ForumIAS

F

Prelims Marathon 12th to 18th October,

2020

HISTORY
ECONOMICS
POLITY
SCIENCE AND TECHNOLOGY
GEOGRAPHY AND ENVIRONMENT

History

- **Q.1)** The "**Treaty of Sugauli**" is signed between British East India Company and which of the following?
- a) Bhutan
- b) Assam
- c) Myanmar
- d) Nepal

ANS: D

Explanation: The Treaty of Sugauli that established the boundary line of Nepal and colonial India was signed on 2 December 1815 and ratified by 4 March 1816 between the East India Company and King of Nepal following the Anglo-Nepalese War of 1814-16.

The signatory for Nepal was Raj Guru Gajraj Mishra aided by Chandra Sekhar Upadhaya the signatory for the Company was Lieutenant Colonel Paris Bradshaw.

Source: Spectrum

- **Q.2)** Which of the following "Governor-General of India" was responsible for suppression of thugs in India?
- a) Lord Warren Hastings
- b) Lord William Bentinck
- c) Lord Hastings
- d) Lord Dalhousie

ANS: B

Explanation: The name of **Lord William Bentinck** is still cherished in India for suppression of the Thugs. The thugs, i.e., cheats were a sect of hereditary assassins and robbers who lived by preying upon innocent and defenseless travelers.

Source: Spectrum

- Q.3) Which of the following statements is/are correct about the "General Committee of Public Instruction"?
- 1. It had the responsibility to grant one lakh of rupees for education.
- 2. All the members of the committee were Europeans.

Select the correct answer using the codes given below:

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

ANS: C

Explanation: In 1823, the Governor-General-in Council appointed a "General Committee of Public Instruction", which had the responsibility to grant one lakh of rupees for education.

- The **committee consisted of 10(ten) European members,** of which Lord Macaulay was the president.
- The committee decided to spend major portions from the grant for the improvement of oriental literature.

Created with love ♥ by ForumIAS- the knowledge network for civil services. Visit academy.forumias.com for our mentor based courses.

Source: Shodhganga

Q.4) Which of the following statements is/are correct about "Indigo Riots"?

- 1. Riots were started in Bengal and spread throughout the country.
- 2. "Neel Darpan" play vividly portrays the oppression by planters upon indigo farmers. Select the correct answer using the codes given below:
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

ANS: B

Explanation: Indigo was a commercial crop forced upon the peasantry by the Zamindars and British planters in the Zamindari areas of eastern India.

- At one point indigo cultivation was considered to be a symbol of India's slavery. Finally, in 1860 the terribly oppressed indigo peasants launched "Non-Cultivation of indigo" movements.
- Beginning with the ryots of Govindpur village in Nadia district of Bengal, the indigo strikes rapidly spread to other areas.
- By the spring of 1860, it totally covered all the indigo districts of Bengal.
- The indigo peasants got tremendous support from the intelligentsia and the press, as well as from the missionaries of Bengal.
- Outstanding in this respect was the role of Harish Chandra Mukherjee editor of Hindu Patriot.
- Dina Bandhu Mitra's play 'Neel Darpan' was to gain great fame for vividly portraying the oppression by planters upon indigo farmers.

Q.5) Which of the following statements is/are NOT correct about "Mahalwari system"?

- 1. Mahal or village is a fiscal unit to a collect rent.
- 2. It is prevailed in North-western, Central and Bombay provinces.

Select the correct answer using the codes given below:

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

ANS: B

Explanation: The settlement was **directly made with the village or Mahal by the Settlement Officers**, who fixed the rent with the consultation of Lambardar and the rent to be paid by the cultivating tenants.

- The system was known as Mauzawari in United Provinces, Malguzari in the Central Provinces, and village or mahali settlement in pre-independent Punjab.
- Mahal simply defined as a fiscal unit was a local area coincides with a large or forms a part of village or includes several parts of villages.
- Mahalwari system covered the most fertile tract of British India including Ganga-Jamuna Doab, major areas of Agra and Awadh Provinces, North Western Provinces, old Banares, the Ceded and Conquered districts and Later on it was extended to Central Provinces and the British Punjab.
- The **Ryotwari system of land revenue** was instituted in the late 18th century by Sir Thomas Munro, Governor of Madras in 1820.

- This was practiced in the Madras and Bombay areas, as well as Assam and Coorg provinces.
- In this system, the peasants or cultivators were regarded as the owners of the land.
- They had ownership rights, could sell, mortgage or gift the land.

Source: e-gyankosh

Q.6) Consider the following statements regarding the Abolition of Slavery in India:

- 1. Charter Act of 1813 had urged the Company to take steps to ameliorate the conditions of slaves.
- 2. Slavery was abolished in 1843 in British India.

Which of the statements given above is/are **NOT** correct?

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

ANS: A

Explanation: Slavery was abolished in the British Empire in 1833 and a cause was inserted in the Charter Act of 1833 requiring the Governor-General-in-Council to abolish slavery in India as soon as it could be safely and conveniently carried out.

Act V of 1843 declared slavery illegal in India and all existing slaves were emancipated without any compensation to the slave-owners.

Founder/President

C N Annadurai

Jyotirao Phule

Source: Spectrum

Q.7) Which of the following is/are correctly matched?

Organization :

- 1. South India Liberal Federation
- 2. Bahishkrit Hitkarni Sabha :
- 3. Sree Narayana Dharma Paripalana Yogam : Narayana Guru

Select the correct answer using the code given below:

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

ANS: D

Explanation: The Justice Party, earlier **South Indian Liberal Federation**, was a political party in the Madras Presidency of British India. It was established in 1916 by **Natesa Mudaliar and co-founded by T. M. Nair and P. Theagaraya Chetty** as a result of a series of non-Brahmin conferences and meetings in the presidency.

Bahishkrit Hitakarini Sabha is a central institution formed by **Dr. Babasaheb Ambedkar** for removing difficulties of the untouchables and placing their grievances before government.

S.N.D.P. means Sri Narayana Guru Dharma Paripalana Yogam or sangam. Narayana Guru through his socio religious teachings and writings has become so famous in the socio-religions and political scenario of Kerala during 19th century that all the young people turned towards the reformative movements of Sri Narayana Guru and voluntarially they have redesignated their former youth association (it's called Vivatu sangha) as S.N.D.P. It was registered as a joint stock company in January 1903 with Sri Narayana Guru as life time president.

Source: Spectrum

- **Q.8)** Lord Cornwallis had introduced many reforms to organize the civil services and to check corruption in East India Company. Which of the following is/are **measures** introduced by Lord Cornwallis?
- 1. Raising the civil servants' salary.
- 2. Strict enforcement of rules against private trade.
- 3. Enforcing promotions through merit.

