	Total wetland area (ha)	% of wetland area
1.	Inland wetlands- Natural (Lakes/pondes; Ox-bow lakes/ cut-off meanders; High-altitude wetlands; Riverine wetlands; waterlogged; River/stream)	6623067	43.40
2.	Inland wetlands- Man-made (Reservoirs/barrages; Tanks/ponds; waterlogged; Salt pans)	3941832	25.83
	Total – Inland	10564899	69.22
3.	Coastal wetlands- Natural (Lagoons; Creeks; Sand/beeach/ Intertidal mud flats; Salt marsh; Mangroves; Coral reefs)	3703971	24.27
4.	Coastal wetlands- Man-made (Salt pans; Aquaculture ponds)	436145	2,86
	Total – Coastal Sub- Total	4140116 14705015	27.13 96.36
5.	Wetlands (< 2.25 ha)	555557	3.64
	Total	15260572	100

[#] The Ministry of Environment, Forest and Climate Change, Sh. Babul Supriyo has announced the establishment of a Centre for Wetland Conservation and Management (CWCM), as a part of the National Centre for Sustainable Coastal Management (NCSCM), Chennai, an institution under the Ministry.

Q.11) The **Dudhwa Tiger Reserve** is located in which of the following State?

- a) Maharshtra
- b) Haryana
- c) Bihar
- d) Uttar Pradesh

Correct answer: D

Explanation: Dudhwa National Park or the Dudhwa Tiger Reserve residing the areas of Lakhimpur & Kheri district of Uttar Pradesh, lying adjacent to the Indo-Nepal border bringing together two most incredible sanctuaries of the area namely, Kishanpur and Katerniaghat Wildlife Sanctuaries to represent the excellent natural forests and greenery along the Terai region.

With funding support under TARA Scheme of Science for Equity, Empowerment & Development (SEED) Division, Department of Science & Technology (DST), Government of India, and implemented through Core Support Group- WWF India; women belonging to the Tharu Hath Karga Gharelu Udyog – a Self Help Group (SHG) have recorded significant increase in revenue from sale of their wares in 2020.

Q.12) Which of the following river(s) is/are tributary to the Alaknanda River?

- 1. Kali River
- 2. Dhauliganga River
- 3. Pindar River

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 **River Alaknanda** rises at the confluence and fed of Satopath and Bhagirathi Kharak glacier in Uttarakhand and meet the Sarasvati River tributary at Mana, India, 21 km from Tibet. Three km below Mana the Alaknanda flows past the Hindu pilgrimage centre of Badrinath.

There are many operational dams and HE projects in the Alaknanda basin namely **Tapovan**, **Tharali**, **Vishnuprayag**, **Srinagar etc**.

Various tributaries joining River Alaknanda are: Dhauli<mark>ganga r</mark>iver at Vishnuprayag, Nandakini River at Nandaprayag, Pindar River at Karnaprayag, Mandakini River at Rudraprayag, and finally it meets Bhagirathi River at Devprayag.



Q.13) Which of the following is/are potential causes of a Glacial Lake Outburst Flood (GLOF)?

- 1. Earthquake
- 2. Heavy rainfall/snowmelt
- 3. Landslides

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 **glacial lake outburst flood (GLOF)** is a release of meltwater from a moraine-or ice-dam glacial lake due to dam failure.

It is mostly caused by rapid slope movement into the lake, heavy rainfall/snowmelt, cascading processes (flood from a lake situated upstream), earthquake, melting of ice incorporated in dam/forming the dam (including volcanic activity-triggered **jökulhlaups**).

As the volume of the glacial lake grows, so does the pressure on the dam containing it. Fragmentation of the source glacier, landslides and other processes can trigger displacement waves in the lake, potentially compromising the stability of the dam and resulting in a GLOF. Failure of the dam can also occur due to internal processes, such as water seeping through the structure.

Q.14) The **Tehri Dam** is on which of the following river?

- a) Alaknanda River
- b) Bhagirathi River
- c) Rishiganga River
- d) Mandakini River

Correct answer: B

Explanation: The **Tehri hydroelectric power complex**, located in the Himalayan foothills, is owned and operated by the Tehri Hydro Development Corporation (THDC).

The Tehri Dam is a multi-purpose rock and earth fill dam build on the Bhagirathi River near Tehri Garhwal in Uttarakhand. The Tehri Hydroelectric Complex Phase 1 was completed in 2006. It withholds a reservoir for irrigation, municipal water supply and generates 1,000 megawatts of electricity along with an additional 1,000 MW of pumped storage hydroelectricity. It provides irrigation to an additional area of 270,000 hectares as well as supporting the existing irrigated area of 604,000 hectares. It supplies clean drinking water to about 4 million people in Delhi and 3 million people in Uttar Pradesh and Uttarakhand. And last but not least, the Tehri reservoir has a flood control pool capacity of 219.65 Mm3.

Q.15) Consider the following statements regarding the recently released report "Assessment of Climate Change over the Indian Region":

- 1. It has been published by Ministry of Earth Sciences (MoES).
- 2 The surface air temperature over India has risen by about 0.7 °C during last 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: C

Explanation: The **Ministry of Earth Sciences (MoES)**, Government of India has recently published a Climate Change report entitled "Assessment of Climate Change over the Indian Region" which covers all the aspects of regional climate change including the climatic extremes across India.

The preparation of this report was led by the Center for Climate Change Research (CCCR) at the Indian Institute of Tropical Meteorology (IITM) Pune.

Based on the available climate records, the report documents that the surface air temperature over India has risen by about 0.7 °C during 1901–2018 which is accompanied with an increase

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in atmospheric moisture content. The sea surface temperatures in the tropical Indian Ocean have also increased by about 1 °C during 1951–2015.

Q.16) Which of the following **Geographical Indication(s)** is/are correctly matched?

1. Blue Pottery - Rajasthan

2. Kala Jeera - Assam

3. Bidriware - Karnataka

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: C

Explanation: The ongoing Tribes India Aadi Mahotsav is showcasing various GI products from all over the country. The GI products stall at the Tribes India Aadi Mahotsav features renowned, exquisite items such as Rajasthan's blue pottery, the Kota Dariya fabric, Madhya Pradesh's Chanderi and Maheshwari silk, Bagh print, Odisha's Pattachitra, Karnataka's Bidriware, Banarasi silk from Uttar Pradesh, Darjeeling tea from West Bengal, Kala jeera from Himachal Pradesh, the extremely spicy Naga chilli, and the large cardamom from the North-east.

The Geographical Indication, which has been recognized by the World Trade Organization, is used to denote the geographical territory from where a product, be it an agricultural produce, natural product or manufactured, and also conveys assurance of qualities or attributes that are unique to that specific geographic region. India became a signatory to this convention, when, as a member of the WTO, it enacted the **Geographical Indications (Registration and Protection Act)**, 1999.

Q.17) Which of the following is/are the effects of sedimentation of Dams?

- 1. Increase the flood-risk reduction capability of Dam
- 2. Reduction of spillway capacity
- 3. Damage on turbines and other mechanical equipment

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: All rivers naturally transport sediment. However, when the flow velocity and energy of the water is reduced as the river enters a reservoir, most of this sediment settles along the bottom of the reservoir where it becomes trapped, rather than continuing downstream.

Option 1 is incorrect. Sedimentation **decreases the storage** available for flood-risk reduction. Option 2 is correct. Sediments will often block low-level outlets designed to allow for reservoir drawdown. As sedimentation continues, clogging of spillway tunnels or other conduits may occur. **Reduction of spillway capacity** can occur as a result of the loss of approach depth when the sediment front reaches the dam.

Option 3 is correct. Sediment can damage turbines and other mechanical equipment through erosion of the oxide coating on the blades, leading to surface irregularities and more serious material damage.8 Sustained erosion can lead to extended shutdown time for maintenance or replacement.

- Q.18) The Torres Strait connects which of the following oceans/seas?
- a) Coral Sea and the Arafura Sea
- b) Atlantic Ocean to the Mediterranean Sea
- c) Adriatic Sea and Ionian Sea
- d) Red Sea and Gulf of Aden

Correct answer:

Explanation: Torres Strait is the passage between the **Coral Sea**, on the east, and the **Arafura Sea**, in the western Pacific Ocean. To the north lies New Guinea and to the south Queensland, Australia. It is about 80 mi (130 km) wide and has many reefs and shoals dangerous to navigation, and its larger islands are inhabited.



The Strait of Gibraltar connects the Atlantic Ocean to the Mediterranean Sea and separates the Iberian Peninsula in Europe from Morocco in Africa.

The Strait of Otranto connects the Adriatic Sea with the Ionian Sea and separates Italy from Albania

Bab el-Mandeb Strait between Arabia and Africa connects the Red Sea with the Gulf of Aden.

- **Q.19)** The **Lalandar (Shatoot) Dam** is being constructed on which of the following river basin in Afghanistan?
- a) Amu Darya
- b) Kabul River
- c) Helmand River
- d) Harut River

Correct answer: B

Explanation: The **Shahtoot dam** is proposed to be constructed on the **Kabul river** basin. A signing ceremony of the Memorandum of Understanding [MoU] between India and Afghanistan for the construction of the Lalandar [Shatoot] Dam in Afghanistan took place recently.

The project is a part of the New Development Partnership between India and Afghanistan. The Lalander [Shatoot] Dam would meet the safe drinking water needs of Kabul City, provide irrigation water to nearby areas, rehabilitate the existing irrigation and drainage network, aid in flood protection and management efforts in the area, and also provide electricity to the region.

This is the second major dam being built by India in Afghanistan, after the India- Afghanistan Friendship Dam [Salma Dam].

Q.20) Consider the following statements regarding **Groundwater**:

- 1. Artificial recharge to an aquifer can occur when people inject water down into a well.
- 2. Water can flow in streams even during periods of drought due to groundwater seeping into stream banks.
- 3. Land subsidence occurs in areas underlain by highly fractured granite, which is readily dissolved by moving acidic groundwater.

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. **Artificial recharge** to an aquifer can occur when people inject water down into a well to force it back into an aquifer so they can withdraw it later. In places where the water table is close to the land surface and where water can move through the aquifer at a high rate, aquifers can be replenished artificially.

Statement 2 is correct. **Groundwater contributes** to streams in most geographic areas and climatic settings. The proportion of stream water that comes from groundwater inflow varies according to a region's geography, geology, and climate. This groundwater component of a stream's flow is called "base flow."

Statement 3 is incorrect. This statement is **truer for sinkholes and not land subsidence**. Sinkholes can occur when water, sometimes a bit acidic in nature, dissolves underground rock, often **limestone or dolomite**. The land surface can collapse, often dramatically, into the void space underneath.

Land subsidence is a gradual settling or sudden sinking of the Earth's surface owing to subsurface movement of earth materials. The basic cause of land subsidence is a loss of support below ground. In other words, sometimes when water is taken out of the soil, the soil collapses, compacts, and drops. This depends on the type of soil and also on the type of rock below the surface.

Q.21) Consider the following statements regarding the **Pangong Tso**:

- 1. It is a saltwater lake.
- 2. It is south of Tso Moriri.
- 3. It is a wetland of international importance under Ramsar Convention.

Which of the statements given above is/are correct?

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

Correct answer: A

Explanation: Statement 1 is correct. Pangong Tso is a long narrow, deep, endorheic **saltwater** lake situated at a height of more than 14,000 ft in the Ladakh Union Territory at Line of Actual Control.

Statement 2 is incorrect. The lake lies **north** of the Tso Moriri.



Statement 3 is incorrect. It is **yet to be recognised** under the Ramsar Convention as wetland of international importance.

Q.22) The Galathea National Park is in which of the following State/UT?

- a) Nagaland
- b) Andaman & Nicobar Islands
- c) Lakshadweep
- d) Goa

Correct answer: B

Explanation: Galathea National Park is a National Park located in the Union Territory of **Andaman and Nicobar Islands**.

It comprises the core area of the southern part of the Biosphere Reserve in Great Nicobar Island and consists of lowland forests which have the greatest abundance of endemic avifauna. It is the prime nesting habitat of the Nicobar Megapode.

The leather back turtle (Dermochelys coriacea) nests in large numbers during the months between December to February at South Bay.

Q.23) Consider the following statements regarding the Seed Replacement Rate (SRR):

- 1. It is the percentage of area sown out of total area of crop planted in the season by using certified seeds.
- 2. SRR has a direct bearing on productivity augmentation and enhancement in farmers' income.

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.

Seed Replacement Rate is the percentage of area sown out of total area of crop planted in the season by using certified/quality seeds other than the farm saved seed.

In India, **farm-saved seed (FSS)** is the most prominent source to raise crop year after year since farmers are familiar with the seed they grow themselves and know that the variety is adapted to local conditions and preferences. This often reduces the quality of seeds sown despite the availability of quality seed of superior genotypes from the organized seed industry. SRR is a measure of cropped area covered with quality seed. Hence SRR is having a direct bearing on **productivity augmentation and enhancement in farmers' income** and is one of the means for achieving doubling the farmers' income.

Focused attention for improving the seed replacement rate and varietal replacement is given in the National Food Security Mission. To increase the seed replacement rate (SRR) of improved varieties of food grains, about 74 lakh quintals of certified seed of high yielding varieties/hybrids of rice, wheat, pulses & coarse cereals were distributed under NFSM from 2014-15 to 2019-20.

Q.24) Arrange the following locations from **North to South**:

- 1. Depsang plains
- 2. Karakoram Pass
- 2. Pangong Tso

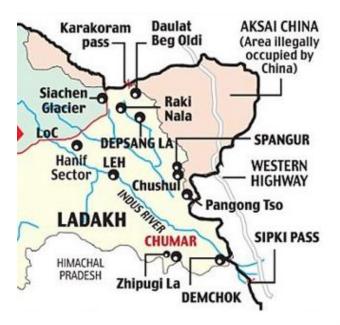
Select the correct answer using the code given below:

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

Correct answer: B

Explanation: The **Depsang Plains** come under India's Sub Sector North (SSN) and as elsewhere, the LAC here is disputed. The importance of the Depsang Plains lies in its geographical location.

To the north of Depsang is the over 18,000 feet **Karakoram Pass**. To its right is the Chinese-annexed Aksai Chin, across which runs the G219 highway that connects Tibet and Xinjiang provinces. The Lingzi Thang mountain range divides the Depsang Plains from Aksai Chin.



Q.25) The Auditorium cave have been in news recently, where is it?

- a) Manipur
- b) Madhya Pradesh
- c) Uttarakhand
- d) Bihar

Correct answer: B

Explanation: Auditorium Cave is an ancient rock-cut cave situated in **Bhimbetka**, **Madhya Pradesh**. It is one of the prominent caves in the Bhimbetka Rock Shelters Complex. The whole cave gallery resembling a 'cathedral-like' atmosphere, with its **Gothic arches and soaring spaces**.

Researchers have discovered three fossils of the earliest known living animal — the 550-million-year-old 'Dickinsonia' — at Bhimbetka Rock Shelters, which can be seen right at the beginning of the 'Auditorium Cave'.

Q.26) Consider the following statements:

- 1. India has nine coastal states.
- 2. India's has world's third largest Exclusive Economic Zone.

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. With a coastline of nearly 7.5 thousand kilometers, India has a unique maritime position. Indian coastline touches nine states-- **Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, West Bengal**; and the nation's geography includes 1,382 islands. There are nearly 199 ports, including 12 major ports that handle approximately 1,400 million tons of cargo each year.

Statement 2 is incorrect. An **exclusive economic zone (EEZ)** is a region in which a has special rights in terms of marine resource exploration and use. These regions are adjacent and beyond a country's territorial waters and do not extend beyond 200 nautical miles (nmi) from a nation's coast.

India's Exclusive Economic Zone of over 2 million square kilometers is 18th largest in the world. Due to its numerous overseas departments and territories scattered all over the oceans, **France** has the largest exclusive economic zone in the world. It is followed by **USA**, **Australia**, **Russia and UK**.

The Ministry of Earth Sciences (MoES) has rolled out the Draft Blue Economy policy for India in the public domain inviting suggestions and inputs.

Q.27) Which of the following bridge(s) is/are on mainstream of the River Brahmaputra?

- 1. Bogibeel Bridge
- 2. Saraighat Bridge
- 3. Dhola-Sadiya Bridge

Select the correct answer using the code given below:

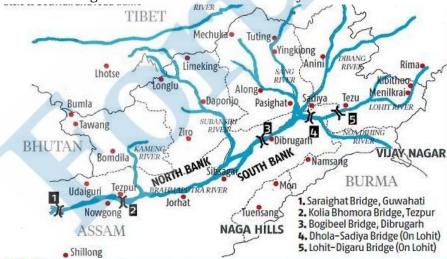
- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

Correct answer: A

Explanation: Option 1 is correct. **Bogibeel bridge** is a combined road and rail bridge over the Brahmaputra River in Assam between Dhemaji district and Dibrugarh district.

Option 2 is correct. The first rail-cum-road bridge over the Brahmaputra, **Saraighat Bridge** was opened to public in 1962. Adjacent New Saraighat Bridge is a road only bridge.

Option 3 is incorrect. The **Dhola-Sadiya Bridge** (Bhupen Hazarika Setu), connecting Assam and Arunachal Pradesh spans the **Lohit River**, a major tributary of the Brahmaputra River, from the village of Dhola in the south to Sadiya to the north.



Q.28) Which of the following Iron ore mines is/are correctly matched to the respective State(s)?

- 1. Kiriburu
- Jharkhand
- 2. Jiling-Langlota
- Odisha



3. Guali - Chhattisgarh

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: Kiriburu Iron ore Mines (KIOM) is one of the captive Iron ore Mines of Steel Authority of India Limited (SAIL) in **Jharkhand**.

Union Minister for Mines and Chief Minister of Odisha recently inaugurated the production in two new iron ore mines of **Odisha** namely **Jiling-Langlota Iron ore Block and Guali Iron ore Block**.

Both the mines have production capacity of 15 lakh tonnes per month and they possess approx. 275 million tonnes of consolidated iron ore reserves. These blocks were recently reserved for the Odisha Mining Corporation (OMC), a state PSU, within a short time of 25 days, after a request was made by State Government to the Central Government, in order to ease the shortage of iron ore in the state of Odisha.

Q.29) The Nanda Devi Biosphere Reserve (NDBR) is in which of the following State?

- a) Himachal Pradesh
- b) Uttarakhand
- c) Assam
- d) Uttar Pradesh

Correct answer: B

Explanation: Nanda Devi Biosphere Reserve, located in the Himalayan Mountains in the northern part of the country, includes as core areas the Nanda Devi and Valley of Flowers National Parks, which are one World Heritage site.

Nanda Devi National Park has remained more or less intact because of its inaccessibility. The Valley of Flowers National Park is renowned for its meadows of endemic alpine flowers and outstanding natural beauty. Together they encompass a unique transition zone between the mountain ranges of the Zanskar and Great Himalaya.

The important mammals' species in the region are Snow leopard (Panthera uncia), Asiatic black bear (Ursus thibetanus), Himalayan brown bear (Ursus arctos), Himalayan musk deer (Moschus chrysogaster), Bharal (Pseudois nayaur) and Himalayan tahr (Hemitragus jemlahicus).

Q.30) The **Carbon Credits** can be accumulated by which of the following means?

- 1. Reducing emissions
- 2. Carbon capture and planting forests
- 3. Avoiding emissions by refraining from cutting down rainforests

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 UNFCCC developed a carbon credit proposal to reduce worldwide carbon emissions in a 1997 agreement known as the **Kyoto Protocol**.

A **carbon credit** is a generic term for any tradable certificate or permit representing the right to emit one tonne of carbon dioxide or the equivalent amount of a different greenhouse gas.

If one party can't stop emitting CO2, it can ask another to emit less so that, even as the first carries on producing CO2, the total amount of carbon in the atmosphere is reduced. There are three basic types of carbon credit:

- --Those from reduced emissions (typically energy efficiency measures)
- --Removed emissions (carbon capture and planting forests)
- --And avoided emissions (for example refraining from cutting down rainforests).
- # The Rishiganga project was among the several hydropower projects that had applied to secure carbon credits under the United Nations Framework Convention on Climate Change in early 2012.

Q.31) Which of the following glacier(s) is/are correctly matched to the respective State?

- 1. Kolhai Glacier Sikkim
- 2. Chhota Shigri Glacier Himachal Pradesh
- 3. Dokriani Glacier Uttarakhand

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: Option 1 is incorrectly matched. **Kolhai glacier** is situated in the Lidder Valley in **Jammu & Kashmir**. The origin of the glacier is below the cirques on the north flank of Kolahoi Peak. It is the main source of Lidder River and its waters become the tributaries of the Jhelum River.

Option 2 is correctly matched. The **Chhota Shigri Glacier** lies on the northern slope of the main ridge of the Pir Panjal Range in the east of the Rohtang Pass in **Himachal Pradesh**. The high, steep ridges and mountain terrain provide an ideal condition for the development of this glacier.

Option 3 is correctly matched. The **Dokriani Glacier** is a valley type glacier located in Garhwal region (**Uttarakhand**) of Himalayas. It follows a narrow valley and meets Bhagirathi River at Bhukki.

Q.32) Which of the following is/are correctly matched?

Jezero Crater - Mars
 Gale Crater - Venus
 Aitken Crater - Moon

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: C

Explanation: Option 1 is correctly matched. **Jezero Crater** is 28 miles (45 kilometers) wide, and is located on the western edge of a flat plain called Isidis Planitia, which lies just north of the Martian equator. It is the landing site of Perseverance Rover.

Option 2 is incorrectly matched. **Gale Crater** formed when a meteor hit Mars in its early history, about 3.5 to 3.8 billion years ago. In 2012, the Curiosity rover of NASA landed in the Gale crater.

Option 3 is correctly matched. **Aitken crater** is about 135 km in diameter. It is located on the northern rim of the South Pole-Aitken Basin, the largest preserved basin on the moon.

The Perseverance Rover's landing site is about 2,300 miles (3,700 kilometers) from Curiosity's landing site in Gale Crater.

Q.33) The Chitaura Lake is in which of the following State/UT?

- a) Uttar Pradesh
- b) Odisha
- c) Andhra Pradesh
- d) Uttarakhand

Correct answer: A

Explanation: Chitaura lake is a Hindu pilgrimage site, centred around a pond in **Bahraich district in Uttar Pradesh**. According to local folklore, the area beside the lake is the site of an 11th-century battle between the Hindu king Suhaldev and the Ghazi Saiyyad Salar Masud.

It is also called Ashtwarka jheel, in the name of Ashtwarka Muni, the Guru of Maharaja Janak who used to live here in his ashram.

Q.34) Which of the following place receives highest annual rainfall?

- a) Mawsynram, India
- b) Tutunendo, Colombia
- c) Debundscha, Cameroon
- d) Big Bog, Hawaii

Correct answer: A

Explanation: The average annual rainfall in **Mawsynram, Meghalaya** which is recognised as the world's wettest by the Guinness Book of Records, is 11,871mm – more than 10 times the Indian national average of 1,083mm.

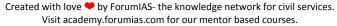
- # The other three options are among the highest rainfall areas of the world.
- # A recent study that looked at the rainfall pattern in the past 119 years found a decreasing trend at Cherrapunji and nearby areas. The team analysed daily rain gauge measurements during 1901–2019, and noted that the changes in the Indian Ocean temperature have a huge effect on the rainfall in the region.

Q.35) Consider the following statements:

- 1. India shares its longest land border with China.
- 2. China shares its longest land border with 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: D

Explanation: Statement 1 is incorrect. **India** shares longest border with **Bangladesh** followed by China.

India has 15,106.7 Km of land border: Bangladesh 4096.7 km, China 3488 km, Pakistan 3323 km, Nepal 1751 km, Myanmar 1643 km, Bhutan 699 km, Afghanistan 106 km.

Statement 2 is incorrect. China shares longest border with Mongolia followed by Russia.

China's border countries (14): Afghanistan 91 km, Bhutan 477 km, Burma 2129 km, India 3488 km, Kazakhstan 1765 km, North Korea 1352 km, Kyrgyzstan 1063 km, Laos 475 km, Mongolia 4630 km, Nepal 1389 km, Pakistan 438 km, Russia (northeast) 4133 km and Russia (northwest) 46 km, Tajikistan 477 km, Vietnam 1297 km. Several of these border lengths are disputed, such as China's border with Pakistan via PoK.

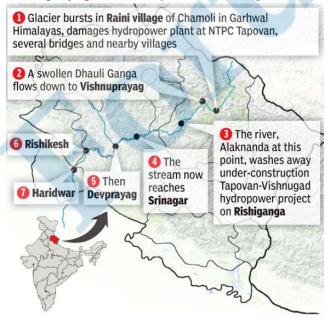
Q.36) Dhauliganga River is a tributary of which of the following river?

- a) Hooghly
- b) Alaknanda
- c) Yamuna
- d) Brahmaputra

Correct answer: B

Explanation: Dhauliganga rises in the vicinity of the Niti Pass in the border regions between Garhwal and southwestern Tibet. It flows southwards until it meets the Rishiganga on its left bank at Rini, in the vicinity of Tapovan in Chamoli district and flows westwards until it meets the **Alaknanda** at Vishnuprayag.

Various tributaries joining River Alaknanda are: Dhauliganga river at Vishnuprayag, Nandakini River at Nandaprayag, Pindar River at Karnaprayag, Mandakini River at Rudraprayag, and finally it meets Bhagirathi River at Devprayag.



The Union Home Secretary reviewed the status of the artificial lake which has formed in the wake of the avalanche incident in the upper catchment of the Rishiganga River in Chamoli District of Uttarakhand.

Q.37) The Devsthal Optical Telescope Facility is located in which of the following State/UT?

- a) Uttarakhand
- b) Himachal Pradesh
- c) Ladakh
- d) Rajasthan

Correct answer: A

Explanation: The 3.6m Optical Telescope Facility Devasthal is in Nainital, **Uttarakhand**. The world-class 3.6-meter optical telescope set up at the place has assumed global importance for observing a number of time-critical cosmic explosive events such as Gamma Ray Bursts and Supernovae. It is the Asia's largest fully steerable optical telescope.

It was set up in year 2016 by **Aryabhatta Research Institute of Observational Sciences** (**ARIES**), an autonomous research institute of DST with support from Belgian government and established India's role as a global player in astronomy research and is facilitating strong future collaborations with national, international institutions and industries.

Q.38) Consider the following statements regarding the Bare-Bellied Hedgehog:

- 1. It is endemic to dry scrubby areas in south-eastern 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: A

Explanation: Statement 1 is correct. The **Bare-bellied hedgehog (Paraechinus nudiventris)**, also known as the Madras hedgehog, is a species of hedgehog that is endemic to dry scrubby areas in south-eastern India.

Statement 2 is incorrect. It is listed as Least Concern under the IUCN Red List of Threatened Species. It is not listed in the Schedule I of the Wildlife Protection Act, 1972.

Q.39) The National Waterway -1 passes through which of the following States?

- 1. Assam
- 2. West Bengal
- 3. Jharkhand

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 **National Waterway 1** of length 1620 km on Ganga-Bhagirathi-Hooghly River System (Haldia - Allahabad) passes through Uttar Pradesh, Bihar, Jharkhand & West Bengal.



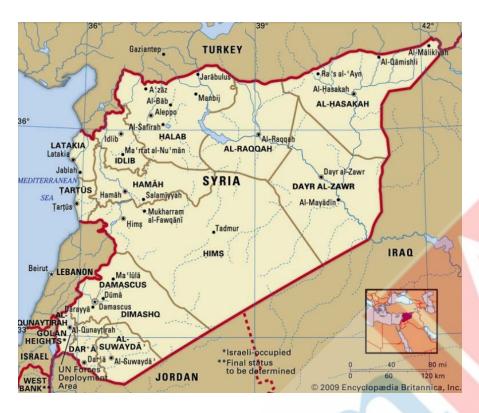
A Memorandum of Understanding is signed between IWAI and MOL (Asia Oceania) Pte. Ltd for transportation of LPG (Liquified Natural Gas) through barges on National Waterways-1 and National Waterways-2

Q.40) Which of the following country does not border Syria?

- a) Jordan
- b) Iran
- c) Turkey
- d) Israel

Correct answer: B

Explanation: Syria is bounded by **Turkey** to the north, by **Iraq** to the east and southeast, by **Jordan** to the south, and by **Lebanon** and **Israel** to the southwest.



Q.41) Which of the following statements is/are incorrect?

- 1. The Tropic of Cancer crosses through the Sahara Desert.
- 2. South Sudan forms the southern part of the Sahara Desert. 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: The **Sahara Desert** has been hit by an icy blast with temperatures dipping below freezing recently. Aïn Séfra in Algeria - known as "The Gateway to the Desert" - is around 1,000 metres above sea level and surrounded by the Atlas Mountains, also experienced snowfall. Statement 1 is correct. There are 16 countries, 3 continents and 6 water bodies through which the Tropic of Cancer passes including Egypt, Libya, Niger, Algeria, Mali, Western Sahara, Mauritania.

Statement 2 is incorrect. Sahara Desert does not cover the are under South Sudan.



Q.42) The Karlapat Wildlife Sanctuary is in which of the following State?

- a) Odisha
- b) Jharkhand
- c) Chhattisgarh
- d) West Bengal

Correct answer: A

Explanation: The **Karlapat sanctuary** is located in Kalahandi district, **Odisha** covering a dense patch of lush green dry deciduous forest. The sanctuary is rich in wildlife such as leopard, gaur, sambar, nilgai, barking deer, mouse deer, soft claws ottawa, a wide variety of birds and reptiles.

Recently six elephants died of Haemorrhagic Septicaemia (HS) in Karlapat Wildlife Sanctuary.



SCIENCE & TECHNOLOGY

- **Q.1)** Which of the following statements is/are correct regarding the process of **Biomethanation**:
- 1. The organic material is microbiologically converted into biogas.
- 2. It takes place in anaerobic conditions.

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.

Biomethanation is a process by which organic material is **microbiologically converted under anaerobic conditions to biogas**. Three main physiological groups of microorganisms are involved: fermenting bacteria, organic acid oxidizing bacteria, and methanogenic archaea. Microorganisms degrade organic matter via cascades of biochemical conversions to methane and carbon dioxide.

A wide variety of process applications for biomethanation of wastewaters, slurries, and solid waste have been developed. They utilize different reactor types (fully mixed, plug-flow, biofilm, UASB, etc.) and process conditions (retention times, loading rates, temperatures, etc.) in order to maximize the energy output from the waste.

Prime Minister during his Mann Ki Baat address made a mention of the garbage-to-power plant being commissioned inside the Dr. B.R. Ambedkar Agriculture Market in Bowenpally.

Q.2) Consider the following statements regarding the **Polio vaccination**:

- 1. Oral polio vaccine (OPV) consists of a mixture of inactivated poliovirus strains of each of the three serotypes.
- 2. Inactivated polio vaccine (IPV) is an injectable vaccine that can be administered in combination with other 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: B

Explanation: Poliomyelitis is a crippling disease that results from infection with any one of the three related poliovirus types (referred to as types P1, P2, and P3), members of the enterovirus (picornavirus) family. Poliovirus is transmitted from one person to another by oral contact with secretions or faecal material from an infected person.

Statement 1 is incorrect. **Oral polio vaccine (OPV)** consists of a mixture of live attenuated poliovirus strains of each of the three serotypes, selected by their ability to mimic the immune response following infection with wild polioviruses, but with a significantly reduced incidence of spreading to the central nervous system.

Statement 2 is correct. **Inactivated polio vaccine (IPV)** is produced from wild-type poliovirus strains of each serotype that have been inactivated (killed) with formalin. As an injectable vaccine, it can be administered alone or in combination with other vaccines (e.g., diphtheria, tetanus, pertussis, hepatitis B, and haemophilus influenza).

President of India recently launched the Pulse Polio Programme for 2021. Government of India has also introduced the injectable Inactivated Polio Vaccine into its routine immunization program.

Q.3) Consider the following statements regarding the **PNEUMOSIL**:

- 1. It is India's first indigenously developed pneumococcal vaccine.
- 2. It is not suitable for children and develops immune response only above 18-year-old adults. 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. **PNEUMOSIL** is India's first indigenously developed pneumococcal vaccine developed by the **Serum Institute of India** Private Limited (SIIPL) in collaboration with partners like the Bill and Melinda Gates Foundation.

Pneumosil has been licensed by Drugs Controller General (India) in July 2020 after approval from Subject Expert Committee (SEC).

Statement 2 is incorrect. PNEUMOSIL will primarily help to fight against pneumococcal pneumonia amongst **children** and will be available at an affordable competitive price with an advantage of presence of serotypes 6A and 19A in the vaccine.

The unique feature of this WHO pre-qualified PCV is its composition which is specially tailored to the prevailing serotype prevalence of S. pneumoniae in India and other regions of the world.

Q.4) Which of the following statements is/are correct regarding the Metro Neo?

- 1. It runs with rubber tyred electric coaches powered by overhead traction system.
- 2. It requires lesser capital investments, operation and maintenance cost than the conventional metro rail system.

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 metro rail system being developed at present is of high capacity which is required for bigger cities with very high ridership and Peak Hour Peak Direction Traffic (PHPDT).

The Ministry of Housing & Uran Affairs released specifications for a system named **Metro Neo** in November 2020, which will be at much **lesser cost, rail guided, rubber tyred electric coaches powered by overhead traction system** running on a road slab (elevated/at-grade).

It can have a Peak Hour Peak Direction Traffic upto 8,000 and 25% of cost of conventional metro system.

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'Metroneo' would also act as feeder system to high-capacity Metro. In addition to less capital cost, the operation and maintenance cost of Metroneo would also be less making the system more viable.

It is being adopted for the first time in the country in Nashik, Maharasthra.

Q.5) Consider the following statements:

- 1. The COVAX Facility is the global pooled procurement mechanism for COVID-19 vaccines.
- 2. The COVID-19 vaccine CoronaVac developed by Sinovac is an RNA based 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. The **COVAX Facility** is the global pooled procurement mechanism for COVID-19 vaccines through which COVAX will ensure fair and equitable access to vaccines for all 190 participating economies.

COVAX, the vaccines pillar of the Access to COVID-19 Tools (ACT) Accelerator, is co-led by CEPI, Gavi and WHO. The goal of COVAX is to deliver two billion doses of safe, effective vaccines that have passed regulatory approval and/or WHO prequalification by the end of 2021.

Statement 2 is incorrect. The Beijing-based biopharmaceutical company Sinovac is behind the **CoronaVac**, an inactivated vaccine. It works by using killed viral particles to expose the body's immune system to the virus without risking a serious disease response.

The Moderna and Pfizer vaccines are mRNA vaccines.

Q.6) Consider the following statements regarding the **Gaganyaan mission**:

- 1. It aims to demonstrate human space flight capability to Low Earth Orbit (LEO).
- 2. ISRO's PSLV has been chosen as the launch vehicle to be used in the Gaganyaan Mission. 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 **Gaganyaan project** has the objective of demonstrating human space flight capability to **Low Earth Orbit (LEO) with three crew members** in orbit and safely recovering them after the mission.

Statement 2 is incorrect. ISRO's heavy lift launcher, **GSLV MkIII** is identified for the Gaganyaan Mission and the process for human rating of GSLV MkIII is in progress. The high thrust solid propellant strap-on boosters S200 play an important role in the Human Rated GSLV MkIII. In order to human rate the booster, many new design features have been introduced in the hardware.

Q.7) Consider the following statements regarding **Lithium**:

- 1. It does not occur as free metal in nature.
- 2. Lithium metal is made into alloys with aluminium and magnesium to improve their strength and make them lighter.
- 3. Lithium carbonate is used in drugs to treat manic depression.

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. **Lithium** does not occur as the metal in nature, but is found combined in small amounts in nearly all igneous rocks and in the waters of many mineral springs. Spodumene, petalite, lepidolite, and amblygonite are the more important minerals containing lithium.

Statement 2 is correct. Lithium metal is made into **alloys with aluminium and magnesium**, improving their strength and making them lighter. A magnesium-lithium alloy is used for armour plating. Aluminium-lithium alloys are used in aircraft, bicycle frames and high-speed trains.

Statement 3 is correct. **Lithium carbonate** is used in drugs to treat manic-depressive disorder (bipolar disorder). It works to stabilize the mood and reduce extremes in behavior by restoring the balance of certain natural substances (neurotransmitters) in the brain.

Preliminary survey shows deposits of Lithium in Mandya district of Karnataka.

Q.8) Consider the following statements regarding the **Orobanche**:

- 1. These are aggressive root parasitic weeds.
- 2. It attacks food crops such as legumes and vegetables.

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.

Orobanche are aggressive root parasitic weeds, which attack strategic food crops, such as legumes and vegetables, and threaten the livelihood of many nations. The continuous spread of Orobanche limits the choice of rotational crops and often force farmers to give up growing the most profitable host crops.

Heavy Orobanche infestation does not only lead to a **complete crop failure**, but make field soils Orobanche-sick over a long period of time, preventing the reasonable production of legumes and vegetables in the infested fields for many years to come.

A field workshop on "Techno-management options to control Orobanche in mustard-a pilot study" was jointly organized by Institute of Pesticide Formulation Technology (IPFT) and the ICAR-Directorate of Rapeseed-Mustard Research (ICAR-DRMR at village Gurda Nandi in the Bharatpur district.