Select the correct answer using the code given below:

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

ANS: C

Explanation: Cornwallis (governor-general, 1786-93) was the first to bring into existence and organise the civil services. He tried to check corruption through—

- raising the civil servants' salary,
- strict enforcement of rules against private trade,
- debarring civil servants from taking presents, bribes etc.,
- Enforcing promotions through seniority.

Source: Spectrum

- **Q.9)** "Political freedom is the life breath of a nation; to attempt social reform, educational reform, industrial expansion, the moral improvement of the race without aiming the first and foremost at political freedom, is the very height of ignorance and futility" is said by which of the following?
- a) Mahatma Gandhi
- b) Bal Gangadhar Tilak
- c) B R Ambedkar
- d) Aurobindo Ghose

ANS: D

Explanation: Sri Aurobindo was renowned and important personality in the history of the Indian resurgence and Indian nationalism.

- Aurobindo had a versatile brilliance. He was a great poet, a thoughtful thinker, a distinguished metaphysican, a great prophet and a passionate patriot.
- He wrote effective texts that represented the crystallization of the new and rising soul of India and given a spiritual message for humankind.
- He wrote that "Political freedom is the life-breath of a nation. To attempt social reform, educational reform, industrial expansion, the moral improvement of the race without aiming first and foremost at political freedom, is the very height of ignorance and futility.
- The primary requisite for national progress, national reform, is the habit of free and healthy national thought and action which is impossible in a state of servitude."

Source: NCERT

- **Q.10)** The term "Nineteen Memorandum" of National Movement of India is related to which of the following Indian National Congress Session?
- a) Nagpur Session 1920
- b) Lucknow Session 1916
- c) Lahore Session 1929
- d) Harpiura Session 1938

Created with love ♥ by ForumIAS- the knowledge network for civil services.

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



ANS: B

Explanation: The **Lucknow Session** of the congress is memorable for it marked the reunion of Moderate and Extremist parties after the Surat split (1907).

- Another noteworthy development was the Congress League Pact for acceptance of a united scheme of Constitutional reforms.
- Ninteen elected members of the Governor-General's Legislative Council prepared a memorandum, popularly known as 'Nineteen Memorandum', containing a different set of proposals and submitted it to the Viceroy in November 1916.

Their main recommendations were:

- all the Legislative Councils should have a substantial majority of elected members;
- the Legislative Councils should be large in size and enjoy larger powers in respect of legislation and finance;
- fiscal autonomy should be conceded to India; the provincial governments should be made autonomous;
- A full measure of Local-Self Government should be immediately granted.

Source: ICSE

Economy

Q.1) Which of the following is/are constraint/constraints for development of integrated value chain system of Agriculture sector?

- 1. Low public and private investments in agriculture since the early 1990s.
- 2. Inability to acquire land for setting up of market yards.
- 3. Poor maintenance of rural roads.

Select the correct answer using the code given below:

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

ANS: D

Explanation: constraint/constraints for development of integrated value chain system of Agriculture sector.

- Public and private investments in agriculture have remained low since the early 90s. Bottlenecks in implementation and a high degree of uncertainty have further reduced investor appetite for agricultural investments.
- Inability to acquire land for setting up of market yards, resulting from the restrictions on land leasing and land acquisition, is another major constraint.
- Even the existing marketing infrastructure suffers because of a lack of finances, manpower and proper facilities.
- Sub-market yards largely function as a location for government procurement and do not provide opportunities for open auction. Further, they are irregular in their operations and handle less than five per cent of the volume handled in principal yards.
- Poor maintenance of rural roads is a major constraint as well. Linkages with local and feeder roads remain sub-optimal.
- In the electricity sector, separate feeders for supply of power to agriculture and domestic electrification have not been carried out in many states.

Source: Ramesh Singh

Q.2) Which of the following is/are type/types of External Benchmark Rates?

- 1. Repo and Reverse repo rate
- 2. Government of India 3-Months Treasury bill yield published by the Financial Benchmarks India Private Ltd (FBIL).
- 3. Government of India 6-Months Treasury bill yield published by the Financial Benchmarks India Private Ltd (FBIL).

Select the correct answer using the code given below:

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

ANS: C

Explanation: The RBI has made it compulsory for banks to link their new floating rate home, auto and MSME loans to an external benchmark so that the borrowers can enjoy

lower rate of interest. All new floating rate personal or retail loans (housing, auto, etc.) and floating rate loans to Micro and Small Enterprises extended by banks from October 01, 2019 shall be benchmarked to one of the following:

- Reserve Bank of India policy repo rate
- Government of India **3-Months Treasury Bill** yield published by the Financial Benchmarks India Private Ltd (FBIL)
- Government of India 6-Months Treasury Bill yield published by the FBIL
- Any other benchmark market interest rate published by the FBIL.

Source: RBI

Q.3) Which of the following are **instruments of Monetary Policy** of Reserve Bank of India (RBI)?

- 1. Repo rate
- 2. Marginal Standing Facility
- 3. Open Market Operations (OMOs)
- 4. Bank Rate

Select the correct answer using the code given below:

- a) 1, 2 and 4 only
- b) 1, 2 and 3 only
- c) 1, 3 and 4 only
- d) 1, 2, 3 and 4

ANS: D

Explanation: There are several direct and indirect instruments that are used for implementing monetary policy.

- **Repo Rate:** The (fixed) interest rate at which the Reserve Bank provides overnight liquidity to banks against the collateral of government and other approved securities under the liquidity adjustment facility (LAF).
- **Reverse Repo Rate**: The (fixed) interest rate at which the Reserve Bank absorbs liquidity, on an overnight basis, from banks against the collateral of eligible government securities under the LAF.
- Marginal Standing Facility (MSF): A facility under which scheduled commercial banks can borrow additional amount of overnight money from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR) portfolio up to a limit at a penal rate of interest. This provides a safety valve against unanticipated liquidity shocks to the banking system.
- **Corridor:** The MSF rate and reverse repo rate determine the corridor for the daily movement in the weighted average call money rate.
- **Bank Rate:** It is the rate at which the Reserve Bank is ready to buy or rediscount bills of exchange or other commercial papers. The Bank Rate is published under Section 49 of the Reserve Bank of India Act, 1934. This rate has been aligned to the MSF rate and, therefore, changes automatically as and when the MSF rate changes alongside policy repo rate changes.
- Cash Reserve Ratio (CRR): The average daily balance that a bank is required to maintain with the Reserve Bank as a share of such per cent of its Net demand and time liabilities (NDTL) that the Reserve Bank may notify from time to time in the Gazette of India.
- **Statutory Liquidity Ratio (SLR):** The share of NDTL that a bank is required to maintain in safe and liquid assets, such as, unencumbered government securities, cash and gold. Changes in SLR often influence the availability of resources in the banking system for lending to the private sector.

Created with love ♥ by ForumIAS- the knowledge network for civil services. Visit academy.forumias.com for our mentor based courses.

- **Open Market Operations (OMOs):** These include both, outright purchase and sale of government securities, for injection and absorption of durable liquidity, respectively.
- Market Stabilization Scheme (MSS): This instrument for monetary management was introduced in 2004. Surplus liquidity of a more enduring nature arising from large capital inflows is absorbed through sale of short-dated government securities and treasury bills. The cash so mobilized is held in a separate government account with the Reserve Bank.

Source: RBI

Q.4) Consider the following statements regarding the **Negative Rate Policy**:

- 1. Under the negative rate policy, financial institutions are required to pay interest for parking excess reserves with the central bank.
- 2. The USA Fed reserve, euro area, Switzerland, Denmark, Sweden and Japan have allowed rates to fall slightly below zero.

Which of the statements given above is/are correct?

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

ANS: A

Explanation: Negative rate policy.

- Under a negative rate policy, financial institutions are required to pay interest for parking excess reserves with the central bank.
- That way, central banks penalize financial institutions for holding on to cash in hope of prompting them to boost lending.
- The **euro area, Switzerland, Denmark, Sweden and Japan** have allowed rates to fall slightly below zero.

Source: Indian Express

Q.5) Which of the following parameters are consists of International Monetary Fund (IMF) Quota Formula?

- 1. Weighted average of GDP.
- 2. Openness.
- 3. Contribution to IMF.
- 4. Economic variability.
- 5. International reserves.

Select the correct answer using the code given below:

- a) 1, 2, 3, 4 and 5
- b) 1, 2, 3 and 5 only
- c) 1, 2, 4 and 5 only
- d) 1, 2, 3 and 4 only

ANS: C

Explanation: When a country joins the IMF, it is assigned an initial quota in the same range as the quotas of existing members of broadly comparable economic size and characteristics. The IMF uses a quota formula to help assess a member's relative position.

• The current quota formula is a **weighted average of GDP** (weight of 50 percent), **openness** (30 percent), **economic variability** (15 percent), and **international reserves** (5 percent).

- For this purpose, **GDP** is measured through a blend of **GDP**—based on market exchange rates (weight of 60 percent) and on **PPP** exchange rates (40 percent).
- The formula also includes a "compression factor" that reduces the dispersion in calculated quota shares across members.

Source: IMF

Q.6) Consider the following statements regarding the **Index of Industrial Production (IIP)**:

- 1. The all-India IIP is being released as a monthly series since 1950.
- 2. The base year of IIP is 2014-15.
- 3. There is a lag of three weeks in the publication of the IIP index data after the reference month ends.

Which of the statements given above is/are NOT correct?

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

ANS: C

Explanation: In India, the first official attempt to compute the Index of Industrial Production (IIP) was made much earlier than the first recommendation on the subject came at the international level.

- The **Office of the Economic Advisor**, Ministry of Commerce and Industry made the first attempt of compilation and release of IIP with base year 1937, covering 15 important industries, accounting for more than 90% of the total production of the selected industries.
- The all-India IIP is being released as a monthly series since 1950. With the inception of the Central Statistical Organization in 1951, the responsibility for compilation and publication of IIP was vested with the same.
- When the index was commenced in India, the base year adopted was 1937 and this was revised successively to 1946, 1951, 1956, 1960, 1970, 1980-81, 1993-94, 2004-05 and recently to 2011-12.
- The IIP number measures the industrial production for the period under review, usually a month, as against the reference period. IIP is a key economic indicator of the manufacturing sector of the economy. There is a lag of six weeks in the publication of the IIP index data after the reference month ends.

Source: MoSPI

Q.7) Consider the following statements regarding the production of Milk in India:

- 1. India is the largest producer of milk in the world.
- 2. The production of milk is continuously increased in the last ten years.
- 3. The per capita availability of milk in India is less than 250grams/day.

Which of the statements given above is/are **NOT** correct?

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

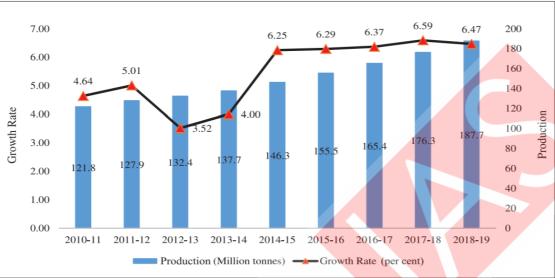
ANS: C

Explanation: Milk production in India.

• India continues to be the largest producer of milk in the world.

- Milk production in the country was 187.7 million tonnes in 2018-19 and registered a growth rate of 6.5 per cent over the previous year.
- The per capita availability of milk has reached a level of 394 grams per day during 2018-19.

Figure 4: Milk Production and its Growth Rate



Source: Department of Animal Husbandry & Dairying (DAHD)

Source: Economic Survey 2019-20

Q.8) Which of the following is/are consists of the Economic Cost of food-grains to Food Corporation of India (FCI)?

- 1. Pooled cost of grains
- 2. Procurement incidentals
- 3. Cost of distribution

Select the correct answer using the code given below:

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

ANS: A

Explanation: The Economic Cost of food-grains consists of three components, namely, pooled cost of grains, procurement incidentals and the cost of distribution. The pooled cost of food grains is the weighted MSP of the stock of food-grains available with FCI at the time of calculating the economic cost.

Source: Economic Survey 2019 - 20

Q.9) Private Entrepreneurs Guarantee (PEG) Scheme is related to which of the following?

- a) Export Sector
- b) Food storage
- c) Financial services
- d) None

ANS: B

Explanation: Private Entrepreneurs Guarantee Scheme was formulated in 2008, for construction of storage godowns in Public Private Partnership (PPP) mode through private entrepreneurs, Central Warehousing Corporation (CWC) and State Warehousing

Created with love ♥ by ForumIAS- the knowledge network for civil services. Visit academy.forumias.com for our mentor based courses.

Corporations (SWCs) to overcome storage constraints and ensure safe stocking of food-grains across the country.

- Assessment of additional storage capacities required under the scheme is based on the overall procurement/ consumption pattern and storage space already available.
- To augment the existing storage capacity, construction of godowns has been undertaken in PPP mode in 22 States under Private Entrepreneurs Guarantee (PEG) Scheme through private sector as well as CWC and SWCs.

Source: Ramesh Singh

Q.10) The term "Smurfing" is related to which of the following?