Q.9) Consider the following statements regarding the Aero India Show:

- 1. It is an annual exhibition organised by the Ministry of Defence.
- 2. An Indian company cannot exhibit products developed outside India at Aero 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. Aero India is a **biennial air show** and aviation exhibition held in Bengaluru, India by the Defence Exhibition Organisation, Ministry of Defence.

Statement 2 is correct. Foreign exhibitors are allowed but an Indian company cannot exhibit products developed outside India.

The 13th edition of Aero India is being held currently in Bengaluru. Though the total number of exhibitors has increased to 601 against 403 in the last edition, the number of foreign exhibitors is down from 165 to 78 this year. The number of foreign delegations is also down from 44 to 14. There are 248 virtual exhibitors at the event.

Q.10) What are common 'One Health' issues?

- 1. Zoonotic diseases
- 2. Antimicrobial resistance
- 3. Environmental contamination

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: D

Explanation: Finance Minister in Budget 2021-22 declared the Government's decision of setting up of a **national institution for One Health**, a Regional Research Platform for WHO South East Asia Region, 9 Bio-Safety Level III laboratories and 4 regional National Institutes for Virology.

One Health is an approach that recognizes that the health of people is closely connected to the health of animals and our shared environment.

One Health issues include zoonotic diseases, antimicrobial resistance, food safety and food security, vector-borne diseases, environmental contamination, and other health threats shared by people, animals, and the environment.

Even the fields of chronic disease, mental health, injury, occupational health, and noncommunicable diseases can benefit from a One Health approach involving collaboration across disciplines and sectors.

Q.11) Consider the following statements regarding the Square Kilometre Array (SKA) project:

- 1. It is an international collaborative effort to build the world's largest radio telescope with over a square kilometre of collecting area.
- 2. Hanle in Ladakh is one of the site hosting part of the array.

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 **Square Kilometre Array (SKA)** project is an international effort to build the world's largest radio telescope, with eventually over a square kilometre (one million square metres) of collecting area.

The SKA telescope will be powerful enough to detect very faint radio signals emitted by cosmic sources billions of light years away from Earth, those signals emitted in the first billion years of the Universe (more than 13 billion years ago) when the first galaxies and stars started forming. Statement 2 is incorrect. **South Africa's Karoo region and Western Australia's Murchison Shire** were chosen as co-hosting locations for many scientific and technical reasons, from the atmospherics above the sites, through to the radio quietness, which comes from being some of the most remote locations on Earth.

Organisations from 14 countries are members of the SKA Organisation – Australia, Canada, China, France, Germany, India, Italy, New Zealand, Spain, South Africa, Sweden, Switzerland, The Netherlands and the United Kingdom.

Q.12) Consider the following statements regarding the Seroprevalence Surveys:

- 1. The percentage of individuals in a population who have antibodies to an infectious agent is called seroprevalence.
- 2. Higher the seroprevalence, higher are the chances of a population achieving Herd Immunity. 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 percentage of individuals in a population who have antibodies to an infectious agent is called **seroprevalence**. A seroprevalence survey uses antibody tests to estimate the percentage of people in a population who have antibodies against a particular infection.

When most of a population is immune to an infectious disease, this provides indirect protection—or **herd immunity** (also called herd protection)—to those who are not immune to the disease.

For example, if 80% of a population is immune to a virus, four out of every five people who encounter someone with the disease won't get sick (and won't spread the disease any further). In this way, the spread of infectious diseases is kept under control.

Q.13) Which of the following is/are potential uses of the Seaweeds?

- 1. Anti-inflammatory agent
- 2. Binding agent
- 3. Nutritious food

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: "**Seaweed**" is the common name for countless species of marine plants and algae that grow in the ocean as well as in rivers, lakes, and other water bodies.

Seaweed is full of **vitamins**, minerals, and fiber, and can be tasty. For at least 1,500 years, the Japanese have enrobed a mixture of raw fish, sticky rice, and other ingredients in a seaweed called nori.

Many seaweeds contain **anti-inflammatory and anti-microbial** agents. Their known medicinal effects have been legion for thousands of years; the ancient Romans used them to treat wounds, burns, and rashes.

These versatile marine plants and algae have also contributed to economic growth. Among their many uses in manufacturing, they are **effective binding agents (emulsifiers)** in such commercial goods as toothpaste and fruit jelly, and popular softeners (emollients) in organic cosmetics and skin-care products.

In Budget 2021-22, the Finance Minister has proposed to set up a multi-purpose seaweed park in Tamil Nadu.

Q.14) Consider the following statements regarding the Software Defined Radio (SDR):

- 1. It is a radio communication system which uses software for the modulation and demodulation of radio signals.
- 2. SDR-Tactical has been developed by the Defence Research & Development Organisation (DRDO) for use of defence forces.

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. **Software Defined Radio** is Radio in which some or all of the physical layer functions are Software Defined. In other words, the software is used to determine the specification of the radio and what it does. If the software within the radio is changed, its performance and function may change.

SDR is a radio communication system which uses software for the modulation and demodulation of radio signals. An SDR performs significant amounts of signal processing in a general-purpose computer, or a reconfigurable piece of digital electronics.

Statement 2 is correct. The SDR-Tactical, jointly designed and developed by Defence Electronics Applications Laboratory (DEAL) of **Defence Research & Development**

Organisation (DRDO) through a consortium of domestic agencies and industry, will bring strategic depth to the Armed Forces.

The SDR-Tac is a four Channel Multi-mode, Multi Band, 19" Rack mountable, ship borne Software Defined Radio system. It is intended to serve ship-to-ship, ship-to-shore and ship-to-air voice and data communication for network centric operations.

It supports simultaneous operation of all the four channels covering V/UHF and L Band. This SDR system houses multiple types of waveforms for narrow band and wide band applications.

Q.15) Consider the following statements regarding **Ethanol**:

- 1. Ethanol is a clear, colorless alcohol made from a variety of biomass materials
- 2. Ethanol has a lower octane number than petrol.

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. **Ethanol** is a clear, colorless alcohol made from a variety of biomass materials called feedstocks (the raw materials used to make a product). Fuel ethanol feedstocks include grains and crops with high starch and sugar content such as corn, sorghum, barley, sugar cane, and sugar beets.

Statement 2 is incorrect. **Octane number**, measure of the ability of a fuel to resist knocking when ignited in a mixture with air in the cylinder of an internal-combustion engine. Ethanol has a higher-octane number than gasoline, providing premium blending properties.

Government has notified scheme for extending financial assistance to project proponents for enhancement of ethanol distillation capacity or to set up distilleries for producing 1st Generation (1G) ethanol from feed stocks such as cereals (rice, wheat, barley, corn & sorghum), sugarcane, sugar beet etc.

Q.16) Consider the following statements regarding **Trans fats**:

- 1. It does not occur naturally and in produced artificially.
- 2. Consumption of trans fats may increase the risk of heart 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. **Trans fats**, or trans-fatty acids, are a form of unsaturated fat.

They are found in two forms — natural, which occur in some animal products and aren't considered harmful, and artificial, which are hydrogenated vegetable oils and have serious health consequences.

Natural, or ruminant, trans fats occur in the meat and dairy from ruminant animals, such as cattle, sheep, and goats. They form naturally when bacteria in these animals' stomachs digest grass.

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Statement 2 is correct. People consuming trans fats instead of other fats or carbs experienced a significant increase in LDL (bad) cholesterol without a corresponding rise in HDL (good) cholesterol and may increase risk of heart disease.

In December 2020, the FSSAI had capped TFAs in oils and fats to 3% by 2021, and 2% by 2022.

Q.17) Which of the following country(s) have successfully put a spacecraft in Mars's orbit?

- 1. Japan
- 2. Israel
- 3. United Arab Emirates

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: C

Explanation: United Arab Emirates has put a probe called Hope in orbit around the planet, making it only the fifth spacefaring entity to do so after the US, the Soviet Union, Europe and India.

The satellite carries three instruments that will observe, among other targets, how neutral atoms of hydrogen and oxygen - remnants from Mars' once abundant water - leak into space. On Wednesday, it will be the turn of China with its Tianwen-1 orbiter to reach Mars. Next week, on Thursday 18 February, the Perseverance robot of USA is set to arrive on Mars.

Q.18) Consider the following statements regarding the distributed denial-of-service (DDoS) attack:

- 1. It target websites and online services.
- 2. It overwhelm the targets with more traffic than the server or network can accommodate. 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.

Distributed denial-of-service attacks target websites and online services. It disrupts the normal traffic of a targeted server, service or network by overwhelming the target or its surrounding infrastructure with a flood of Internet traffic.

DDoS attacks achieve effectiveness by utilizing multiple compromised computer systems as sources of attack traffic. Exploited machines can include computers and other networked resources such as IoT devices.

Q.19) Which of the following Mars mission(s) include a rover landing on Mars surface?

- 1. UAE's Hope Mission
- 2. China's Tianwen-1
- 3. NASA's Perseverance

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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: Option 1 is incorrect. The United Arab Emirates Mars Mission, **Hope** is an orbiter designed to spend one Martian year (two Earth years) around Mars.

Option 2 is correct. The **Tianwen-1**, China's Mars mission that recently entered the Mars's orbit, comprises an orbiter and a rover. The rover will spend next few months in orbit before landing on Mars surface.

Option 3 is correct. Mars 2020 is a Mars rover mission by NASA's Mars Exploration Program that includes the **Perseverance rover** and the Ingenuity helicopter drone, which is set to achieve first powered flight on Mars. The rover will land on Mars surface on February 18, 2021.

Q.20) Consider the following statements regarding the Spinal muscular atrophy (SMA):

- 1. It is a genetic disease.
- 2. It deteriorates the neuromuscular functioning of the body by causing motor neurons loss and paralysis.

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: Spinal muscular atrophy (SMA) is a group of hereditary diseases that progressively destroys motor neurons—nerve cells in the brain stem and spinal cord that control essential skeletal muscle activity such as speaking, walking, breathing, and swallowing, leading to muscle weakness and atrophy.

It deteriorates the neuromuscular functioning of the body by causing motor neurons loss and associated muscle weakness and paralysis.

The disease is caused by a genetic defect in the survival motor neuron (SMN) gene, which encodes the SMN protein essential for the survival of motor neurons.

Q.21) The term 'Jökulhlaups' has been in news recently, what does it mean?

- a) Glacial outburst floods
- b) A situation of liquidity trap rendering monetary policy ineffective
- c) Radio frequency signals received from Proxima Centauri
- d) A plant species found in Karroo, arid to semiarid geographic region of South Africa

Correct answer: A

Explanation: Jökulhlaups is an Icelandic word that translates as 'glacier burst', it refers to **glacial outburst floods (GLOFS)**. They occur when a lake fed by glacial meltwater breaches its dam and drains catastrophically.

These floods occur very suddenly discharge large volumes of water, ice and debris from a glacial source. They can occur anywhere where water accumulates in a subglacial lake beneath a glacier. The flood is initiated following the failure of an ice or moraine dam.

GLOFs are characterized by extreme peak discharges, often several times in excess of the maximum discharges of hydrometeorological induced floods, with an exceptional erosion/transport potential; therefore, they can turn into flow-type movements, e.g. GLOF-induced debris flows.

Q.22) Consider the following statements:

- 1. Biogas is the mixture of gases produced by the breakdown of organic matter in the presence of oxygen.
- 2. Sustainable Alternative Towards Affordable Transportation (SATAT) scheme aims to promote Compressed Bio-Gas (CBG) as transport fuel.

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. **Bio-gas** is produced naturally through a process of anaerobic (absence of oxygen) decomposition from waste / bio-mass sources like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc.

It is primarily composed of methane gas, carbon dioxide, and trace amounts of nitrogen, hydrogen, and carbon monoxide. It occurs naturally in compost heaps, as swamp gas, and as a result of enteric fermentation in cattle and other ruminants.

Statement 2 is correct. After purification, it is compressed and called CBG, which has pure methane content of over 95%. Compressed Bio-Gas is exactly similar to the commercially available natural gas in its composition and energy potential.

The scheme of **Sustainable Alternative Towards Affordable Transportation (SATAT)** aims to promote Compressed Bio-Gas (CBG) as an alternative and green transport fuel.

Q.23) Zolgensma has been in news recently, what is it?

- a) A gene replacement therapy
- b) A rare disease of heart
- c) A protein found in amniotic fluid
- d) An autoimmune disease

Correct answer: A

Explanation: Zolgensma is a gene replacement therapy indicated for the treatment of **spinal muscular atrophy (SMA)** in paediatric patients.

Spinal muscular atrophy is a rare genetic disease that deteriorates the neuromuscular functioning of the body by causing motor neurons loss and associated muscle weakness and paralysis.

The disease is caused by a genetic defect in the survival motor neuron (SMN) gene, which encodes the SMN protein essential for the survival of motor neurons.

The Government of India has decided to waive off some GST amount against the import of gene therapy Zolgensma. This therapy is required to treat a child who is suffering from Spinal Muscular Atrophy.

Q.24) The fossils of which of the following organism have been found at Bhimbetka recently?

- a) Kimberella
- b) Dickinsonia
- c) Spriggina
- d) Charnia

Correct answer: B

Explanation: Researchers have discovered three fossils of the earliest known living animal—the 550-million-year-old 'Dickinsonia' — on the roof of the Bhimbetka Rock Shelters.

Dickinsonia is an extinct genus of basal animal that lived during the late Ediacaran period. It is one of the **Ediacaran** critters (first discovered in Ediacara hills in the Flinders ranges of South Australia), more than 50 types of Ediacarans are now known, and they have been found on every continent, save for Antarctica.

Bhimbetka Rock Shelters are a UNESCO World Heritage Site housing hundreds of pre-historic paintings.

Q.25) What is a Blazar?

- a) An active galactic nucleus
- b) A neutron star with an extremely powerful magnetic field
- c) An interstellar cloud of dust
- d) A region of spacetime with zero gravity

Correct answer: A

Explanation: A blazar is an active galactic nucleus (AGN) that produces a high-energy jet viewed face-on from Earth. Like other forms of active galactic nuclei (AGN), blazars are the most luminous and energetic objects in the known universe.

The central **super-massive black-hole (SMBH)** that drives an AGN are the nucleation seeds that stimulates the formation of their host galaxies, while the SMBH itself grows in the process. # *Indian Astronomers have reported one of the strongest flares from a feeding supermassive black hole or blazar called BL Lacertae.*

Q.26) Consider the following statements regarding the Science and Engineering Research Board (SERB):

- 1. It is a statutory body.
- 2. Prime Minister is the ex-officio chairperson of SERB.
- 3. The Board offers JC Bose National Fellowship to scientists and engineers for their outstanding performance and contributions.

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: C

Explanation: Statement 1 is correct. The **Science and Engineering Research Board (SERB)** is a statutory body established through an Act of Parliament. Supporting basic research in emerging areas of Science & Engineering are the primary and distinctive mandate of the Board. Statement 2 is incorrect. Secretary to the Government of India in Department of Science & Technology is the ex-officio chairperson of the SERB.

Statement 3 is correct. SERB supports research in frontier areas of Science and Engineering. The Board offers **JC Bose National Fellowship** to scientists and engineers for their outstanding performance and contributions and **RAMANUJAN Fellowship** for brilliant scientists and engineers from all over the world to take up scientific research positions in India, especially those scientists who want to return to India from abroad.

Four young women fellows of National Science Academies have been awarded the SERB Women Excellence Award for excelling in science and engineering on the International Day of Women and Girls in Science 2021.

Q.27) Consider the following statements regarding the Leatherback turtles:

- 1. They are the largest sea turtle species.
- 2 These are endemic to Indian Ocean.
- 3 They are listed Vulnerable species under 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: C

Explanation: Statement 1 is correct. The **leatherback** is the largest turtle in the world, and has a primarily black rubbery skin with pinkish-white coloring on its underside. They are the only species of sea turtle that lack scales. Their shell (carapace) consists of small, interlocking dermal bones beneath the skin that overlie a supportive layer of connective tissue and fat and the deeper skeleton.

Statement 2 is incorrect. Leatherbacks occur in the **Atlantic, Pacific, and Indian Oceans**. In India leatherbacks come to beaches of Kerala and Andaman and Nicobar Islands for nesting. Statement 3 is correct. Leatherback (Dermochelys coriacea) is listed as Vulnerable species with decreasing trend under the IUCN Red List of Threatened Species.

Q.28) Which of the following is/are the uses of the Carbon Black?

- 1. Rubber reinforcement
- 2. Colors and pigments for plastics
- 3. Electric equipment and conductive components

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: Carbon black (CB) is derived via thermal decomposition of heavy petroleum products.

- -- Carbon black is added to the rubber used in tire treads, to high-pressure hoses, and has other demanding applications, as well as added to plastics as material reinforcement.
- -- Since carbon black has excellent conductive properties, it is used as a component for magnetic tapes and semiconductors.
- -- Compared with other colorants, carbon black has a high coloring power. it is used as ink for printing newspapers, as ink-jet toner, and other such uses. It is also suitable as a pigment for heat-molded plastics, car fenders, coating for electric wires and other products.

Q.29) Consider the following statements regarding the Buruli ulcer:

- 1. It is a viral disease.
- 2. It can destroy the destroy skin or soft tissue on body.

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. Buruli ulcer is a disease caused by the **bacterium** Mycobacterium ulcerans.

Statement 2 is correct. It mainly affects the skin but can also affect the bone. Cases are generally seen in the tropics, primarily in **West Africa and Australia**.

Infection often leads to ulcers on the arms or legs, which can also destroy skin or soft tissue. When not properly treated, the disease can cause irreversible deformity or long-term functional disability.

The Buruli ulcer is classified as a "neglected" disease by the World Health Organization, it has recently been reported in rising numbers in Australia.

Q.30) Hydrogen can be extracted/produced from which of the following methods?

- 1. Separation of Hydrogen from water molecules
- 2. Extraction of hydrogen from hydrocarbons
- 3. Break down of organic matter by microbes

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: Hydrogen is a clean fuel that, when consumed in a fuel cell, produces only water. Hydrogen is an energy carrier that can be used to store, move, and deliver energy produced from other sources. Hydrogen can be extracted from **fossil fuels and biomass, from water**, or from a mix of both.

-- Thermal processes for hydrogen production typically involve steam reforming, a high-temperature process in which steam reacts with a hydrocarbon fuel to produce hydrogen.

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- -- Water can be separated into oxygen and hydrogen through a process called electrolysis.
- -- In microbial biomass conversion, the microbes break down organic matter like biomass or wastewater to produce hydrogen, while in photobiological processes the microbes use sunlight as the energy source.

Q.31) Consider the following statements regarding the **Perseverance Rover**:

- 1. It has landed on the Jezero crater on Mars.
- 2. It will study Mars' habitability, seek signs of past microbial life.
- 3. The rover spent a year in Mars's orbit for suitable landing site.

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 and 2 are correct.