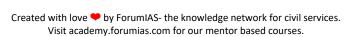
- a) Ransomware
- b) Money laundering
- c) Round tripping
- d) None

ANS: B

Explanation: Smurfing (also called structuring) is a method in which small sizes of money is kept in several number of bank accounts to hide the real identity of the real owner.

- This has been a very commonly used **method of money-laundering**.
- During the reform period, as more prudential norms of banking regulation evolved, such acts declined in India.
- 'Smurfer' (or 'money mule') is a person who does this.

Source: Ramesh Singh



Polity

- **Q.1)** The "Agreement on Reciprocal Logistics Support (ARLS)" is an agreement between India and which of the following country?
- a) Russia
- b) Iran
- c) Vietnam
- d) USA

ANS: A

Explanation: India and Russia are expected to conclude a mutual logistics agreement (Agreement on Reciprocal Logistics Support (ARLS) and review the setting up of joint ventures for manufacturing spares for Russian defense platforms in India. Logistics agreements are administrative arrangements facilitating access to military facilities for exchange of fuel and provisions on mutual agreement when the Indian military is operating abroad.

Source: Indian Express

Q.2) Which of the following statements is/are correct about "Automatic Exchange of Information (AEOI)"?

- 1. It is the exchange of information between countries with a formal request by recipient country.
- 2. Recently Switzerland has shared bank account details with the Indian government under the AEOI.

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

ANS: B

Explanation: The new global standard on Automatic Exchange of Information (AEOI) reduces the possibility for tax evasion.

- It provides for the exchange of non-resident financial account information with the tax authorities in the account holders' country of residence.
- Automatic Exchange of Information (AEOI) is the exchange of information between countries without having to request it.
- In the first tranche of information, Switzerland has shared bank account details with the Indian government under the AEOI (Automatic Exchange of Information) framework.

Source: The Hindu

- Q.3) Which of the following statements is/are correct about "Blue Dot Network"?
- 1. It is jointly launched by USA, Japan, Australia and India to counter China's Belt and Road Initiative (BRI).
- 2. It is launched on the sidelines of the 33rd ASEAN Summit in Singapore.
- 3. It is an initiative that aims to bring governments, the private sector and civil society together to promote "high quality, trusted standards for global infrastructure development".

Select the correct answer using the code given below:

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

ANS: C

Explanation: Blue Dot Network.

- Led by the US's International Development Finance Corporation (DFC), the Blue Dot network was jointly launched by the US, Japan (Japanese Bank for International Cooperation) and Australia (Department of Foreign Affairs and Trade) in November 2019 on the sidelines of the 34th ASEAN Summit in Thailand.
- It is meant to be a multi-stakeholder initiative that aims to bring governments, the private sector and civil society together to promote "high quality, trusted standards for global infrastructure development".

Source: Indian Express

Q.4) India is a member of which among the following?

- 1. Asia -Pacific Economic Cooperation
- 2. ASEAN
- 3. Regional Anti-Terrorist Structure (RATS)
- 4. Quad

Select the correct answer using the code given below:

- a) 1, 2 and 4 only
- b) 2 and 4 only
- c) 3 and 4 only
- d) 2, 3 and 4 only

ANS: C

Explanation:

- The Regional Anti-Terrorist Structure (RATS), headquartered in Tashkent, Uzbekistan, is a permanent organ of the SCO which serves to promote cooperation of member states against the three evils of terrorism, separatism and extremism.
- At SCO summit, held in Tashkent, Uzbekistan, on June 2004, the Regional Anti-Terrorist Structure (RATS) was established.
- The Head of RATS is elected to a three-year term. Each member state also sends a permanent representative to RATS.
- The **grouping of four democracies –India, Australia, US and Japan** known as the quadrilateral security dialogue or quad, was first mooted by Japanese Prime Minister Shinzo Abe in 2007.
- However, the idea couldn't move ahead with Australia pulling out of it, apparently due to Chinese pressure.
- With the aim to counter China's aggressive behaviour in the Indo-Pacific region, India, Australia, US and Japan, formed the "quadrilateral" coalition on November 12, 2017.
- India is not a member of both Asia-Pacific Economic Cooperation and ASEAN.

Source: The Hindu

- **Q.5)** With respect to World Economic Forum's Global Gender Gap Report 2020, India has improved its ranking in which of the following indicators?
- a) Political Empowerment
- b) Health and survival
- c) Educational attainment
- d) Economic participation

ANS: A

Explanation: Global Gender Gap Report, 2020 by World Economic Forum benchmarks 153 countries on their progress towards gender parity across four thematic dimensions:

- Economic Participation and Opportunity
- Educational Attainment
- Health and Survival, and
- Political Empowerment.

India slipped four places to 112th rank and has closed two-thirds of its overall gender gap (score of 66.8%). While India has improved in political empowerment, it has fallen in other three indicators. India is the only country among the 153 countries studied where the economic gender gap is larger than the political one.

Source: The Hindu

Q.6) Consider the following statements regarding the **Commission on the Status of Women (CSW)**:

- 1. It is the principal global intergovernmental body exclusively dedicated to the promotion of gender equality and the empowerment of women.
- 2. It is a functional commission of ECOSOC.
- 3. It monitors and reviews the progress and problems in the implementation of the Beijing Declaration and Platform for Action.

Which of the statements given above is/are correct?

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

ANS: D

Explanation: Commission on the Status of Women (CSW).

- The Commission on the Status of Women (CSW) is the principal global intergovernmental body exclusively dedicated to the promotion of gender equality and the empowerment of women.
- A functional commission of the Economic and Social Council (ECOSOC), it was established by ECOSOC resolution 11(II) of 21 June 1946.
- The CSW is instrumental in promoting women's rights, documenting the reality of women's lives throughout the world, and shaping global standards on gender equality and the empowerment of women.
- In 1996, ECOSOC in resolution 1996/6 expanded the Commission's mandate and decided that it should take a leading role in monitoring and reviewing progress and problems in the implementation of the Beijing Declaration and Platform for Action, and in mainstreaming a gender perspective in UN activities.

Source: Laxmikanth

Q.7) Consider the following statements regarding the Open Government Data Platform India:

- 1. It is a platform for supporting Open Data initiative of Government of India.
- 2. It is a joint initiative of Government of India and US 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

ANS: C

Explanation: Open Government Data (OGD) Platform India - data.gov.in - is a platform for supporting Open Data initiative of Government of India.

- The portal is intended to be used by Government of India Ministries/ Departments their organizations to publish datasets, documents, services, tools and applications collected by them for public use.
- It intends to increase transparency in the functioning of Government and also open avenues for many more innovative uses of Government Data to give different perspective.
- The Open Government Data Platform India is a joint initiative of Government of India and US Government.
- Open Government Data Platform India is also packaged as a product and made available in open source for implementation by countries globally.