Mission Name: Mars 2020; Rover Name: Perseverance

Main Job: Seek signs of ancient life and collect samples of rock and regolith (broken rock and

soil) for possible return to Earth.

Launch: July 30, 2020; Landing: Feb. 18, 2021

Landing Site: Jezero Crater, Mars

Tech Demonstration: The Mars Helicopter is a technology demonstration, hitching a ride on the Perseverance rover.

Statement 3 is incorrect. Last week, two other spacecraft, Hope from the United Arab Emirates and Tianwen-1 from China, entered orbit around Mars. But NASA's spacecraft did not go into orbit first, instead it went along a **direct path to the surface of Mars**.

Q.32) Consider the following statements regarding the Particle Pollution (Particulate Matter):

- 1. It contains microscopic solids or liquid droplets.
- 2. Particulate matter is never directly emitted but is always formed when gaseous pollutants previously emitted to air turn into 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: A

Explanation: Statement 1 is correct. **Particle pollution** — also called particulate matter (PM) — is made up of particles (tiny pieces) of **solids or liquids** that are in the air. These particles may include Dust, Dirt, Soot, Smoke or Drops of liquid.

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 incorrect. Particle pollution can come from two different kinds of sources — **primary or secondary**. Primary sources cause particle pollution on their own. For example, wood stoves and forest fires are primary sources.

Secondary sources let off gases that can form particles. Power plants and coal fires are examples of secondary sources.

Q.33) Which of the following is/are Anti-Tank Guided Missiles?

- 1. Helina
- 2. Dhruvastra
- 3. Astra

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: HELINA (Helicopter based NAG) is a third-generation fire and forget class antitank guided missile (ATGM) system mounted on the Advanced Light Helicopter (ALH). The system has all weather day and night capability and can defeat battle tanks with conventional armour as well as explosive reactive armour.

HELINA Weapon Systems is being inducted into the Indian Army (IA). A variant of HELINA Weapon System called **DHRUVASTRA** is being inducted into the Indian Air Force (IAF).

Astra is India's first beyond-visual-range (BVR) air-to-air missile indigenously designed and developed by Defence Research and Development Organisation.

Q.34) Which of the following country(s) have successfully landed spacecraft on Mars surface?

- 1. Russia
- 2. United Kingdom
- 3. Japan

Select the correct answer using the code given below:

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

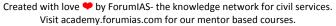
Correct answer: A

Explanation: There have been **nine successful US Mars landings**: Viking 1 and Viking 2 (both 1976), Pathfinder (1997), Spirit and Opportunity (both 2004), Phoenix (2008), Curiosity (2012), InSight (2018) and Perseverance (2021).

The only other country to land a spacecraft on Mars was the **Soviet Union in 1971 and 1973**. The USSR's Mars 3 lander made the first successful landing on the planet's surface. It transmitted data for 20 seconds before failing.

The United States, the Soviet Union, the European Space Agency, India, UAE and China have successfully sent spacecraft to enter Mars' orbit.

China's mission to Mars includes a lander which will descent from the Tianwen-1 orbiter soon.



Q.35) What is Placebo effect?

- a) Change in metabolism after migrating to a new place
- b) Effect of fake treatment on body
- c) Psychological effect of a drug on body
- d) Negative effects of gene therapy

Correct answer: B

Explanation: The **placebo effect** refers to the impact of a placebo on an individual. A placebo is a substance or treatment which is designed to have no therapeutic value.

The idea that the brain can convince body a fake treatment is the real thing — the so-called placebo effect — and thus stimulate healing has been around for millennia.

A placebo is used in clinical trials to test the effectiveness of treatments and is most often used in drug studies. For instance, people in one group get the tested drug, while the others receive a fake drug, or placebo, that they think is the real thing. This way, the researchers can measure if the drug works by comparing how both groups react.

Q.36) Which of the following is/are waterborne diseases?

- 1. Cholera
- 2. Hepatitis A
- 3. Typhoid

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: Waterborne diseases are caused by a variety of microorganisms, biotoxins, and toxic contaminants, which lead to devastating illnesses such as **cholera**, **schistosomiasis and other gastrointestinal problems**. Outbreaks of waterborne diseases often occur after a severe precipitation event (rainfall, snowfall).

Cholera is an intestinal infection caused by the bacteria Vibrio cholera acquired through infected food and water leading to massive watery diarrhoea, vomiting, cramps and dehydration.

Hepatitis A and E are viral diseases caused by the ingestion of contaminated food or water or through direct contact with an infected person. Both affect the liver and can cause mild to severe illness.

Typhoid and Paratyphoid are associated with poor sanitation and untreated water supplies. Typhoid is caused by the bacteria Salmonella Typhi while Paratyphoid is caused due to the infection of Salmonella Paratyphi A.

Telangana has joined a group of States that has ensured tap water connections to all schools and anganwadi centres (AWCs). Telangana was among States like Andhra Pradesh, Himachal Pradesh, Goa, Haryana and Tamil Nadu, which reported the provision of tap water in all schools and AWCs.

Q.37) Consider the following statements regarding Anti-microbial resistance:

- 1. It refers to human the body becoming resistant to treatment through antibiotics.
- 2. It occurs naturally over time, usually through genetic changes.

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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. **Antibiotic resistance** happens when germs like bacteria and fungi develop the ability to defeat the drugs designed to kill them.

Antibiotic resistance does not mean the body is becoming resistant to antibiotics; it is that bacteria have become resistant to the antibiotics designed to kill them.

Statement 2 is correct. **AMR occurs naturally over time**, usually through genetic changes. Antimicrobial resistant organisms are found in people, animals, food, plants and the environment (in water, soil and air). They can spread from person to person or between people and animals, including from food of animal origin.

The main drivers of antimicrobial resistance include the misuse and overuse of antimicrobials; lack of access to **clean water**, **sanitation and hygiene (WASH)** for both humans and animals; poor infection and disease prevention and control in health-care facilities and farms; poor access to quality, affordable medicines, vaccines and diagnostics; lack of awareness and knowledge; and lack of enforcement of legislation.

Q.38) Consider the following statements regarding the **Total Fertility Rate (TFR)**:

- 1. Total fertility levels of about 2.1 children per woman is considered as the Replacement-level fertility.
- 2. India's TFR has fallen below the Replacement-level fertility.

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: The **Total Fertility Rate (TFR)** is average number of live births a woman would have by age 50 if she were subject, throughout her life, to the age-specific fertility rates observed in a given year. Its calculation assumes that there is no mortality.

Statement 1 is correct. **Replacement-level fertility** is considered at total fertility levels of about 2.1 children per woman. This value represents the average number of children a woman would need to have to reproduce herself by bearing a daughter who survives to childbearing age. If replacement level fertility is sustained over a sufficiently long period, each generation will exactly replace itself in the absence of migration.

Statement 2 is incorrect. **India's TFR is still above Replacement level at 2.2**, however several states have achieved the replacement levels. Of the 17 states analysed in the NFHS-5 data, except for Bihar, Manipur and Meghalaya, all other states have a TFR of 2.1 or less, which implies that most states have attained replacement level fertility.

Union Minister for Health and Family Welfare while addressing the 'Population versus Planet' Conference noted that the country has witnessed significant decline in both fertility and mortality; the crude birth rate which was recorded at 40.8 per 1000 in 1951 has declined to 20.0

in 2018; Total Fertility Rate (TFR) has declined from 6.0 in 1951 to 2.2 in 2015-16; death rate in India has declined from 7 in 2012 to 6.2 in 2018.

Q.39) Which of the following is/are **Zoonotic Diseases**?

- 1. Ebola
- 2. Lyme disease
- 3. Salmonellosis

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: Zoonotic diseases (also known as zoonoses) are caused by germs that spread between animals and people. Zoonotic pathogens may be bacterial, viral or parasitic, or may involve unconventional agents and can spread to humans through direct contact or through food, water or the environment.

Several zoonotic diseases of most concern are: Zoonotic influenza, Salmonellosis, West Nile virus, Plague, Emerging coronaviruses (e.g., severe acute respiratory syndrome and Middle East respiratory syndrome, COVID-19), Ebola viral disease, Rabies, Brucellosis, Lyme disease etc.

Q.40) Consider the following statements regarding the **human liver**:

- 1. Bile helps carry away waste products from the liver.
- 2. All the blood leaving the stomach and intestines passes through the liver.

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 **liver** is located in the upper right-hand portion of the abdominal cavity, beneath the diaphragm, and on top of the stomach, right kidney, and intestines.

The liver holds about one pint (13%) of the body's blood supply at any given moment. The liver consists of 2 main lobes. Both are made up of 8 segments that consist of 1,000 lobules (small lobes).

The liver regulates most chemical levels in the blood and excretes a product called **bile**. This helps carry away waste products from the liver. All the blood leaving the stomach and intestines passes through the liver. The liver processes this blood and breaks down, balances, and creates the nutrients and also metabolizes drugs into forms that are easier to use for the rest of the body or that are nontoxic.

Union Minister of Health & Family Welfare, launched the operational guidelines for Integration of NAFLD (Non-Alcoholic Fatty Liver Disease) with NPCDCS (National Programme for Prevention & Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke) recently.

Q.41) Consider the following statements regarding the Haemorrhagic septicaemia (HS):

- 1. It is a bacterial disease.
- 2. It is a zoonotic disease transmitted from bats 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: A

Explanation: Statement 1 is correct. **Haemorrhagic septicaemia (HS)** is a contagious bacterial disease caused by two serotypes of Pasteurella multocida, B2 and E2.

Statement 2 is incorrect. It affects **cattle** and water buffaloes with a high mortality rate in infected animals. There are no reported cases of human infection.

In many **Asian countries** HS disease outbreaks mostly occur during the climatic conditions typical of monsoon (high humidity and high temperatures); however, with climate change, incidences of disease may occur any month of the year.

Six elephants have died of Haemorrhagic Septicaemia(HS) in Karlapat Wildlife Sanctuary located in Odisha's Kalahandi district.

Q.42) Consider the following statements regarding the Brent Crude:

- 1. It is a blend of crude oil recovered from the Persian Gulf.
- 2. It is a light and sweet grade crude oil.

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. **Brent blend** is a blend of crude oil extracted from oilfields in the **North Sea** between the United Kingdom and Norway.

Statement 2 is correct. Crude from this region is **light and sweet**, making them ideal for the refining of diesel fuel, gasoline, and other high-demand products.

- # Indian Crude Basket is weighted average of Dubai and Oman (sour) and the Brent Crude (sweet) crude oil prices.
- # Sweet crude oil contains small amounts of hydrogen sulfide and carbon dioxide and it is commonly used for processing into gasoline, kerosene, and high-quality diesel. Before sour crude oil can be refined into gasoline, impurities need to be removed, therefore increasing the cost of processing.

Q.43) What is/are the properties of ideal thermoelectric materials?

- 1. High thermal conductivity
- 2. Low electrical conductivity

Select the correct answer using the code given below:

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

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d) Neither 1 nor 2

Correct answer: D

Explanation: Thermoelectricity is formed when heat is converted into energy. What makes a material have the ability to create thermal electricity is both **high electrical conductivity and low thermal conductivity.**

Electrons flow back and forth on what is called a temperature gradient. Since we generally know that metal is a good energy conductor, electrons that are responsible for creating the thermoelectric energy can flow easily through metal.

Furthermore, a typical thermoelectric material should have low thermal conductivity and thus must maintain a temperature gradient.

Scientists from Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, an autonomous institution of the Department of Science & Technology (DST) have identified a lead-free material called Cadmium (Cd) doped Silver Antimony Telluride (AgSbTe2) which can efficiently allow recovery of electricity from 'waste heat'.

Q.44) Which of the following animal dormant states is/are correctly matched?

- 1. Hibernation Hot or dry period
- 2. Brumation Winter3. Estivation Summer

Select the correct answer using the code given below:

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

Correct answer: B

Explanation: The environment that an animal lives in affects their dormancy behavior greatly. Animals might go through **hibernation**, **brumation or estivation** (aestivation).

Hibernation refers to the deep sleep that some warm-blooded animals engage in during the **winter**. **Brumation** is known as the hibernation for cold-blooded animals.

Estivation is when animals are dormant because weather conditions are very **hot and dry**. Their breathing rate, heart rate and metabolic rate decrease to conserve energy under these harsh conditions.

Therefore, only option 2 is correctly matched.

Q.45) Consider the following statements regarding the **Sun**:

- 1. The Sun rotates more quickly at its equator than at its poles.
- 2. Sunspots are darker and at higher temperature than other areas on Sun.

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. Since the Sun is a ball of gas/plasma, it does not have to rotate rigidly like the solid planets and moons do. In fact, the **Sun's equatorial regions rotate**

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faster (taking only about 24 days) than the polar regions (which rotate once in more than 30 days).

This differential rotation persists to about a third of the way inside the Sun, where the rotation becomes uniform from pole to pole.

Statement 2 is incorrect. **Sunspots** are areas that appear dark on the surface of the Sun. They appear dark because they are **cooler than other parts** of the Sun's surface. Solar flares are a sudden explosion of energy caused by tangling, crossing or reorganizing of magnetic field lines near sunspots.

Q.46) Consider the following statements regarding the Alzheimer's Disease:

- 1. It is a bacterial disease with no cure.
- 2. It causes the brain to shrink and brain cells to die.

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 exact causes of Alzheimer's disease aren't fully understood**. But at a basic level, brain proteins fail to function normally, which disrupts the work of brain cells (neurons) and triggers a series of toxic events. **Neurons** are damaged, lose connections to each other and eventually die.

Scientists believe that for most people, Alzheimer's disease is caused by a combination of genetic, lifestyle and environmental factors that affect the brain over time.

Statement 2 is correct. Alzheimer's disease is a progressive neurologic disorder that causes the brain to shrink (atrophy) and brain cells to die. Alzheimer's disease is the most common cause of dementia — a continuous decline in thinking, behavioral and social skills that affects a person's ability to function independently.

The novel drug candidate TGR63 developed by the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), an autonomous institute of the Department of Science & Technology team has potential as a promising drug candidate for AD treatment.

Q.47) Consider the following statements regarding the **COVAXIN**:

- 1. It has been developed by Bharat Biotech is developed in collaboration with the Indian Council of Medical Research (ICMR).
- 2. It is a live attenuated virus type 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. **COVAXIN**, India's indigenous COVID-19 vaccine by Bharat Biotech is developed in collaboration with the **Indian Council of Medical Research** (ICMR) - **National Institute of Virology (NIV).**

Statement 2 is incorrect. The vaccine developed by BBIL is a highly purified, whole virion, inactivated SARS-CoV2.

The vaccine is developed using **Whole-Virion Inactivated Vero Cell** derived platform technology. Inactivated vaccines do not replicate and are therefore unlikely to revert and cause pathological effects. They contain dead virus, incapable of infecting people but still able to instruct the immune system to mount a defensive reaction against an infection.

The vaccine is formulated with Algel-IMDG, which contains chemisorbed TLR7/8 agonist onto aluminium hydroxide gel to generate the requisite type of immune responses. A CSIR constituent lab, Indian Institute of Chemical Technology (IICT), Hyderabad, was approached by BBIL to develop the synthetic route for the agonist molecule with indigenous chemicals.

Q.48) Consider the following statements regarding the **Tuberculosis** (TB):

- 1. The TB bacteria can attack only lungs in the human body.
- 2. TB bacteria are spread through the air from one person to another.
- 3. Bacille Calmette-Guérin (BCG) is a vaccine for tuberculosis (TB) disease. 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. **Tuberculosis (TB)** is caused by a bacterium called Mycobacterium tuberculosis. The bacteria usually attack the lungs, but TB bacteria **can** attack any part of the body such as the kidney, spine, and brain.

Statement 2 is correct. TB bacteria are spread through the air from one person to another. The TB bacteria are put into the air when a person with TB disease of the lungs or throat coughs, speaks, or sings. People nearby may breathe in these bacteria and become infected.

Statement 3 is correct. **Bacille Calmette-Guérin (BCG)** is a vaccine for tuberculosis (TB) disease.

The Revised National TB Control Programme (RNTCP) was launched in 1997 with implementation of Directly Observed Treatment, Short Course Strategy, Programme is further renamed as National Tuberculosis Elimination Programme in the year 2020 by Central TB Division and aims to eliminate TB by 2025.

ECONOMICS

- **Q.1)** Arrange the following factors in deceasing order of their **weight in formula of Horizontal devolution** of funds, as adopted by the Fifteenth Finance Commission (XVFC):
- 1. Forest & Ecology
- 2. Income Distance
- 3. Demographic Performance

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: B

Explanation: The horizontal devolution determines each state's share in central taxes depending their status/performance in the weights assigned to following criterion:

Criterion	Weight
Population	15
Income Distance	45
Forest & Ecology	10
Demographic Performance	12.5
Area	15
Tax & Fiscal Efforts	2.5
Total	100

- --On horizontal devolution, while XVFC agreed that the Census 2011 population data better represents the present need of States, to be fair to, as well as reward, the States which have done better on the demographic front, XVFC has assigned a 12.5 per cent weight to the **demographic performance** criterion.
- --Income distance is the distance of the state's income from the state with the highest income.
- --XVFC has re-introduced tax effort criterion to reward fiscal performance.
- Q.2) Consider the following statements regarding the Report of the Fifteenth Finance Commission (XVFC):
- 1. It has recommended a vertical devolution at 41 per cent from the divisible pool of taxes.
- 2. It has proposed a Modernisation Fund for Defence and Internal Security (MFDIS) under the Consolidated Fund of India.
- 3. It has recommended an All India Medical and Health Service under the All-India Services Act, 1951.

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: C

Explanation: Statement 1 is correct. In order to maintain predictability and stability of resources, especially during the pandemic, XVFC has recommended maintaining the **vertical devolution at 41 per cent** – the same as in report for 2020-21.

It is at the same level of 42 per cent of the divisible pool as recommended by FC-XIV. However, it has made the required adjustment of about 1 per cent due to the changed status of the erstwhile State of Jammu and Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir.

Statement 2 is incorrect. The XVFC proposes that the Union Government may constitute in the **Public Account of India**, a dedicated non-lapsable fund, **Modernisation Fund for Defence and Internal Security (MFDIS)**. The total indicative size of the proposed MFDIS over the period 2021-26 is Rs. 2,38,354 crores.

Statement 3 is correct. XVFC has recommend that health spending by States should be increased to more than 8 per cent of their budget by 2022.

Given the inter-State disparity in the availability of medical doctors, it is essential to constitute an All India Medical and Health Service as is envisaged under Section 2A of the All-India Services Act, 1951.

Q.3) Consider the following statements regarding trends in Indian economy in last five years:

- 1. India's fiscal deficit was continuously below five percent before the Financial Year 2020-21.
- 2. India's current account balance has been consistently positive.

Which of the statements given above is/are correct?