Source: The Laxmikanth Governance

Q.8) The term "e-Pramaan" is related to which of the following?

- a) Land records
- b) Authentication
- c) Health services
- d) None

ANS: B

Explanation: e-Pramaan is a National e-Authentication service offered by DeitY.

- e-Pramaan provides a simple, convenient and secure way for the users to access government services via internet/mobile as well as for the government to assess the authenticity of the users.
- e-Pramaan builds up confidence and trust in online transactions and encourages the use of the e-services as a channel for service delivery.

Source: The Hindu

- **Q.9)** Which of the following is the **first state in India** to operationalise a law that makes **social audit** of government programmes and schemes a part of government practice?
- a) Meghalaya
- b) Tripura
- c) Andhra Pradesh
- d) Kerala

ANS: A

Explanation: Meghalaya became the first state in India to operationalise a law that makes social audit of government programmes and schemes a part of government practice. Chief

Minister of Meghalaya launched 'The Meghalaya Community Participation and Public Services Social Audit Act, 2017', at a national convention in Shillong.

Source: The Hindu

Q.10) Consider the following statements regarding the **Election Commission of India**:

- 1. It is a Permanent and Independent body.
- 2. It deals with elections to parliament, state legislature and local bodies.

Which of the statements given above is/are correct?

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

ANS: A

Explanation: The Election Commission is a **permanent and an independent body** established by the Constitution of India directly to ensure free and fair elections in the country.

- Article 324 of the Constitution provides that the power of superintendence, direction
 and control of elections to parliament, state legislatures, the office of president
 of India and the office of vice-president of India shall be vested in the election
 commission.
- Thus, the Election Commission is an all-India body in the sense that it is common to both the Central government and the state governments.
- It must be noted here that the election commission is not concerned with the elections to panchayats and municipalities in the states.

Source: Laxmikanth



Science and technology

Q.1) Which of the following statements is/are NOT correct about "Air Independent Propulsion (AIP) system"?

- 1. It is a technology which allows a nuclear submarine to operate without the need to access atmospheric oxygen.
- 2. India is self-sufficient in the AIP system and exports to other countries also. 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

ANS: C

Explanation: Submarines are essentially of two types: conventional and nuclear.

- Conventional submarines use a diesel-electric engine, and must surface daily for oxygen for fuel combustion.
- If fitted with an Air Independent Propulsion (AIP) system, the submarine needs to take in oxygen only once a week.
- The state-of-the-art "air independent propulsion" (AIP) system that the Defence R&D Organisation (DRDO) is indigenously developing will be ready to drive the Indian Navy's submarines from 2024 onwards.
- Consequently, this AIP will not power the six new submarines that the navy is tendering in a Rs 45,000crore programme called Project 75-I.
- Instead, those six boats (as the navy traditionally refers to submarines) will have AIP systems that the foreign vendor must offer.

Source: Indian Express

Q.2) The term "**Vyommitra**" is recently in news is related to which of the following?

- a) Half-humanoid robot
- b) Satellite radar system
- c) Space education portal
- d) None

ANS: A

Explanation: Vyommitra.

- Recently, Indian Space Research Organisation (ISRO) unveiled its first 'woman' astronaut, named Vyom Mitra who will ride to space in the first test flight of the human space mission, Gaganyaan.
- She is **half-humanoid** and her body stops at the torso and has no legs. She is capable of switching panel operations, performing Environment Control and Life Support Systems (ECLSS) functions, conversations with the astronauts, recognising them and solving their queries.

Source: The Hindu

Q.3) The terms "Antu, Kueyen, Melipal and Yepun" is related to which of the following?

- a) Asteroids
- b) Planets of Jupiter

- c) Telescope
- d) Radar systems

ANS: C

Explanation: Very Large Telescope array (VLT).

- The **Very Large Telescope array (VLT)** is the flagship facility for European ground-based astronomy at the beginning of the third Millennium.
- It is the world's most advanced optical instrument, consisting of four Unit Telescopes with main mirrors of 8.2m diameter and four movable 1.8m diameter Auxiliary Telescopes.
- The telescopes can work together, to form a giant 'interferometer', the ESO Very Large Telescope Interferometer, allowing astronomers to see details up to 25 times finer than with the individual telescopes.
- The large telescopes are named Antu, Kueyen, Melipal and Yepun.

Source: National Geographic Channel

Q.4) Which of the following statements is/are NOT correct about "Aditya L1 mission"?

- 1. It is first scientific expedition of ISRO to study Sun.
- 2. Aditya L1 satellite will be placed in the halo orbit around the Lagrangian point 1 (L1) of the sun-earth system.
- 3. It will be launched using the Geo-synchronous Satellite Launch Vehicle (GSLV) Mark-III. Select the correct answer using the code given below:
- a) 1 only
- b) 1 and 2 only
- c) 3 only
- d) 1, 2 and 3

ANS: C

Explanation: Aditya - L1 First Indian mission to study the Sun.

- The Aditya-1 mission was conceived as a 400kg class satellite carrying one payload, the Visible Emission Line Coronagraph (VELC) and was planned to launch in a 800 km low earth orbit.
- Satellite will be placed in the halo orbit around the Lagrangian point 1 (L1) of the Sun-Earth system has the major advantage of continuously viewing the Sun without any occultation/eclipses.
- Therefore, the Aditya-1 mission has now been revised to "Aditya-L1 mission" and will be inserted in a halo orbit around the L1, which is 1.5 million km from the Earth.
- The satellite carries additional six payloads with enhanced science scope and objectives.
- The project is approved and the satellite will be launched during 2019 2020 timeframe by PSLV-XL from Sriharikota.
- Aditya-1 was meant to observe only the solar corona. The outer layers of the Sun, extending to thousands of km above the disc (photosphere) is termed as the corona.
- It has a temperature of more than a million degree Kelvin which is much higher than the solar disc temperature of around 6000K.
- How the corona gets heated to such high temperatures is still an unanswered question in solar physics.

Source: ISRO

Q.5) Which of the following statements is/are correct about "Quantum Computers"?

- 1. Quantum computers use logical units called quantum bits that can be put into a quantum state where they can simultaneously represent both 0 and 1.
- 2. Quantum computers works at a temperature of -273 °C (-459 °F) with hardly any atmospheric pressure and isolated from Earth's magnetic field.

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

ANS: C

Explanation: Quantum Computers work by harnessing the properties of quantum mechanics.

- As the reality of a quantum computer comes closer, it is useful for us to understand both how one functions and how it's different from a traditional computer. The first thing to bear in mind is that they use different basic units of data: 'bits' and 'qubits'.
- Every element of a classical computer is written in binary code (1s and 0s) and is translated into electricity: high voltage is represented by 1, and low voltage by 0. In quantum computing, qubits are the basic unit and their value can be 1, 0, or 1 and 0 simultaneously, overlapping (superposition) and intertwining (entanglement) according to the laws of physics.
- This means that qubits, as opposed to bits, can take on various values at one time and can perform calculations that a conventional computer cannot.
- The classical computer, if there is interference with the system; the system can correct itself and continue running. For the time being, this is not the case with quantum computers.
- "External disturbances force the system to define itself as 1 or 0, causing it to lose its quantum coherence.
- To avoid this kind of external 'noise,' the system has to be completely isolated: the atoms have to be very quiet, ensuring nothing makes them collide or interact with the surroundings.
- Quantum computers have to be at a temperature of -273 °C (-459 °F) with hardly any atmospheric pressure and isolated from Earth's magnetic field.

Source: The Hindu

Q.6) Consider the following statements regarding the **gas hydrates**:

- 1. They are formed when a gas such as methane gets trapped in well-defined cages of water molecules forming crystalline solids.
- 2. They are formed naturally under the sea bed and glaciers under high pressure, low temperature conditions.

Which of the statements given above is/are correct?

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

ANS: C

Explanation: Gas hydrates.

- Gas hydrates are formed when a gas such as **methane gets trapped in well-defined cages of water molecules** forming crystalline solids.
- In terrestrial conditions, gas hydrates are formed naturally under the sea bed and glaciers under high pressure, low temperature conditions. Methane hydrate is a potential source of natural gas.
- Researchers at **Indian Institute of Technology (IIT) Madras** have experimentally shown that methane and carbon dioxide (CO2) can exist as gas hydrates at temperatures and pressures seen in interstellar atmosphere.
- The methane and CO2 hydrates were produced in the lab at very low pressures (ten thousand billionth of atmospheric pressure) and temperature (as low as -263 degree C) to simulate the conditions of deep space.

Source: Indian Express

Q.7) The term "Botulinum" is related to which of the following?

- a) Natural toxin
- b) Natural anesthesia drug
- c) Flu virus
- d) None

ANS: A

Explanation: Botulinum is a natural toxin produced by a bacterium known as Clostridium botulin. It produces the toxin when it starts reproducing.

- The bacterium is commonly found in the soil, river, and sea water.
- There are around **eight types** A, B, C1, C2, D, E, F, and G of botulinum toxin and they are distinguishable when diagnosed. But all types of toxins attack the neurons, which leads to muscle paralysis.
- **Botulinum affects both humans and animals** but the type of the toxin varies botulinum C in birds and A, B and E in humans. The toxin has been recognised as a major cause of mortality in wild birds since the 1900s.
- Avian botulism killed over 18,000 birds in and around Rajasthan's Sambhar Lake.

Source: The Hindu

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

- 1. It is a general name for the proteins found in fruits and vegetables.
- 2. It is used as an additive to improve texture and promote moisture retention in a variety of processed foods.

Which of the statements given above is/are **NOT** correct?

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

ANS: A

Explanation: Gluten.

- Gluten is a family of storage proteins formally known as prolamins that are naturally found in certain cereal grains, such as wheat, barley, and rye.
- Gluten offers a variety of functional culinary benefits and is responsible for the soft, chewy texture that is characteristic of many gluten-containing, grain-based foods.

 Because of these unique physical properties, gluten is also frequently used as an additive to improve texture and promote moisture retention in a variety of processed foods.

Gluten may be found in a variety of whole and processed foods, including:

- **Grains:** whole wheat, wheat bran, barley, rye, triticale, spelt, kamut, couscous, farro, semolina, bulgur, farina, einkorn, durum, wheat germ, cracked wheat, matzo, mir (a cross between wheat and rye)
- **Processed grain-based products**: crackers, bread, breadcrumbs, pasta, seitan, wheat-containing soba noodles, some veggie burgers, cookies, pastries
- Other foods and beverages: barley malt, malt vinegar, soy sauce, certain salad dressings, sauces or gravies thickened with flour, bouillon and some broths, certain spice blends, flavored chips, beer, certain kinds of wine.

Source: The Hindu

Q.9) Consider the following statements regarding **e-waste clinic**:

- 1. India's first e-waste clinic has been inaugurated in Bhopal, Madhya Pradesh.
- 2. It would enable segregation, processing and disposal of waste from both household and commercial units.
- 3. The clinic is set up in accordance with the Solid Waste Management Rules adopted in 2016.

Which of the statements given above is/are correct?

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

ANS: D

Explanation: India's first e-waste clinic has been inaugurated in Bhopal and will enable segregation, processing and disposal of electronic waste from both household and commercial units.

- It was set up by the Bhopal Municipal Corporation and the Central Pollution Control
- The e-waste clinic is developed on the bases of a three-month pilot project and, if successful, more clinics will be built throughout the country.
- The clinic is set up in accordance with the Solid Waste Management Rules adopted in 2016.

Source: The Hindu

Q.10) Consider the following statements regarding the **IndiGen programme**:

- 1. It aims to undertake whole genome sequencing of ten thousand Indian individuals representing diverse ethnic groups from India.
- 2. It is funded by the Council for Scientific and Industrial Research (CSIR).

Which of the statements given above is/are correct?

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

ANS: B

Explanation: IndiGen programme aims to undertake whole genome **sequencing of a thousand Indian individuals** representing diverse ethnic groups from India.

- The objective is to create a pilot dataset to enable genetic epidemiology of carrier genetic diseases towards enabling affordable carrier screening approaches in India.
- We also hope to mine allele frequencies for genetic variants for estimating population scale prevalence for diverse clinical applications.
- The human genome data sets would also be utilized for prioritizing Pharmacogenomics variants specific for Indian population for optimizing therapy and minimizing adverse events.
- IndiGen is funded by the Council for Scientific and Industrial Research (CSIR).

Source: CSIR

Geography

Q.1) Which of the following is/are **NOT** correctly matched?

Mechanism/Process:Rock1. Mechanically formed sedimentary rock:Sandstone2. Organically formed sedimentary rock:Rock salt3. Chemically formed sedimentary rock:Shale

Select the correct answer using the code given below:

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

ANS: C

Explanation: Sedimentary rocks are formed by the accumulation of sediments. There are three basic types of sedimentary rocks.

- Clastic sedimentary rocks such as breccia, conglomerate, sandstone, siltstone, and shale are formed from mechanical weathering debris.
- Chemical sedimentary rocks, such as rock salt, iron ore, chert, flint, some dolomites, and some limestone, form when dissolved materials precipitate from solution.
- **Organic sedimentary rocks** such as coal, some dolomites, and some limestone, form from the accumulation of plant or animal debris.