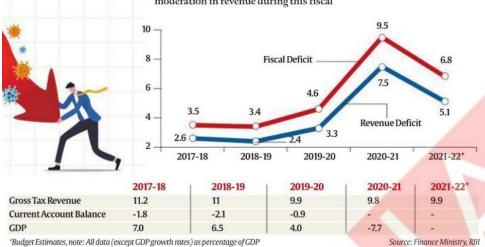
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Correct answer: A

Explanation: Statement 1 is correct. The **fiscal deficit** in BE 2021-2022 is estimated to be 6.8% of GDP. The fiscal deficit in RE 2020-21 is pegged at 9.5% of GDP - funded through Government borrowings, multilateral borrowings, Small Saving Funds and short-term borrowings.

WIDENING FISCAL DEFICIT

The Central government's fiscal deficit, which has been under strain, has slipped further due to a rise in expenditure on account of the outbreak of Covid pandemic and moderation in revenue during this fiscal



Statement 2 is incorrect. This financial year 2020-21 is expected to end with an Annual Current Account Surplus for the first time after a period of 17 years.

Q.4) Which of the following option correctly defines a Gig worker?

- a) Unpaid household worker
- b) Person engaged in the production of goods or services for an employer in his home
- c) Working outside of traditional employer-employee relationship
- d) A worker having negligible productivity in an economic activity

Correct answer: C

Explanation: A **"gig worker**" means a person who performs work or participates in a work arrangement and earns from such activities outside of traditional employer-employee relationship.

Traditional workers have a long-term employer-employee relationship in which the worker is paid by the hour or year, earning a wage or salary. Outside of that arrangement, work tends to be temporary or project-based; workers are hired to complete a particular task or for a certain period of time.

The **budget 2021-22** has proposed a portal that will collect relevant information on gig, building, and construction workers, among others. This will help formulate health, housing, skill, insurance, credit and food schemes for migrant workers.

Q.5) The Budget 2021-22 has proposed a single **Securities Markets Code** by consolidation of which of the following law(s)?

- 1. Securities and Exchange Board of India Act, 1992
- 2. Depositories Act, 1996
- 3. Pension Fund Regulatory & Development Authority Act, 2013

Select the correct answer using the code given below:

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

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d) All of the above

Correct answer: A

Explanation: Through Union Budget 2021-22, the Union Minister for Finance & Corporate Affairs announced that the Government will consolidate the provisions of SEBI Act, 1992, Depositories Act, 1996, Securities Contracts (Regulation) Act, 1956 and Government Securities Act, 2007 into a rationalized single Securities Markets Code.

Securities are tradable financial instruments used to raise capital in public and private markets. There are primarily three types of securities: equity—which provides ownership rights to holders; debt—essentially loans repaid with periodic payments; and hybrids—which combine aspects of debt and equity.

Q.6) Which of the following is/are principles of Washington Consensus?

- 1. Diversion of public spending from subsidies to important long-term growth supporting sectors
- 2. Tax reform policies to broaden the tax base and adopt moderate marginal tax rates.
- 3. High government borrowing

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 **Washington Consensus** refers to a set of broadly free market economic ideas, supported by prominent economists and international organisations, such as the IMF, the World Bank, the EU and the US.

The ten specific principles originally set out by John Williamson in 1989:

- --Low government borrowing. Avoidance of large fiscal deficits relative to GDP;
- --Redirection of public spending from subsidies ("especially indiscriminate subsidies") toward broad-based provision of key pro-growth, pro-poor services like primary education, primary health care and infrastructure investment;
- --Tax reform, broadening the tax base and adopting moderate marginal tax rates;
- --Interest rates that are market determined and positive (but moderate) in real terms;
- --Competitive exchange rates;
- --Trade liberalization: liberalization of imports, with particular emphasis on elimination of quantitative restrictions (licensing, etc.); any trade protection to be provided by low and relatively uniform tariffs;
- --Liberalization of inward foreign direct investment;
- --Privatization of state enterprises;
- --Deregulation: abolition of regulations that impede market entry or restrict competition, except for those justified on safety, environmental and consumer protection grounds, and prudential oversight of financial institutions;
- --Legal security for property rights.

Q.7) Consider the following statements regarding India-China trade:

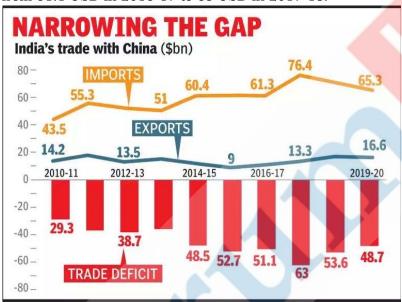
- 1. Electrical equipment and nuclear machinery are among top imports from China to India.
- 2. India's trade deficit with China has been consistently decreasing since 2015-16.

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. **Electrical machinery, nuclear reactors, boilers, organic chemicals,** plastic items, fertilizers are among the top import from China to India. Statement 2 is incorrect. India trade deficit with China had an increase once in last five years; from 51.1 USD in 2016-17 to 63 USD in 2017-18.



Q.8) Consider the following statements regarding the **One Person Companies (OPCs)** rules in India:

- 1. Any person, who is an Indian citizen, whether resident in India or otherwise is allowed to form an OPC.
- 2. Conversion of OPC into a Public company is allowed only after two years of the incorporation of the OPC.

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: As a measure which directly benefits Startups & Innovators in the country, especially those who are supplying products & services on e-commerce platforms, and in order to bring in more unincorporated businesses into the organized corporate sector, the

incorporation of **One Person Companies (OPCs)** is being incentivized by amending the Companies (Incorporation) Rules.

Statement 1 is correct. Previously NRIs were not allowed to incorporate OPCs. Now any natural person, who is an Indian citizen, whether resident in India or otherwise would be allowed to form an OPC.

For being considered as a resident in India, the residency period has been proposed to be reduced to 120 days from 182 days for NRIs.

Statement 2 is incorrect. Rule relating to voluntary conversion unless OPC has completed two years from the date of incorporated is proposed to be **omitted** and with effect from 01.04.2021, Conversion of One Person Company into a Public company or a Private company shall be permitted anytime.

- **Q.9)** Which of the following measures in **fiscal policy** are used to increase the overall demand in economy?
- 1. Higher government spending
- 2. Lowering the tax rates
- 3. Increasing the repo rate

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. **Fiscal policy is the use of government spending and taxation** to influence the economy. The most immediate effect of fiscal policy is to change the aggregate demand for goods and services.

A fiscal expansion raises aggregate demand through one of two channels. First, if the government increases its spending but keeps taxes constant, it increases demand directly. Second, if the government cuts taxes or increases transfer payments, households' disposable income rises, and they will spend more on consumption. This rise in consumption will in turn raise aggregate demand.

Option 3 is incorrect. The repo rate adjustment is part of monetary policy and not fiscal policy. Further, an increase in repo rate reduces the money supply and lowers the demand.

Q.10) Which of the following statement(s) is/are correct regarding Expansionary Monetary Policy?

- 1. It increases the money supply
- 2. It is achieved by increasing the interest rates
- 3. It aims to increases demand in economy

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: C

Explanation: Monetary policy refers to the actions of a central bank to influence a nation's money supply and economy. Monetary policy is used to influence the employment situation and to manage inflation.

Option 1 and 3 are correct. **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**.

Option 2 is incorrect as higher interest rates lower the money supply thereby decreasing the demand.

The Reserve Bank of India Governor Shaktikanta Das announced Friday at the end of the last monetary policy review meeting of the current fiscal to keep the repo and reverse repo rates unchanged at 4% and 3.35%, respectively, while maintaining an accommodative stance.

Q.11) In the **Budget 2021-22**, which of the following estimates are presented?

- 1. Budget Estimate (BE) for 2021-22
- 2. Revised Estimate (RE) for 2020-21
- 3. Actual amounts for 2019-20

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: Budget is a detailed statement by the government regarding its estimated expenditure and receipts for the next financial year. That means an estimate of expenditure to be made and receipts to be obtained from 1st April 2021 to 31st March 2022. The budget also includes statements about two previous budgets. First, there is an actual budget statement of the previous year and a revised estimate of the current year.

So, Budgeted estimates (BE) are budget allocations announced at the beginning of each financial year. Revised Estimates (RE) are estimates of projected amounts of receipts and expenditure until the end of the financial year. Actual amounts are audited accounts of expenditure and receipts in a year.

Therefore, Budget 2021-22 lists Budget Estimate (BE) for 2021-22, Revised Estimate (RE) for 2020-21 and Actual amounts for 2019-20.

Q.12) The **Special Drawing Right (SDR)** currency basket includes which of the following currency(s)?

- 1. Chinese Renminbi
- 2. Japanese Yen
- 3. Indian Rupee

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: Special Drawing Right (SDR) is an international reserve asset, created by the IMF in 1969 to supplement its member countries' official reserves. The value of the SDR is based on a basket of five currencies—the U.S. dollar, the euro, the Chinese renminbi, the Japanese yen, and the British pound sterling.

The SDR basket is reviewed every five years, or earlier if warranted, to ensure that the basket reflects the relative importance of currencies in the world's trading and financial systems. During the last review concluded in November 2015, the Board decided to include the Chinese renminbi (RMB) in SDR basket.

Q.13) Which of the following institution publishes Financial Stability Reports in India?

- a) NITI Aayog
- b) Reserve Bank of India
- c) Department of Economic Affairs, Ministry of Finance
- d) Financial Stability and Development Council

Correct answer: B

Explanation: The Financial Stability Reports are published by **Reserve Bank of India**, after approved by FSDC Sub-Committee since its inception, taking inputs from financial sector regulators i.e. RBI, SEBI, FRDA, IRDAI including Ministry of Finance.

These are periodic exercise for reviewing the nature, magnitude and implications of risks that may have a bearing on the macroeconomic environment, financial institutions, markets and infrastructure. These reports will also assess the resilience of the financial sector through stress tests.

Q.14) Which of the following is/are called the Gilt-edged securities?

- 1. Securities issued by the government
- 2. Securities issued by any corporation

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: Gilt-edged stocks or securities are issued by the government for people to invest in for a fixed period of time at a fixed rate of interest.

Sometimes securities issued by large corporations are also called gilt edged for their highquality value.

By nature, a gilt edge denotes a high-quality item whose value remains fairly constant over time. As an investment vehicle, this equates to high-grade securities with relatively low yields compared to riskier, below-investment-grade securities.

The Reserve Bank of India has proposed to provide direct access to retail investors to its government securities investment platform opens the door to this risk-free investment for retailers. Currently, retail investors are allowed to submit non-competitive bids in auctions of government bonds.

Q.15) Which of the following factors make demand of a product inelastic?

- 1. High competition in product category
- 2. No close substitute for the 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: B

Explanation: The **inelastic demand** occurs when the demand for a **product** doesn't change as much as the price. Inelastic demand is one of the three types of demand elasticity. It describes how much demand changes when the price does. The other two are:

- --Elastic demand is when changes in price impact the quantity demanded.
- -- Unit elastic demand is when changes in price cause an equal change in demand.

Major factors for a product having inelasticity of demand are:

- --No substitutes; if there is an easy substitute for a good or service, the substitute makes the demand for the good more elastic.
- --having little or **no competition** in the market; if a firm has monopoly power, then it is able to charge higher prices

Q.16) Consider the following statements:

- 1. Reserve Bank of India pays commission to banks for undertaking government agency businesses.
- 2. Private sector banks are barred from undertaking Government-related banking transactions such as taxes and revenue payment facilities.

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. For undertaking government agency business, the **RBI pays a commission to banks**. The central bank carries out the general banking business of the central and state governments through agency banks appointed under Section 45 of the RBI Act, 1934.

The government transactions eligible to commission are revenue receipts, payments on behalf of the central and state governments, pension payments, and any other item specified by the RBI.

Statement 2 is incorrect. In 2012, the finance ministry had not allowed private banks, barring some, to undertake government business for three years.

In 2015, the government had continued with the embargo, and allowed the private sector with existing government agency business to continue without any fresh authorisation to private banks.

Recently, Government of India has **lifted the embargo on private sector banks** (only a few were permitted earlier) for the conduct of Government-related banking transactions such as taxes and other revenue payment facilities, pension payments, small savings schemes, etc.

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This step is expected to further enhance customer convenience, spur competition and higher efficiency in the standards of customer services.

Q.17) Consider the following statements regarding Nidhi Companies:

- 1. They are registered under the Societies Registration Act, 1860.
- 2. It is a type of Non-banking financial institution.

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 and 2 is correct.

Nidhi Company is a financial institution or a type of NBFC that is involved in depositing and lending money to their members. This company is registered under the **Companies Act**, **2013** and is managed, as per the RBI's guidelines.

All the transactions are performed by the company's members only. Since all the transactions are focused on the shareholders of the Nidhi Company, RBI has exempted the notified Nidhi companies from the core acts of RBI.

#Ministry of Corporate Affairs has advised investors to verify the antecedents / status of a Nidhi Company especially their declaration of their status as Nidhi Company by the Central Government before becoming its member and investing their hard-earned money in such companies.

Q.18) Which of the following institution publishes the **Advance Estimates of National Income** in India?

- a) NITI Aayog
- b) Department of Economic Affairs
- c) Reserve Bank of India
- d) National Statistical Office

Correct answer: D

Explanation: National Statistical Office (NSO) is mandated to prepare 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.

The National Statistical Office (NSO), Ministry of Statistics and Programme Implementation has recently released the **Second Advance Estimates of National Income**, **2020-21**.

The approach for compiling the advance estimates is based on **Benchmark-Indicator Method**. The sector-wise estimates are obtained by extrapolation of indicators like Index of Industrial Production (IIP), financial performance of Listed Companies in the Private Corporate Sector, Second Advance Estimates of Crop Production, Accounts of Central & State Governments among others.

INTERNATIONAL RELATIONS/ORGANISATIONS

Q.1) Consider the following statements regarding the **ASEAN-INDIA Hackathon**:

- 1. It is an initiative of the NITI Aayog.
- 2. The hackathon focusses on common ASEAN-India challenges under themes of 'Blue Economy' and 'Education'.

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 **ASEAN-INDIA Hackathon** is an initiative taken by Ministry of Education as proposed by the Prime Minister of India during Singapore India Hackathon in 2019. The ASEAN India Hackathon is being organized online from 1st -3rd February 2021

Statement 2 is correct. The Hackathon will provide a unique opportunity to India and ASEAN countries to solve their common identified challenges under two broad themes of "Blue Economy" and "Education" and thereby provide an opportunity to forward their economic and cultural ties through collaboration in education, science and technology.

Q.2) Consider the following statements:

- 1. Length of India's land border with Myanmar is more than that of with Nepal.
- 2. India has an integrated check post at Moreh in Manipur for ease of travel and trade with Myanmar.

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. India has 15,106.7 Km of land border and a coastline of 7,516.6 Km including island territories. The length of our land borders with neighboring countries is:

Country	Border length
Bangladesh	4,096.7 km
China	3,488 km
Pakistan	3,323 km
Nepal	1,751 km
Myanmar	1,643 km
Bhutan	699 km
Afghanistan	106 km
Total	15,106.7

Statement 2 is correct. **Integrated Check Post (ICP) Moreh** is located on NH-39 on the India-Myanmar border in the Tengnoupal district at about 110 Km. from Imphal, the State capital of Manipur. Tamu is the corresponding town in Myanmar opposite to Moreh.

Q.3) Consider the following statements regarding the estimates by the **Global Risks Report** 2021:

- 1. The extreme weather and climate action failure are most likelihood risks of the next decade.
- 2. The infectious diseases is the most impact risk of the next 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: C

Explanation: Both statements are correct.

The Global Risks Report 2021, 16th Edition has been released by the World Economic Forum which shares the results of the latest Global Risks Perception Survey (GRPS).

Among the highest likelihood risks of the next ten years are **extreme weather**, **climate action failure and human-led environmental damage**; as well as digital power concentration, digital inequality and cybersecurity failure. Among the highest impact risks of the next decade, **infectious diseases** are in the top spot, followed by climate action failure and other environmental risks; as well as weapons of mass destruction, livelihood crises, debt crises and IT infrastructure breakdown.

Top Global Risks by Likelihood





Q.4) Consider the following statements regarding the Global Fund to Fight AIDS, Tuberculosis and Malaria (the "Global Fund"):

- 1. It is an intergovernmental organisation to invest additional resources to end the epidemics of HIV/AIDS, tuberculosis and malaria.
- 2. India is a donor country to the Global Fund.

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 **Global Fund to Fight AIDS, Tuberculosis and Malaria (the "Global Fund")** is a multistakeholder international financing institution duly formed as a **non-profit** foundation under the laws of Switzerland and recognized as an international organization by various national governments.

The purpose of the Global Fund is to attract, leverage and invest additional resources to end the epidemics of HIV/AIDS, tuberculosis and malaria to support attainment of the Sustainable Development Goals established by the United Nations.

Statement 2 is correct. **India** joined the Global Fund as a donor in 2006, and has contributed a total US\$53.5 million to date. The Government of India pledged US\$22 million to the Global Fund's Sixth Replenishment for 2020-2022.

Q.5) Consider the following statements regarding the New Strategic Arms Reduction Treaty (New START):

- 1. It limits the number of non-deployed Inter Continental Ballistic Missiles (ICBMs).
- 2. The treat has been extended till 2026 by USA and Russia.

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 **New Strategic Arms Reduction Treaty (New START)** was signed April 8, 2010, in Prague by the United States and Russia and entered into force in 2011. It is an agreement for nuclear arms reduction between the United States and Russia, establishing a limit on deployed strategic warheads.

Statement 1 is incorrect. New START does not limit the number of non-deployed ICBMs and SLBMs, but it does monitor them and provide for continuous information on their locations and on-site inspections to confirm that they are not added to the deployed force.

Statement 2 is correct. The **United States and Russia** agreed on Feb. 3, 2021, to extend New START by five years, as allowed by the treaty text, until Feb. 5, 2026.

Q.6) Which of the following organisation has launched the EDISON Alliance?

- a) World Economic Forum
- b) World Bank
- c) Asian Development Bank



d) World Health Organization

Correct answer: A

Explanation: The events of 2020 have dramatically accelerated the digitalization of our economies and societies. In response to this complex and urgent challenge, the **World Economic Forum launched The EDISON Alliance** to mobilize a global movement to prioritize digital inclusion as foundational to the achievement of the Sustainable Development Goals and a cross-sector platform to accelerate collaborative action.

The Alliance will prioritize three focus areas related to the Sustainable Development Goals each year. For 2021, the alliance will focus on health and healthcare, education, and financial inclusion.

Q.7) Which of the following institution has released the **Corruption Perception Index 2021**?

- a) Transparency International
- b) World Economic Forum
- c) Financial Action Task Force
- d) World Bank

Correct answer: A

Explanation: Transparency International publishes the Corruption Perception Index annually, since 1995. The CPI scores and ranks 180 countries/territories based on how corrupt a country's public sector is perceived to be by experts and business executives. It is a composite index, a combination of 13 surveys and assessments of corruption, collected by a variety of reputable institutions.