Source: NCERT

Q.2) Which of the following are examples of Fold Mountains?

- 1. Himalayas
- 2. Rockies
- 3. Alps

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) 1, 2 and 3

ANS: D

Explanation: Fold Mountains are created through a process called orogeny. An orogenic event takes millions of years to create a fold mountain.

- When a tectonic plate gets pressure from two sides, it gets folded. Some of its portion becomes elevated and forms the mountains.
- The depressions form the valleys. The Himalayas, the Rockies, the Andes and the Alps are examples of Fold Mountain.
- They are the young mountains of the world and hence they have some of the highest peaks of the world.

Source: NCERT

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

1. It is a large depression formed when a volcano erupts and collapses.

2. Crater Lake is an example of Caldera.

Which of the statements given above is/are NOT correct?

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

ANS: D

Explanation: A caldera is a large depression formed when a volcano erupts and collapses.

- During a volcanic eruption, magma present in the magma chamber underneath the volcano is expelled, often forcefully.
- When the magma chamber empties, the support that the magma had provided inside the chamber disappears.
- As a result, the sides and top of the volcano collapse inward. Calderas vary in size from one to 100 kilometers (0.62 to 62 miles) in diameter.
- Some calderas form a lake as the bowl-shaped depression fills with water. A **famous** example is Crater Lake, in Oregon.
- This caldera formed about 7,000 years ago when a stratovolcano, Mt. Mazama, violently erupted.
- For several thousand years after this eruption, smaller volcanic eruptions continued inside the caldera.
- One of these eruptions was so large it formed an island in Crater Lake named Wizard Island.

Source: National Geographic Channel

Q.4) Which of the following is NOT part of Great lakes of North America?

- a) Victoria
- b) Ontario
- c) Michigan
- d) Erie

ANS: A

Explanation: The Great Lakes are, from west to east: Superior, Michigan, Huron, Erie and Ontario.

- They are a dominant part of the physical and cultural heritage of North America.
- Shared with Canada and spanning more than 750 miles (1,200 kilometers) from west to east, these vast inland freshwater seas provide water for consumption, transportation, power, recreation and a host of other uses.

Source: Majid Hussain

Q.5) Which of the following factors are affecting the **ocean salinity**?

- 1. Evaporation
- 2. Freezing of Ice
- 3. Rivers
- 4. Wind flow

Select the correct answer using the code given below:

- a) 1, 2 and 3 only
- b) 2, 3 and 4 only
- c) 1, 3 and 4 only
- d) 1, 2, 3 and 4

ANS: D

Explanation: All waters in nature, whether rain water or ocean water, contain dissolved mineral salts. Salinity is the term used to define the total content of dissolved salts in sea water. Factors affecting ocean salinity are mentioned below:

- The salinity of water in the surface layer of oceans depends mainly on **evaporation** and **precipitation**.
- Surface salinity is greatly influenced in coastal regions by the **fresh water flow from** rivers, and in **Polar Regions by the processes of freezing and thawing of ice**.
- **Wind**, also influences salinity of an area by transferring water to other areas.
- The **ocean currents** contribute to the salinity variations. Salinity, temperature and density of water are interrelated. Hence, any change in the temperature or density influences the salinity of water in an area.

Source: NCERT

Q.6) Arrange the following **reservoirs of water on earth's surface** in ascending order of their percentage?

- 1. Oceans
- 2. Ice caps
- 3. Lakes
- 4. Streams and Rivers

Select the correct answer using the code given below:

- a) 3-4-2-1
- b) 4-3-2-1
- c) 3-4-1-2
- d) 4-3-1-2

ANS: B

Explanation: About 71 per cent of the planetary water is found in the oceans. The remaining is held as freshwater in glaciers and icecaps, groundwater sources, lakes, soil moisture, atmosphere, streams and within life.

Table 13.1: Water on the Earth's surface

Reservoir	Volume (Million Cubic km)	Percentage of the Total
Oceans	1,370	97.25
Ice Caps	29	2.05
and Glaciers Groundwater	9.5	0.68
Lakes	0.125	0.01
Soil Moisture	0.065	0.005
Atmosphere	0.013	0.001
Streams and Rivers	0.0017	0.0001
Biosphere	0.0006	0.00004

Source: NCERT

Q.7) Consider the following statements regarding the **Storm Surge**:

- 1. Storm surge is the abnormal rise in seawater level during a storm, measured as the height of the water above the normal predicted astronomical tide.
- 2. The amplitude of the storm surge at any given location depends on the orientation of the coast line with the storm track, the intensity, size, speed of the storm, and the local bathymetry.

Which of the statements given above is/are correct?

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

ANS: C

Explanation: Storm Surge.

- Storm surge is the **abnormal rise in seawater level during a storm**, measured as the height of the water above the normal predicted astronomical tide.
- The surge is caused primarily by a storm's winds pushing water onshore.
- The amplitude of the storm surge at any given location depends on the orientation of the coast line with the storm track;
- The intensity, size, and speed of the storm; and the local bathymetry.

Source: NOAA

Q.8) Consider the following statements regarding the Oceanic Rossby Waves:

- 1. Oceanic Rossby Waves are fast moving waves.
- 2. Oceanic Rossby Waves stretch horizontally across the planet for hundreds of kilometers in eastward direction.

Which of the statements given above is/are correct?

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

ANS: D

Explanation: Oceanic and atmospheric Rossby waves — also known as planetary waves — naturally occur largely due to the Earth's rotation. These waves affect the planet's weather and climate.

- Waves in the ocean come in many different shapes and sizes.
- Slow-moving oceanic Rossby waves are fundamentally different from ocean surface waves.
- Unlike waves that break along the shore, Rossby waves are huge, undulating movements of the ocean that stretch horizontally across the planet for hundreds of kilometers in a westward direction.
- They are so large and massive that they can change Earth's climate conditions.

Along with rising sea levels, King Tides, and the effects of El Niño, oceanic Rossby waves contribute to high tides and coastal flooding in some regions of the world.

Source: NOAA

Q.9) Which of the following is/are correctly matched?

Slash and burn agriculture Region

1. Jhumming : North-east India

2. Milpa : Indonesia and Malaysia

3. Ladang : Mongolia and northern China

Select the correct answer using the code given below:

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

ANS: A

Explanation: Primitive subsistence agriculture or shifting cultivation is widely practised by many tribes in the tropics, especially in Africa, south and Central America and south East Asia.

The vegetation is usually cleared by fire, and the ashes add to the fertility of the soil. Shifting cultivation is thus, also called slash and burn agriculture.