New Zealand and Denmark are ranked at the first position with scores of 88. India ranks at 86 with score of 40.

Q.8) Consider the following statements regarding the Global Climate Risk Index 2021:

- 1. It has been released by the Germany-based think tank Germanwatch.
- 2. India was the most affected country by the impacts of extreme weather events in 2019. 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 **Global Climate Risk Index** annually published by the **Germanwatch** is an analysis based on one of the most reliable data sets available on the impacts of extreme weather events and associated socio-economic data.

Statement 2 is incorrect. Mozambique, Zimbabwe and the Bahamas were the countries most affected by the impacts of extreme weather events in 2019. India is seventh, most affected country.

Between 2000 and 2019, Puerto Rico, Myanmar and Haiti were the countries most affected by the impacts of extreme weather events.

Table 1: The 10 most affected countries in 2019

Ranking 2019 (2018)	Country	cri	Fatalities	Fatalities per 100 000 inhabitants	Absolute losses (in million US\$ PPP)	Losses per unit GDP in %	Human De- velopment Index 2020 Ranking ¹⁴
1 (54)	Mozambique	2.67	700	2.25	4 930.08	12.16	181
2 (132)	Zimbabwe	6.17	347	2.33	1 836.82	4.26	150
3 (135)	The Bahamas	6.50	56	14.70	4 758.21	31.59	58
4 (1)	Japan	14.50	290	0.23	28 899.79	0.53	19
5 (93)	Malawi	15.17	95	0.47	452.14	2.22	174
6 (24)	Islamic Republic of Afghanistan	16.00	191	0.51	548.73	0.67	169
7 (5)	India	16.67	2 267	0.17	68 812.35	0.72	131
8 (133)	South Sudan	17.33	185	1.38	85.86	0.74	185
9 (27)	Niger	18.17	117	0.50	219.58	0.74	189
10 (59)	Bolivia	19.67	33	0.29	798.91	0.76	107

PPP = Purchasing Power Parities. GDP = Gross Domestic Product.

Q.9) Consider the following statements regarding the India-EU High Level Dialogue (HLD) on Trade & Investment, 2021:

- 1. It was the first ever HLD on Trade & Investment between India and EU.
- 2. The 'India-EU Strategic Partnership: A Roadmap to 2025' has been adopted at the HLD. 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 **1**st **India-EU High Level Dialogue (HLD)**, co-chaired by the Minister of Commerce and Industry Shri Piyush Goyal and the European Union Executive Vice-President & Trade Commissioner Mr. Valdis Dombrovskis, was held on 5th February 2021.

Commitment to the establishment of this Dialogue was a major **outcome of the 15th India-EU Leader's Summit held in July 2020**, with an objective for a Ministerial level guidance towards the bilateral trade and investment relations.

Statement 2 is incorrect. The "India-EU Strategic Partnership: A Roadmap to 2025" was endorsed as a common roadmap to guide joint action and further strengthen the India-EU Strategic Partnership over the next five years at 15th India-European Union Summit on the 15th July 2020.

Q.10) Consider the following statements regarding the COVID-19 vaccines:

1. AstraZeneca-Oxford University vaccine AZD1222 became the COVID-19 vaccine first to receive emergency validation from World Health Organisation.

2. The Pfizer-BioNTech COVID-19 vaccine has received emergency use authorization in India from the Drugs Controller General 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: D

Explanation: Statement 1 is incorrect. The **World Health Organization (WHO) in December 2020 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 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.

Statement 2 is incorrect. The **COVISHEILD and COVAXIN** are the only vaccines that have received authorization from DCGI for emergency use in India.

It has been reported recently that Pfizer has withdrawn its emergency use application in India for want of local trials.

Q.11) Consider the following statements regarding the Global Himalayan Expedition (GHE):

- 1. GHE is funding the solar electrification of the remote Himalayan villages.
- 2. It is among the winners of the 2020 UN Global Climate Action Award.

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. **Global Himalayan Expedition (GHE)** is the one of the world's first organizations using the force of tourism coupled with technology to bring solar energy to these remote communities, as recognized by the World Travel and Tourism Council (WTTC) and the United Nations World Tourism Organisation (UNWTO).

GHE conducts "Impact Expeditions" to remote Himalayan villages and uses a portion of the expedition fee to fund the capital cost of the hardware, transportation, installation and training of village-scale solar micro-grids. The micro-grid infrastructure set up by GHE is owned and operated by the community.

Statement 2 is correct. Global Himalayan Expedition (GHE) is among the winners of the **2020 UN Global Climate Action Award** for 'Financing for Climate Friendly Investment'.

Q.12) The Democracy Index 2020 has been released by which of the following organisation?

- a) Association for Democratic Reforms
- b) The Economist Intelligence Unit
- c) Inter-Parliamentary Union
- d) Amnesty International

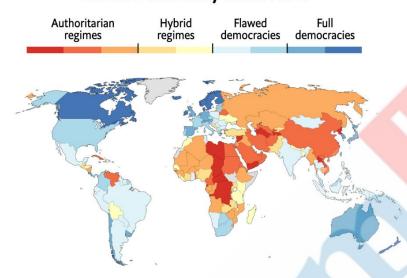


Correct answer: B

Explanation: The **EIU Democracy Index** provides a snapshot of the state of world democracy for 165 independent states and two territories. The Democracy Index is based on five categories: electoral process and pluralism, civil liberties, the functioning of government, political participation, and political culture.

Based on their scores on 60 indicators within these categories, each country is then itself classified as one of four types of regime: **full democracy**, **flawed democracy**, **hybrid regime or authoritarian regime**.

Global Democracy Index 2020



Q.13) Consider the following statements regarding the **India-Myanmar relations**:

- 1. India has announced a debt service relief to Myanmar under the G20 Debt Service Suspension Initiative.
- 2. Land Border Crossing Agreement (LBCA) has been signed to facilitate movement of bonafide citizens of both countries across India-Myanmar land border.

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. COVID-19 has dealt a major blow to world's poorest countries, causing a recession that could push more than 100 million people into extreme poverty.

That is why the World Bank and the International Monetary Fund urged G20 countries to establish the Debt Service Suspension Initiative. The DSSI is helping countries concentrate their resources on fighting the pandemic and safeguarding the lives and livelihoods of millions of the most vulnerable people.

India in May 2020 announced the debt service relief to Myanmar under the G20 Debt Service Suspension Initiative.

Statement 2 is correct. Signing of Land Border Crossing Agreement (LBCA) in 2018 facilitated movement of bonafide citizens of both countries with valid travel documents/visas to travel across India-Myanmar land border.

Q.14) India has recently agreed for development of an Enhanced Trade Partnership (ETP) with which of the following country?

- a) United Kingdom
- b) United States of America
- c) Japan
- d) Australia

Correct answer: A

Explanation: The Minister for Commerce and Industry of India, Shri Piyush Goyal, and UK Secretary of State for International Trade, Ms. Elizabeth Truss MP, met on Saturday, 6th February 2021, at New Delhi to discuss the India - UK trade and investment relationship. Both Ministers reiterated their commitment to long term India-UK partnership and agreed to deepen trade cooperation between the two countries through an Enhanced Trade Partnership (ETP).

India and UK Trade Ministers reviewed the ongoing engagements between the two sides for an ETP, as part of the development of a roadmap that would lead to a potential comprehensive FTA, including considerations on an Interim Agreement on preferential basis.

It has been reported that ETP will be formally launched during the visit of the UK Prime Minister Boris Johnson to India later this year.

Q.15) India has Extradition Treaties with which of the following country(s)?

- 1. Australia
- 2. Canada
- 3. United Kingdom

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: Extradition is the recognised international mechanism for the timely return of fugitives from foreign countries. It is defined as the "delivery of an accused or convicted individual from the country he is found in, to another country that requests his extradition".

At present, India has bilateral extradition treaties with following countries:

Azerbaijan (2013)	Egypt (2008)	Nepal (1953)	Tajikistan (2003)	
Australia (2008)	France (2003)	Netherlands (1898)	Thailand (2013)	
Bahrain (2004)	Germany (2001)	Oman (2004)	Tunisia (2000)	
Bangladesh (2013)	Hong Kong (1997)	Poland (2003)	Turkey (2001)	
Belarus (2007)	Indonesia (2011)	Philippines (2004)	UAE (1999)	
Belgium (1901)	Iran (2001)	Russia (1998)	UK (1992)	
Bhutan (1996)	Kuwait (2004)	Saudi Arabia (2010)	Ukraine (2002)	
Brazil (2008)	Malaysia (2010)	South Africa (2003)	USA (1997)	
Bulgaria (2003)	Mauritius (2003)	South Korea (2004)	Uzbekistan (2000)	
anada (1987) Mexico (2007)		Spain (2002)	Vietnam (2011)	
Chile (1897)	Mongolia (2001)	Switzerland (1880)	Malawi (2018)	



- 1. Shatoot Dam
- 2. Salma Dam
- 3. Kajaki Dam

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: India has assisted Afghanistan in construction of **Salma Dam**, which is a hydroelectric and irrigation dam project located on the Hari River in Chishti Sharif District of Heart.

Recently India and Aghanistan have signed a Memorandum of Understanding [MoU] for the construction of the Lalandar [Shatoot] Dam in Afghanistan. The project is a part of the New Development Partnership between India and Afghanistan.

The **Lalander [Shatoot] Dam** would meet the safe drinking water needs of Kabul City, provide irrigation water to nearby areas, rehabilitate the existing irrigation and drainage network, aid in flood protection and management efforts in the area, and also provide electricity to the region.

Q.17) Consider the following statements regarding the United Nations Convention on the Rights of the Child:

- 1. It recognizes the human rights of children, defined as persons up to the age of 18 years.
- 2. India and United States of America have not ratified the Convention.

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 **Convention on the Rights of the Child** is an international treaty that recognizes the human rights of children, defined as persons up to the age of 18 years.

The **Convention** establishes in international law that States Parties must ensure that all children – without discrimination in any form – benefit from special protection measures and assistance; have access to services such as education and health care; can develop their personalities, abilities and talents to the fullest potential; grow up in an environment of happiness, love and understanding; and are informed about and participate in, achieving their rights in an accessible and active manner.

Statement 2 is incorrect. The **Convention on the Rights of the Child** is the most rapidly ratified human rights treaty in history. More countries have ratified the Convention than any other human rights treaty in history – 196 countries have become State Parties to the Convention as of October 2015. The United States of America has not ratified the Convention. **India** ratified the United Nations Convention on the Rights of the Child in 1992.

Q.18) Consider the following statements regarding the Coalition for Disaster Resilient Infrastructure (CDRI):

- 1. CDRI is an intergovernmental organization.
- 2. It has been launched by India and has a secretariat at New Delhi.

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 **Coalition for Disaster Resilient Infrastructure (CDRI)** is a global partnership that aims to promote the resilience of infrastructure systems to climate and disaster risks, thereby ensuring sustainable development.

Statement 1 is incorrect. CDRI is a multi-stakeholder global partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, and academic and knowledge institutions. **At present, it is not an intergovernmental organization**, which are ordinarily treaty-based organizations.

Statement 2 is correct. The Prime Minister of India launched CDRI during his speech at the UN Climate Action Summit on 23 September 2019. The CDRI Secretariat is based in New Delhi, India.

Q.19) Which of the following is/are joint exercise(s) between Indian and USA's defence forces?

- 1. Yudh Abhyas
- 2. Vajra Prahar
- 3. Dustlik

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 India-US joint military exercise "Yudh Abhyas 20" commenced today in Mahajan Field Firing Range of Bikaner district in Rajasthan. This is the 16th edition of annual bilateral joint exercise of both the armies. It will continue till the 21st of this month. The previous version of the joint exercise was held at Seattle in the United States.

'Vajra Prahar' is a Special Forces joint training exercise conducted alternately in India and the US.

Dustlik: India-Uzbekistan joint military exercise

Q.20) Which of the following institution is organizing the World Sustainable Development **Summit 2021?**

- a) United Nations Sustainable Development Solutions Network
- b) The Energy and Resources Institute
- c) Intergovernmental Panel for Climate Change
- d) Institute for Sustainable Development and International Relations

Correct answer: B

Explanation: The 20th edition of The Energy and Resources Institute's (TERI) flagship event, the World Sustainable Development Summit, will be held online from 10th-12th February, 2021.

India's Ministry of Environment, Forests and Climate Change, Ministry of New and Renewable Energy and Ministry of Earth Sciences are key partners of the Summit. Energy and industry transition, adaptation and resilience, nature-based solutions, climate finance, circular economy, clean oceans and air pollution, are amongst the range of topics to be discussed during the Summit.

The World Sustainable Development Summit 2021 is being held on the theme 'Redefining our Common Future: Safe and Secure Environment for All'

Q.21) Consider the following statements regarding the United Nations Human Rights Council

- 1. It is one of the United Nations organs established in 1945.
- 2. It conducts Universal Periodic Review (UPR) of the human rights records of all UN Member

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 **Human Rights Council** is an inter-governmental body within the United Nations system responsible for strengthening the promotion and protection of human rights around the globe and for addressing situations of human rights violations and make recommendations on them.

The main organs of the UN are the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the UN Secretariat.

The Council was created by the United Nations General Assembly on 15 March 2006 by resolution.

Statement 2 is correct. The **Universal Periodic Review (UPR)** is a unique process which involves a review of the human rights records of all UN Member States. The UPR is a Statedriven process, under the auspices of the Human Rights Council, which provides the opportunity for each State to declare what actions they have taken to improve the human rights situations in their countries and to fulfil their human rights obligations.

The US President has decided to rejoin the United Nations Human Rights Council (UNHRC). The moves come after the former US President had withdrawn from the global body three years ago.

Q.22) Consider the following statements regarding the World Trade Organisation (WTO):

- 1. The WTO's General Council also meets as the Dispute Settlement Body.
- 2. All WTO members must undergo periodic scrutiny under the Trade Policy Review Mechanism (TPRM).

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 **General Council** is the WTO's highest-level decision-making body in Geneva, meeting regularly to carry out the functions of the WTO. It has representatives (usually ambassadors or equivalent) from all member governments and has the authority to act on behalf of the ministerial conference which only meets about every two years. The General Council also meets, under different rules, as the **Dispute Settlement Body and as the Trade Policy Review Body**.

Statement 2 is correct. Surveillance of national trade policies is a fundamentally important activity running throughout the work of the WTO. At the centre of this work is the Trade Policy Review Mechanism (TPRM). All WTO members are reviewed, the frequency of each country's review varying according to its share of world trade.

Dr Okonjo-Iweala will become the first woman and the first African to be chosen as Director-General, when she takes office on 1 March.

Q.23) Which of the following **COVID-19 vaccine** have been approved so far by World Health Organisation for emergency use?

- 1. COVISHIELD by Serum Institute of India
- 2. Pfizer/BioNTech COVID-19 vaccine
- 3. NOVAVAX vaccine

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 World Health Organization (WHO) recently listed two versions of the AstraZeneca/Oxford COVID-19 vaccine for emergency use, giving the green light for these vaccines to be rolled out globally through COVAX. The vaccines are produced by **AstraZeneca-SKBio (Republic of Korea) and the Serum Institute of India**.

It also listed the Pfizer/BioNTech vaccine for emergency use on 31 December 2020. WHO's Emergency Use Listing (EUL) assesses the quality, safety and efficacy of COVID-19 vaccines and is a prerequisite for COVAX Facility vaccine supply.

Q.24) Consider the following statements regarding the International Criminal Court (ICC):

- 1. It investigates and tries organisations and corporations charged with the gravest crimes of concern to the international community.
- 2. It is governed by an international treaty called the Rome Statute to which India is not a signatory.

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 **International Criminal Court (ICC)** investigates and, where warranted, tries **individuals** charged with the gravest crimes of concern to the international community: genocide, war crimes, crimes against humanity and the crime of aggression.

Statement 2 is correct. ICC is governed by an international treaty called the **Rome Statute**. India is not a party to Rome Statute.

- # There have thus far been 30 cases before the Court, with some cases having more than one suspect. The judges have issued 9 convictions and 4 acquittals.
- # The International Criminal Court said on February 5 that the court has jurisdiction over war crimes committed in the Palestinian territories. Palestinian Authority got formal membership of international criminal court in 2015. Israel is not a member of the ICC.

Q.25) Consider the following statements regarding the India and Mauritius trade relations:

- 1. Mauritius is among the top five Foreign Direct Investment source countries for India.
- 2. India has signed a Comprehensive Economic Cooperation and Partnership Agreement (CECPA) with Mauritius.

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 biggest FDI source countries are **Singapore**, **Mauritius**, **Netherlands**, **Japan and USA**.

Mauritius was the second top source of foreign direct investment (FDI) into India in 2018-19. India received USD 8 billion (about Rs 56,000 crore) foreign inflows from the country.

Statement 2 is correct. The Union Cabinet has approved signing of the Comprehensive Economic Cooperation and Partnership Agreement (CECPA) between India and Mauritius.

The Agreement is a limited agreement, which will cover Trade in Goods, Rules of Origin, Trade in Services, Technical Barriers to Trade (TBT), Sanitary and Phytosanitary (SPS) measures, Dispute Settlement, Movement of Natural Persons, Telecom, Financial services, Customs Procedures and Cooperation in other Areas.

Q.26) Consider the following statements regarding the United Nations Peacekeeping:

- 1. Peacekeeping has been explicitly provided for in the UN Charter.
- 2. UN peacekeeping operations are deployed with the consent of the main parties to the conflict.

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 **Charter of the United Nations** is the foundation document for all the UN work. Peacekeeping, although **not explicitly provided for in the Charter**, has evolved into one of the main tools used by the United Nations to achieve this purpose. UN peace operations are deployed on the basis of mandates from the United Nations Security Council.

Statement 2 is correct. UN peacekeeping operations are deployed with the **consent of the main parties** to the conflict. This requires a commitment by the parties to a political process. Their acceptance of a peacekeeping operation provides the UN with the necessary freedom of action, both political and physical, to carry out its mandated tasks.

There are three basic principles that continue to set UN peacekeeping operations: Consent of the parties, Impartiality, Non-use of force except in self-defence and defence of the mandate. # India has announced that it will gift 2,00,000 doses of coronavirus vaccine to United Nations peacekeepers.

Q.27) The **India Energy Outlook 2021** has been released by which of the following institution/organization?

- a) World Economic Forum
- b) International Energy Agency
- c) Central Electricity Regulatory Commission
- d) International Atomic Energy Agency

Correct answer: B

Explanation: The **India Energy Outlook 2021** is a new special report from the **International Energy Agency**'s World Energy Outlook series.

- --India is the world's third-largest energy consuming country, thanks to rising incomes and improving standards of living.
- --Energy use has doubled since 2000, with 80% of demand still being met by coal, oil and solid biomass.
- --On a per capita basis, India's energy use and emissions are less than half the world average, as are other key indicators such as vehicle ownership, steel and cement output.
- -- To meet growth in electricity demand over the next twenty years, India will need to add a power system the size of the European Union to what it has now.

Q.28) Consider the following statements regarding Quad countries:

- 1. All Quad countries are members of the G20.
- 2. The Quad countries have expressed support for a free, open and inclusive Indo-Pacific region.
- 3. India holds 2+2 Ministerial dialogues with all Quad countries.

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

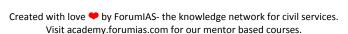
Correct answer: D

Explanation: Quad is a dialogue forum between the United States, Japan, Australia and India

Statement 1 is correct. The members of the G20 are: Argentina, **Australia**, Brazil, Canada, China, France, Germany, **India**, Indonesia, Italy, **Japan**, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the **United States**, and the European Union.

Statement 2 is correct. Quad group's various readouts/statements have professed for 'their common vision for a free, open and inclusive Indo-Pacific region, with clear support for ASEAN cohesion and centrality.'

Statement 3 is correct. India has 2+2 Ministerial dialogue with USA, Australia and Japan.



India & its Quad Partners

AUSTRALIA

2+2 Ministerial Agreements

Mutual Logistics Support Agreement,
Information Sharing Agreement
Dialogues: defense policy, defense research
& material, maritime security (+ Indonesia)
Staff talks: all 3 services
Bilateral military exercises
AUSINDEX, AUSTRA HIND
Participation in Australian exercises

JAPAN

2+2 Ministerial
Agreements
GSOMIA, Reciprocal Provision of Supplies
& Services
Dialogues: defense policy, joint research on
UGVs & robotics technology
Staff talks: all 3 services
Bilateral military exercises
JIMEX, DHARMA GUARDIAN,
SHINYUU MAITRI, SAHYOG-KAIJIN

UNITED STATES

PITCH BLACK, KAKADU

2+2 Ministerial
Agreements
GSOMIA, LEMOA, COMCASA, ISA, HOSTAC
Dialogues: defense policy, defense technology
& trade, maritime security, etc.
Joint training of peacekeepers
Indian liaison at NAVCENT

Bilateral military exercises
VAJRA PRAHAR, YUDH ABHYAS,
COPE INDIA, Tiger TRIUMPH
Defense deals
C-17, C-130J, P-8I, M777, SIG716,
AH-64E, CH-47F(I), MH-60R
Strategic Trade Authorization-1 for India

Tanvi Madan BROOKING

Q.29) Which of the following organisation has released the "Making Peace With Nature" report?

- a) United Nations Environment Programme
- b) World Wildlife Fund for Nature
- c) Intergovernmental Panel for Climate Change
- d) International Union for Conservation of Nature

Correct answer: A

Explanation: The first UNEP synthesis report is titled: "**Making Peace With Nature**: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies" and is based on evidence from global environmental assessments.

The UNEP's cross-disciplinary approach aims to tackle interlinked environmental crises within the framework of the **UN's 2030 Sustainable Development Goals**, and to lay the groundwork for achieving carbon neutrality by 2050.

The UNEP calculates that natural capital constitutes around 20% of so-called planetary wealth (in addition to human capital, manufactured capital and so on).

The report details our reliance on what it calls "natural capital" for livelihoods, prosperity, health and well-being, and outlines how that value is unevenly distributed.

Q.30) Consider the following statements regarding the **Tree Cities of the World**:

- 1. It is an initiative of the UN Habitat.
- 2. Hyderabad is the only city of India to have received the Tree City recognition.

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 **Tree Cities of the World programme** is an international effort to recognise cities and towns committed to ensuring that their urban forests and trees are properly maintained, sustainably managed, and duly celebrated.

The Food and Agriculture Organization of the United Nations and the Arbor Day Foundation have developed this programme to celebrate greener cities and towns worldwide.

Statement 2 is correct. **Hyderabad** has won a green contest among cities in India, and emerged one of the 'Tree Cities of the World'. With the recognition, the city joins 120 others from 23 countries, including the U.S., the U.K., Canada, and Australia.

The city was evaluated on five metrics: 'Establish Responsibility', 'Set the Rules', 'Know What YouHave', 'Allocate the Resources', and 'Celebrate the Achievements'.

Q.31) Consider the following statements regarding the India Australian Circular Economy Hackathon (I-ACE):

- 1 It is being organised by the World Bank.
- 2. It aims to enable the students and startups in fostering innovative solutions for the development of a circular economy across the food system value chain.

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. **India Australia Circular Economy Hackathon (I-ACE)** is jointly being organized by Atal Innovation Mission, NITI Aayog, Government of India and Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia.

Statement 2 is correct. It aims to enable the students and startups/MSMEs of both the nations in fostering innovative solutions for the development of a **circular economy** across the food system value chain with the aim of increasing the long-term health and resilience of our planet, through innovative technology solutions. I-ACE aims to accelerate the development of young and promising students and startups/MSMEs working towards the creation of a sustainable future.

Q.32) Consider the following statements regarding the Asia Environmental Enforcement Awards:

- 1. It is an initiative of the Asian Development Bank.
- 2. The Wildlife Crime Control Bureau (WCCB) have been awarded with Asia Environmental Enforcement Award-2020.

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 **Asia Environmental Enforcement Awards by UNEP** publicly recognize and celebrate excellence in enforcement by government officials and institutions or teams combating transboundary environmental crime.

Statement 2 is correct. The **Wildlife Crime Control Bureau (WCCB)** has received the Asia Environmental Enforcement Award-2020 in innovation category.

The Wildlife Crime Control Bureau initiated Operation WILDNET-II to deter potential traders and bring offenders to justice. WCCB created awareness-raising programmes with stakeholders and other agencies and worked through social media and online trade portals such as Indiamart, Amazon, and OLX, to share information on illegal wildlife trade activity.

Q.33) The United Kingdom is conducting **Human Challenge Trials for COVID-19**, what is the objective of such trials?

- 1. Study the amount of virus it takes to start an infection
- 2. Measure the initial response of immune system to the infection 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: Healthy, young volunteers will be infected with coronavirus to test vaccines and treatments in the world's first Covid-19 "human challenge" study, which will take place in the UK.

The study, which has received ethics approval, will start in the next few weeks and recruit 90 people aged 18-30. They will be exposed to the virus in a safe and controlled environment while medics monitor their health.

The trials will help scientists work out the **smallest amount of coronavirus** needed to cause infection, and how the body's immune system reacts to it. This will give doctors a better understanding of Covid-19, the disease caused by the virus, which will feed into the development of vaccines and treatments.

Q.34) Consider the following statements regarding the UN Capital Development Fund (UNCDF):

- 1. It is an autonomous and entire voluntarily funded UN organization.
- 2. It is the largest recipient of funds from the UNCDF.

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. **UNCDF** is an autonomous, voluntarily funded **UN** organization, affiliated with UNDP. UNCDF raises its funding separately from UNDP. Its funding comes from UN member states, foundations and the private sector.

Statement 2 is incorrect. The UN Capital Development Fund makes public and private finance work for the poor in the world's **47 least developed countries (LDCs)**. With its capital mandate and instruments, UNCDF offers last mile finance models that unlock public and private resources, especially at the domestic level, in support of households, localities and small enterprises that are underserved, where development needs are greatest and where resources are scarcest.

Q.35) Consider the following statements regarding the **Mission Innovation**:

- 1. It is a global initiative to accelerate global clean energy innovation with the objective to make clean energy widely affordable.
- 2. India is a member of the Mission Innovation.

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. **Mission Innovation (MI)** is a global initiative working to reinvigorate and accelerate global clean energy innovation with the objective to make clean energy widely affordable.

MI was announced at **COP21 on November**, **2015**, as world leaders came together in Paris to commit to ambitious efforts to combat climate change.

Statement 2 is correct. Mission Innovation (MI) is a global initiative of 24 countries, **including India and the European Commission** (on behalf of the European Union). These 25 members have committed to seek to double public investment in clean energy RD&D and are engaging with the private sector, fostering international collaboration and celebrating innovators.

Q.36) Which of the following constitute the International Bill of Human Rights?

- 1. Universal Declaration of Human Rights
- 2. International Covenant on Civil and Political Rights
- 3. Convention relative to the Treatment of Prisoners of War

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: What is known as the International Bill of Human Rights is made up of:

- --Universal Declaration of Human Rights (1948)
- --International Covenant on Civil and Political Rights (1966)

a treaty, so it does not directly create legal obligations for States.

- --International Covenant on Economic, Social and Cultural Rights (1966)
- --Optional Protocol to the International Covenant on Civil and Political Rights
- --Optional Protocol to the International Covenant on Economic, Social and Cultural Rights In 1948 the United Nations General Assembly adopted the UDHR. This was the first time that countries agreed on a comprehensive statement of inalienable human rights. The UDHR is not



The covenants, International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights were opened for signature in 1966 and entered into force in 1976. **India ratified both the covenants in 1979.**

Q.37) Consider the following statements:

- 1. Sanitary and phytosanitary (SPS) measures in trade agreements are applied to protect human, animal or plant life.
- 2. India does not have a trade agreement with any of the African countries. 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. **Sanitary and phytosanitary** (**SPS**) measures are quarantine and biosecurity measures which applied to protect human, animal or plant life or health from risks arising from the introduction, establishment and spread of pests and diseases and from risks arising from additives, toxins and contaminants in food and feed.

Statement 2 is incorrect. **India and Mauritius** recently signed a Comprehensive Economic Cooperation and Partnership Agreement.

The CECPA is the first trade Agreement signed by India with a country in Africa. The Agreement is a limited agreement, which will cover Trade in Goods, Rules of Origin, Trade in Services, Technical Barriers to Trade (TBT), Sanitary and Phytosanitary (SPS) measures, Dispute Settlement, Movement of Natural Persons, Telecom, Financial services, Customs Procedures and Cooperation in other Areas.

Q.38) Consider the following statements regarding the **Paris Agreement** under the United Nations Framework Convention on Climate Change (UNFCCC):

- 1. It requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve.
- 2. Starting in 2023 and then every five years, governments will take stock of the implementation of the Agreement to assess the collective progress under the agreement.

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 **2015 Paris Agreement** established a goal to limit average global temperature rise to well below 2° degrees C, and to pursue efforts to limit it to 1.5° degrees C.

To meet this goal, every country is expected to prepare and communicate a **nationally determined contribution (NDC**) every five years. NDCs include targets, measures and policies and are the basis for national climate action plans.

Statement 2 is correct. Starting in 2023 and then every five years, governments will take stock of the implementation of the Agreement to assess the collective progress towards achieving the purpose of the Agreement and its long-term goals.

The outcome of the **global stock-take** will inform the preparation of subsequent NDCs, in order to allow for increased ambition and climate action to achieve the purpose of the Paris Agreement and its long-term goals.

The United Kingdom is holding the Presidency of the UNSC for the month of February 2021 and it is organizing the United Nations Security Council Open Debate on "Addressing climate-related risks to international peace and security".

Q.39) Which of the following reports/indices are correctly matched?

- 1. Rule of Law Index Freedom House
- 2 Press Freedom Index Reporters Without Borders (RSF)
- 3. Corruption Perception Index Transparency International 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 **Rule of Law Index** is a quantitative assessment tool by the **World Justice Project** (WJP) designed to offer a detailed and comprehensive picture of the extent to which countries adhere to the rule of law in practice.

The Paris based **Reporters Without Borders (RSF)** publishes annually a World Press Freedom Index (WPFI) purporting to evaluate the level of freedom available to the media.

Since its inception in 1995, the **Corruption Perceptions Index, Transparency International's** flagship research product Corruption Perceptions Index (CPI) ranks countries "by their perceived levels of public sector corruption, as determined by expert assessments and opinion surveys."

Q.40) Consider the following statements regarding **BRICS**:

- 1. BRICS National Security Advisors' meeting deliberates on Counter Terrorism, Cyber Security, peace & stability as well as national security of BRICS countries.
- 2. India is the chair of BRICS for 2021.

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 leaders of **BRIC** (**Brazil, Russia, India, and China**) countries met for the first time in St. Petersburg, Russia, on the margins of G8 Outreach Summit in July 2006. BRIC group was renamed as BRICS (Brazil, Russia, India, China, South Africa) after **South Africa** was accepted as a full member at the BRIC Foreign Ministers' meeting in New York in September 2010.

Statement 1 is correct. **BRICS National Security Advisors'** meeting is an important component of the BRICS Political and Security Pillar of cooperation. Under this meeting, the High Representatives on National Security deliberate on security issues such as Counter Terrorism, Cyber Security, peace & stability, transnational organized crime, as well as national security of BRICS countries.

Statement 2 is correct. **India assumed the BRICS Chairship in 2021**, at a time when BRICS is celebrating its 15th anniversary. Under the theme BRICS@15: Intra-BRICS Cooperation, India's approach is focused on strengthening collaboration through Continuity, Consolidation and Consensus.

India hosted a Meeting of BRICS Finance and Central Bank Deputies recently.

Q.41) What is the objective of the annual India-USA Executive Steering Group (ESG) Meeting?

- a) Plan and discuss defense force's cooperation
- b) Implementation of bilateral trade arrangements
- c) Plan Head of State/Government summits
- d) Cooperation in agriculture and pharmaceuticals

Correct answer: A

Explanation: The 24th edition of the **India-USA Executive Steering Group (ESG)** meeting was held at New Delhi from 22 to 24 Feb 2021. The meeting was attended by a 12-member delegation from the US Army in person and virtually by 40 officers from different locations from the USA.

The forum is an Army-to-Army engagement that meets every year alternately in India and USA to discuss **Army to Army cooperation**.

A number of contemporary issues of mutual interests were discussed with an aim to enhance the engagements in diverse fields. For the first time the meeting was held both in person and through virtual mode owing to restrictions of COVID-19.

Q.42) Consider the following statements regarding the World Intellectual Property Organization (WIPO):

- 1. It is a self-funding specialized agency of the United Nations.
- 2. The Global Innovation Index is an annual publication of the WIPO.
- 3. Technology and Innovative Support Centers (TISCs) is an initiative of the WIPO to support innovators in developing countries.

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: D

Explanation: Statement 1 is correct. **UN specialized agencies** are international organizations working with the UN, in accordance with relationship agreements between each organization and the UN.

Specialized Agencies each have a process for admitting members and appointing their administrative head. WIPO is a **self-funding** organization and a **specialized agency** of United Nations.

Statement 2 is correct. The Global Innovation Index is published annually by Cornell University, INSEAD and the WIPO. Its 80 indicators explore a broad vision of innovation, including political environment, education, infrastructure and business sophistication.

Statement 3 is correct. The **WIPO Technology and Innovation Support Center (TISC)** program provides innovators in developing countries with access to locally based, high quality technology information and related services, helping them to exploit their innovative potential and to create, protect, and manage their intellectual property (IP) rights.

Q.43) Which of the following is *not* a **G20 member** country?

- a) Egypt
- b) Mexico
- c) Indonesia
- d) Argentina

Correct answer: A

Explanation: The **members of the G20** are: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States, and the European Union. Its members account for more than 80 percent of world GDP, 75 percent of global trade and 60 percent of the population of the planet.

The forum has met every year since 1999 and since 2008 has included a yearly Leaders' Summit, with the participation of the respective Heads of State and Government.

Union Minister for Finance & Corporate Affairs participated virtually in the First G20 Finance Ministers and Central Bank Governors (FMCBG) meeting under the Italian Presidency recently.

Q.44) Consider the following statements regarding the **Asian Infrastructure Investment Bank** (AIIB):

- 1. AIIB membership is limited to the countries located in Asia only.
- 2. It has a Permanent Observer status in the deliberations of both the United Nations General Assembly and the Economic and Social Council.
- 3. The Financing operations of AIIB are limited to sovereign backed financing and it does not lend to private enterprises.

Which of the statements given above is/are correct?

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

Correct answer: B

Explanation: Statement 1 is incorrect. **AIIB has non-regional members as well**. Membership in AIIB is open to members of the International Bank for Reconstruction and Development or the Asian Development Bank.

Statement 2 is correct. In 2018, AIIB was granted **Permanent Observer status in the deliberations of both the United Nations General Assembly and the Economic and Social Council**, the two development-focused principal organs of the global body.

Statement 3 is incorrect. **AIIB provides non-sovereign backed financing as well**. Sovereign-Backed financing is considered a loan to, or guaranteed by, a member. Non-sovereign Backed financing includes any financing to or for the benefit of a private enterprise or a sub-sovereign

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entity (such as a political or administrative subdivision of a member or a public sector entity) that is not backed by a guarantee or counter-guarantee and indemnity provided by the member to the Bank.

The Government of India and AIIB recently signed a loan agreement for a \$304 million Assam Intra-State Transmission System Enhancement Project to improve reliability, capacity and security of the power transmission network in the State of Assam.

Q.45) Consider the following statements regarding the International Commission on Large Dams (INCOLD):

- 1. It is an inter-governmental organization which provides a forum for the exchange of knowledge and experience in dam engineering.
- 2. India is among the countries having National Committees for INCOLD. 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 **International Commission on Large Dams** (**ICOLD**) is a **non-governmental International Organization** which provides a forum for the exchange of knowledge and experience in dam engineering.

The Organization leads the profession in ensuring that dams are built safely, efficiently, economically, and without detrimental effects on the environment.

Statement 2 is correct. ICOLD was founded in 1928 and has National Committees from more than 100 countries with approximately 10 000 individual members.

The **Committee for International Commission on Large Dams, (INCOLD)** is the Indian Committee interacting with ICOLD Central Office in Paris and helps in dissemination, in India, of information about new developments in dam engineering, besides projecting India's expertise at international level through participation in various events of ICOLD.

International Commission on Large Dams (INCOLD) in collaboration with Central Water Commission (CWC), Dam Rehabilitation Improvement Project (DRIP) and National Hydrology Project (NHP) is organising Symposium on "Sustainable Development of Dams and River Basins" under the aegis of ICOLD at New Delhi.

POLITY

Q.1) On which of the following grounds under the **Information & Technology Act, 2000**, the Central Government can block public access of any information through internet?

- 1. Interest of sovereignty and integrity of India
- 2. Friendly relations with foreign States
- 3. Public order

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: Under article 69A of the Information & Technology Act if the Central Government or any of its officers specially authorised by it in this behalf is satisfied that it is necessary or expedient so to do, in the interest of sovereignty and integrity of India, defence of India, security of the State, friendly relations with foreign States or public order or for preventing incitement to the commission of any cognizable offence relating to above block for access by the public or cause to be blocked for access by the public any information generated, transmitted, received, stored or hosted in any computer resource.

The intermediary who fails to comply with the direction issued shall be punished with an imprisonment for a term which may extend to seven years and also be liable to fine.

Q.2) Consider the following statements regarding the Section 124A of the Indian Penal Code:

- 1. It defines sedition as an attempt to bring hatred or disaffection against the Government established by law in India.
- 2. It makes sedition an offence punishable with life imprisonment.

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.

Sedition, as the Section 124A of Indian Penal Code defines is an attempt to bring hatred or contempt, or disaffection against the Government established by law in India. This can be done by words, signs, or any kind of visible representation.

It further makes sedition a punishable offence that shall be punished with imprisonment for life, to which a fine may be added; or, with imprisonment which may extend to three years, to which a fine may be added; or, with fine.

Q.3) Consider the following statements:

1. 'Police' and 'law and order' fall under the category of concurrent list of the seventh Schedule in the Constitution of India.

2. The inter-State distribution of funds for Modernization of Police Forces is based on number of police stations as well as incidence of crime per lakh 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: B

Explanation: Statement 1 is incorrect. **'Police' and 'law and order'** fall under the category of subjects within the domain of the **State** as per Entry 2 of List II of the Seventh Schedule in the Constitution of India. Thus, the principal responsibility for managing these subjects lies with the State Governments.

However, the States have not been able to fully modernize and equip their police forces upto the desired level due to financial constraints. It is in this context that the **Ministry of Home Affairs (MHA)** has been supplementing the efforts and resources of the States, from time to time, by implementing the Scheme for Modernisation of State Police Forces (MPF Scheme) since 1969-70.

Statement 2 is correct. The criteria determined for inter-State distribution of funds by the Government in the year 2005 include (i) population (35% weightage), (ii) sanctioned strength of police force (25% weightage), (iii) number of police stations (15% weightage) and (iv) incidence of crime per lakh population (25% weightage).

Q.4) Consider the following statements regarding the Medical Termination of Pregnancy (Amendment) Bill, 2020:

- 1. It allows abortion to be done on the advice of one doctor up to 20 weeks.
- 2. It provides death of partner and domestic violence as valid grounds for termination of pregnancy 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: A

Explanation: Statement 1 is correct. Currently, abortion requires the opinion of one doctor if it is done within 12 weeks of conception and two doctors if it is done between 12 and 20 weeks. The **Medical Termination of Pregnancy (Amendment) Bill, 2020** allows abortion to be done on the advice of one doctor up to 20 weeks, and two doctors in the case of certain categories of women between 20 and 24 weeks.

Statement 2 is incorrect. The Bill provides that safe abortions can be performed at any stage of the pregnancy in case of foetal "abnormalities," it fails to consider any other reason such as personal choice, a sudden change in circumstances due to separation from or death of a partner, and domestic violence.

Q.5) Consider the following statements regarding the seat of Supreme Court in India:

- 1. Constitution of India provides for Delhi to be seat of the Supreme Court.
- 2. The Supreme Court can sit at any places as determined by the Parliament from time to 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: A

Explanation: Statement 1 is correct and 2 is incorrect.

The Constitution of India has specific provision for seat of the Supreme Court under the **Article 130**, which states that:

"The Supreme Court shall sit in Delhi or in such other place or places, as the Chief Justice of India may, with the approval of the President, from time to time, appoint."

Other seats/benches for the Supreme Court have been suggested by various Bar Councils as well as current Attorney General of India.

Q.6) Consider the following statements regarding the recommendations of the **15th Finance** Commission:

- 1. It has recommended a vertical devolution of 42 percent to the States from the Central pool of divisible taxes.
- 2. It has recommended inclusion of Tax and Fiscal efforts of States criteria in Horizontal devolution formula.

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. In order to maintain predictability and stability of resources, especially during the pandemic, XVFC has recommended maintaining the vertical devolution at **41 per cent - the same as in its report for 2020-21**.

It is at the similar level of 42 per cent of the divisible pool as recommended by FC-XIV. However, it has made the required adjustment of about 1 per cent due to the changed status of the erstwhile State of Jammu and Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir.

Statement 2 is correct. Based on principles of need, equity and performance, overall horizontal devolution formula is as follows:

Criteria	Weight (%)
Population	15
Area	15
Forest & Ecology	10
Income Distance	45
Tax & fiscal efforts	2.5
Demographic performance	12.5

Q.7) Consider the following statements regarding the **Defamation laws in India**:

- 1. Defamation is among the reasonable restrictions to freedom of speech and expression under the Constitution.
- 2. Defamation is not a criminal offence 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. The grounds for **reasonable restrictions** on freedom of speech and expressions as provide under **article 19(2)** are: interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, **defamation** or incitement to an offence. Statement 2 is incorrect. Defamation in India is both a civil and a criminal offence. In Civil Law, the punishment is in the form of damages awarded to the claimant. Under Criminal Law, Defamation is bailable, non-cognizable and compoundable offence. Section 499 of the Indian Penal Code, 1860 defines what is defamation and its exceptions.

Q.8) Consider the following statements regarding the Juvenile Justice (Care and Protection of Children) Act, 2015:

- 1. The Central Adoption Resource Authority (CARA) is given the status of a statutory body under the act.
- 2. It permits juveniles between the ages of 14-18 years to be tried as adults for heinous offences.

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. To streamline adoption procedures for orphan, abandoned and surrendered children, the earlier **Central Adoption Resource Authority (CARA)** is given the status of a statutory body to enable it to perform its function more effectively.

Statement 2 is incorrect. Under Section 15, special provisions have been made to tackle child offenders committing heinous offences in the **age group of 16-18 years**. The Juvenile Justice Board is given the option to transfer cases of heinous offences by such children to a Children's Court (Court of Session) after conducting preliminary assessment to be tried as adults.

The Union Cabinet has approved the proposal of the Ministry of Women and Child Development to amend the Juvenile Justice (Care and Protection of Children) Act, 2015 to introduce measures for strengthening Child Protection set-up to ensure best interest of children.

The amendments include authorizing District Magistrate including Additional District Magistrate to issue adoption orders under Section 61 of the JJ Act, in order to ensure speedy disposal of cases and enhance accountability.

Q.9) Which of the following is/are 'intermediary' as per the Information Technology Act, 2000?

- 1. Telecom Service Providers
- 2. Online marketplaces
- 3. Cyber cafes

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: An 'intermediary' has been defined in Section 2(w) of the Information Technology Act, 2000 as "any person who on behalf of another person receives, stores or transmits that record or provides any service with respect to that record and includes telecom service providers, web-housing service providers, search engines, online payment sites, online auction sites, online market places and cyber cafes".

Section 79 of the Act grants conditional immunity to intermediaries from liability for third party acts. Section 79(1) of the Act grants intermediaries a conditional immunity with regard to any third-party information, data or communication link made available or hosted by them.

Q.10) Which of the following is/are **exceptions to Defamation** under the Indian Penal Code?

- 1. Attribution of any truth made for public good.
- 2. Publication of true reports of the proceedings of the Courts
- 3. Statements made about the character of a person if it is made in order to protect the interests of the person making it

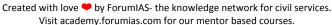
Select the correct answer using the code given below:

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

Correct answer: D

Explanation: Section 499 of the Indian Penal Code, 1860 defines what is defamation and its exceptions. Persons who make defamatory statements are exempted from punishments if they fall in one of the ten exceptions provided in Section 499. They are:

- -- Attribution of any truth made for public good.
- --Any opinion made in good faith regarding the conduct of a public servant in the discharge of his public functions.
- --Any opinion made in good faith respecting the conduct of any person which relates to a public question.
- --Publication of true reports of the proceedings of the Courts or the result of the proceedings is not defamation.
- --Any opinion made in good faith regarding the merits of any civil or criminal case decided by the Court of Justice, or the conduct of any person as a party, witness or agent to that case and no further.
- --Opinions made about the merits of any performance which its author has submitted to the judgement of the public, or about the author is not defamation if made in good faith.





- --Censures passed by persons neither having authority over another either conferred by a law or from a lawful contract in good faith is nor defamation. Censure is formal statement of severe disapproval.
- --Accusation of offence to any person having lawful authority over the alleged person in good faith is an exception to defamation. Complaints about servants to masters and children to parents are examples to the exception.
- --Statements made about the character of another is not defamation if it is made in order to protect the interests of the person making it, or any other person, or for the public good.
- --Cautions conveyed to one person against another are not defamation if it is intended for the good of the conveyed person, or any other, or for public good.

Q.11) Consider the following statements:

- 1. India is party to the UN Convention on the Elimination of all Forms of Discrimination against Women (CEDAW).
- 2. Vishakha guidelines were passed by the Indian Parliament against sexual harassment of women at workplace.

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 **UN Convention on the Elimination of all Forms of Discrimination against Women (CEDAW)** was adopted by the UN General Assembly in 1979 and is ratified by India. Often described as an international bill of rights for women, it calls for the equality of women and men in terms of human rights and fundamental freedoms in the political, economic, social, cultural and civil spheres. It underlines that discrimination and attacks on women's dignity violate the principle of equality of rights.

Statement 2 is incorrect. Based on the facts of **Bhanwari Devi's case in Rajasthan**, a Public Interest Litigation (PIL) was filed by Vishaka and other women groups against the State of Rajasthan and Union of India before the Supreme Court of India.

In a landmark judgment, **Vishaka vs. State of Rajasthan (1997)**, the Supreme Court of India created legally binding guidelines basing it on the right to equality and dignity accorded under the Indian Constitution. It included: A definition of sexual harassment, Shifting accountability from individuals to institutions, Prioritizing prevention and Provision of an innovative redress mechanism.

They were later superseded in 2013 by the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

Q.12) Consider the following statements regarding the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013:

- 1. It recognizes the right of every woman to a safe and secure workplace environment irrespective of her age.
- 2. The act explicitly provides protection to domestic workers in dwelling places.
- 3. The act provide for establishment of Complaints Committees which must have three-fourth of representation of women.

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: A

Explanation: Statement 1 is correct. The **Sexual Harassment of Women at Workplace** (**Prevention, Prohibition and Redressal) Act, 2013** recognizes the right of every woman to a safe and secure workplace environment irrespective of her age or employment/work status. Statement 2 is correct. As per the definition of "workplace" under section 2(o) it includes a dwelling place or a house. Therefore, your house is very much a workplace for your **domestic help**.

According to the Act, a **domestic worker** means a woman who is employed to do the household work in any household for remuneration whether in cash or kind, either directly or through any agency on a temporary, permanent, part time or full-time basis, but does not include any member of the family of the employer.

Statement 3 is incorrect. The Act provides for two kinds of complaints mechanisms: Internal Complaints Committee (ICC) and Local Complaints Committee (LCC). All Complaints Committees must have 50 per cent representation of women. ICC or LCC members will hold their position not exceeding three years from the date of their nomination or appointment.

Every employer is obliged to constitute an ICC through a written order and the District Officer will constitute an LCC in every district so as to enable women in the unorganised sector or small establishments to work in an environment free of sexual harassment.

Q.13) Which of the following is/are grounds provided under the Constitution for **reasonable** restrictions on freedom of speech and expression?

- 1. Defamation
- 2. Contempt of Court
- 3. Incitement to an offence

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: D

Explanation: Article 19(2) of the Constitution authorizes the government to impose, by law, reasonable restrictions upon the freedom of speech and expression.

It lists following grounds: The sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence.

Q.14) Consider the following statements regarding the **Legislative Councils:**

- 1. The total number of members in the Legislative Council of a State cannot be less than forty.
- 2. The Legislative Council of a State is subject to dissolution along with the Legislative Assembly every 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: A

Explanation: Statement 1 is correct. As per **article 171 of the Constitution** the total number of members in the Legislative Council of a State having such a Council shall **not exceed** one third of the total number of members in the Legislative Assembly of that State:

Provided that the total number of members in the Legislative Council of a State shall in no case be less than forty.

Statement 2 is incorrect. The provisions for the Legislative Councils are similar to that for Rajyasabha.

Article 172 of the Constriction provides that the Legislative Council of a State shall not be subject to dissolution, but as nearly as possible one-third of the members thereof shall retire as soon as may be on the expiration of every second year in accordance with the provisions made in that behalf by Parliament by law.

Q.15) Consider the following statements regarding the recommendations by the Fifteenth Finance Commission (XVFC):

- 1. XVFC has recommend that health spending by States should be increased to more than 8 per cent of their budget by 2022.
- 2. For all urban local bodies, 100 per cent of the grants are performance-linked.

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. XVFC has recommend that health spending by States should be increased to more than 8 per cent of their budget by 2022.

Given the inter-State disparity in the availability of medical doctors, it is essential to constitute an **All India Medical and Health Service** as is envisaged under Section 2A of the All-India Services Act, 1951.

Statement 2 is incorrect. The total size of the grant to local governments should be Rs. 4,36,361 crores for the period 2021-26.

Of these total grants, Rs. 8,000 crores is performance-based grants for incubation of new cities and Rs. 450 crores is for shared municipal services. A sum of Rs. 2,36,805 crores is earmarked for rural local bodies, Rs.1,21,055 crore for urban local bodies and Rs. 70,051 crores for health grants through local governments.

Urban local bodies have been categorized into two groups, based on population, and different norms have been used for flow of grants to each, based on their specific needs and aspirations. Basic grants are proposed only for cities/towns having a population of less than a million. For Million-Plus cities, 100 per cent of the grants are performance-linked through the Million-Plus Cities Challenge Fund (MCF).

Q.16) Consider the following statements regarding the Section 124A of the Indian Penal Code (IPC):

- 1. It criminalizes any attempts to excite disaffection towards the Government established by law in India.
- 2. The offence of sedition is punishable by death sentence.

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. **Section 124A of the IPC**, which deals with sedition, states, "Whoever, words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards the Government established by law in India shall be punished with imprisonment for life, to which fine may be added, or with imprisonment which may extend to three years, to which fine may be added, or with fine."

Statement 2 is incorrect. Sedition is a non-bailable offence. Punishment under the law varies from imprisonment up to **three years to a life term and fine**. A person charged under this law can't apply for a government job. They have to live without their passport and must present themselves in the court as and when required.

Q.17) Consider the following statements regarding the Interstate Migrant Workmen Act 1979:

- 1. This law is applicable to all the establishments employing five or more labors.
- 2. Employment of inter-State migrant workmen in any establishment is prohibited unless it is duly registered under this Act.

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 **Interstate Migrant Workmen (Regulation of Employment and Conditions of Service) Act 1979** is applicable to, every establishment in which **five or more interstate migrant workmen** (whether or not in addition to other workmen) are employed or who were employed on any day of the preceding twelve months.

Statement 2 is correct. Employment of inter-State migrant workmen in any establishment is prohibited unless it is duly registered under this Act.

Some of the important **duties of the employer** are:

- --Maintain the registers indicating the details of interstate workers and make available for scrutiny by the statutory authorities.
- --Principal employer shall be liable to bear the wages and other benefits to interstate workers in case of failure by the contractor to affect the same. Liable for the prescribed punishments for violations committed under this Act.

- --In case of any employment injury or fatal accident, ensure the same is informed to authorities of States concerned and to the kins of the deceased through the contractor.
- # NITI Aayog, along with a working subgroup of officials and members of civil society, has prepared a draft national migrant labour policy. It mentions that the Ministry of Labour and Employment should amend the 1979 Act for effective utilisation to protect migrants.

Q.18) Consider the following statements regarding the Anti Defection Law:

- 1. Voluntarily giving up of the membership of party does not amount to defection.
- 2. The law does not specify a time-period for the Presiding Officer to decide on a disqualification plea.

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 **Tenth Schedule** was inserted in the Constitution in 1985. It lays down the process by which legislators may be disqualified on grounds of defection by the Presiding Officer of a legislature based on a petition by any other member of the House.

A legislator is deemed to have defected if he either **voluntarily gives up** the membership of his party or disobeys the directives of the party leadership on a vote. This implies that a legislator defying (abstaining or voting against) the party whip on any issue can lose his membership of the House. The law applies to both Parliament and state assemblies.

Statement 2 is correct. The law **does not specify a time-period** for the Presiding Officer to decide on a disqualification plea. There have been several cases where the Courts have expressed concern about the unnecessary delay in deciding such petitions.

Q.19) Consider the following statements regarding parliamentary privileges in India:

- 1. According to the Constitution, the powers, privileges and immunities of Parliament are to be defined by Parliament.
- 2. No member of Parliament is liable to any proceedings in any court in respect of anything said by him in Parliamentary committee.

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. According to the **Constitution**, the powers, privileges and immunities of Parliament and MPs are to be defined by **Parliament**. No law has so far been enacted in this respect. In the absence of any such law, it continues to be governed by conventions.

Statement 2 is correct. The Constitution of India specifies some of the privileges. These are freedom of speech in Parliament; immunity to a member from any proceedings in any court in respect of anything said or any vote given by him in **Parliament or any committee thereof**;

immunity to a person from proceedings in any court in respect of the publication by or under the authority of either House of Parliament of any report, paper, votes or proceedings.

Q.20) Who among the following is eligible to vote by postal ballot in India?

- 1. Army personnel
- 2. Government employees posted outside India
- 3. A person under preventive detention

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: Several categories of citizens are eligible to vote through postal ballot in India in which a voter can cast her vote remotely by recording her preference on the ballot paper and sending it back to the election officer before counting.

Members of the armed forces like the **Army, Navy and Air Force**, members of the armed police force of a state (serving outside the state), government employees posted outside India and their spouses are entitled to vote only by post.

Voters under **preventive detention** are also allowed to vote through postal ballot.

The Election Commission of India (ECI) had written to the Law Ministry on November 27 last year with the proposal of extending postal ballots to overseas electors. This facility would not be extended to them for the upcoming elections to the Assam, Tamil Nadu, Puducherry, Kerala and West Bengal Assemblies.

Q.21) Consider the following statements regarding the **State Legislatures**:

- 1. The Legislative Council of a State is not subject to dissolution.
- 2. A person to be qualified to fill a seat in the Legislative Assembly must be older than thirty five years of age.
- 3. State Election Commission is mandated to conduct election to the Legislative Assemblies of States.

Which of the statements given above is/are correct?

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

Correct answer: A

Explanation: Statement 1 is correct. The **Legislative Council** of a State shall not be subject to dissolution, but as nearly as possible one third of the members thereof shall retire as soon as may be on the expiration of every second year in accordance with the provisions made in that behalf by Parliament by law.

Statement 2 is incorrect. As per article 173 of the Constitution a person shall not be qualified to be chosen to fill a seat in the Legislature of a State unless he—

--is a citizen of India, and makes and subscribes before some person authorised in that behalf by the Election Commission an oath or affirmation according to the form set out for the purpose in the Third Schedule;

--is, in the case of a seat in the Legislative Assembly, not less than twenty-five years of age and, in the case of a seat in the Legislative Council, not less than thirty years of age.

Statement 3 is incorrect. The **Election Commission of India** is the authority to conduct the elections to the State Legislatures.