It is prevalent in tropical region in different names, e.g. **Jhuming in North eastern states** of India, Milpa in Central America and Mexico and Ladang in Indonesia and Malaysia. Source: NCERT

Q.10) The term "Kolkhoz" is related to which of the following?

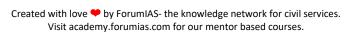
- a) Subsistence farming
- b) Collective farming
- c) Contract farming
- d) None

ANS: B

Explanation: Collective farming.

- The basic principle behind collective farming is based on social ownership of the means of production and collective labour.
- Collective farming or the model of Kolkhoz was introduced in erstwhile Soviet Union to improve upon the inefficiency of the previous methods of agriculture and to boost agricultural production for self-sufficiency.
- The farmers used to pool in all their resources like land, livestock and labour.

Source: NCERT



Environment

- Q.1) Consider the following statements regarding the Centre for Science and Environment (CSE):
- 1. It is an autonomous body under Ministry of Environment, Forest and Climate Change.
- 2. The India Environment Portal is initiated and managed by the Centre for Science and Environment (CSE).

Which of the statements given above is/are correct?

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

ANS: B

Explanation: The Centre for Science and Environment (CSE) is an independent, public interest organization (not-for-profit), which uses knowledge for activism.

- The Centre was started in 1980, by India's top environmentalist, Anil Agarwal and continues to work to push, prod and argue for environmental management in the country. It believes it can and must make a difference.
- The India Environment Portal is initiated and managed by the Centre for Science and Environment (CSE) promoted by the National Knowledge Commission (NKC), Government of India.

Source: CSE

- **Q.2)** Which of the following **Act mandates to create** Local level Biodiversity Management Committees (BMC's)?
- a) Indian Forests Act, 1927
- b) Environment Protection Act, 1986
- c) Biodiversity Act, 2002
- d) Forest Rights Act, 2006

ANS: C

Explanation: The Bruhat Bengaluru Mahanagara Palike (BBMP) has formed a Biodiversity Management Committee (BMC) as per the Bio Diversity Act of 2002, which mandates the establishment of BMCs at the local body level across the country.

- The committee will work towards conservation and promotion of biological diversity.
- The primary responsibility of the committee includes documentation of biological diversity, preservation of natural habitats, conservation of landrace, local and regional breeds of animals and plants.
- One of the important functions of the committee would be to prepare or help prepare People's Biodiversity Register (PBR), which will contain comprehensive information on local flora and fauna, traditional and scientific knowledge, and information associated with species.

Source: The Hindu

Q.3) Consider the following statements regarding the Centre for Biodiversity Policy and Law (CEBPOL):

- 1. It is established by Government of India in collaboration with the Norwegian Government.
- 2. It is a policy advocacy unit of the National Biodiversity Authority (NBA).

Which of the statements given above is/are correct?

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

ANS: C

Explanation: Government of India in collaboration with the Norwegian Government has established a "Centre for Biodiversity Policy and Law (CEBPOL)" in the National Biodiversity Authority (NBA), Chennai, to develop professional expertise in biodiversity policies and laws and develop capacity building.

- The Centre for Biodiversity Policy and Law (CEBPOL), a **policy advocacy unit of the National Biodiversity Authority**, came out with recommendations to increase India's agro-biodiversity in 2019.
- These include a comprehensive policy on 'ecological agriculture' to enhance native pest and pollinator population providing ecosystem services for the agricultural landscape.
- It suggested promotion of the bio-village concept of the M.S. Swaminathan Research Foundation (MSSRF) for ecologically sensitive farming;
- conserving crop wild relatives of cereals, millets, oilseeds, fibres, forages, fruits and nuts, vegetables, spices etc. for crop genetic diversity healthier food;
- Providing incentives for farmers cultivating native landrace varieties and those conserving indigenous breeds of livestock and poultry varieties.

Source: National Biodiversity Authority

Q.4) Which of the following is/are sites of Globally Important Agricultural Heritage Systems (GIAHS) in India?

- 1. Kashmir (saffron)
- 2. Koraput (traditional agriculture)
- 3. Kuttanad (below sea-level farming)

Select the correct answer using the codes given below:

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

ANS: A

Explanation: The Global Agricultural Heritage Systems (GIAHS) was started by Food and Agricultural Organization (FAO) for the purpose of creating public awareness and safeguarding the World agricultural heritage sites. **There are three regions of India, which has been recognised as the Global Agricultural Heritage Systems (GIAHS) cities in India: Koraput, Odisha State; Kashmir Valley, Pampore region; and Kuttanad.**

Source: UPSC Previous year papers

- **Q.5)** The **Prerana MyTree**, an eco-initiative by students is started in which of the following state?
- a) Kerala
- b) Karnataka
- c) West Bengal
- d) Odisha

ANS: B

Explanation: In the wake of 16-year-old Greta Thunberg's call for standing up for climate action, students all over the world are heeding her clarion call.

- On Children's Day, students in Bengaluru and Karnataka are doing their bit for the environment by planting trees.
- Prerana MyTree, an eco-initiative by students from 48,000 government schools across Karnataka will plant about 2.5 lakh trees across the state.
- Prerana MyTree is supported by the state government, the NGO Sikshana Foundation, Dell and Bengaluru-based startup, Eyeris Media.

Source: The Hindu

- **Q.6)** The Climate Change Performance Index (CCPI) ranks individual countries based on four categories. Which of the following are the **categories of CCPI**?
- 1. Green House Gas (GHG) Emissions
- 2. Renewable Energy
- 3. Climate Policy
- 4. Energy Use

Select the correct answer using the codes given below:

- a) 1, 2 and 3 only
- b) 1, 2 and 4 only
- c) 2, 3 and 4 only
- d) 1, 2, 3 and 4

ANS: D

Explanation: The CCPI (released by Germanwatch) is an independent monitoring tool of countries' climate protection performance.

- It aims to enhance transparency in international climate politics and enables the comparability of climate protection efforts and progress made by individual countries.
- The ranking results are defined by a country's aggregated performance in 14 indicators within the four categories "GHG Emissions", "Renewable Energy" and "Energy Use", as well as on "Climate Policy", in a globally unique policy section of the index.

Source: The Hindu

- Q.7) Consider the following statements regarding the drought forecasting tool box:
- 1. It was unveiled at 14th Conference of Parties (COP14) of the UN Convention to Combat Desertification (UNCCD).
- 2. It aims to track, assess and deliver relevant information concerning climatic, hydrologic and water supply trends.

Which of the statements given above is/are correct?

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

d) Neither 1 nor 2

ANS: C

Explanation: 'Drought-forecasting toolbox' was unveiled at UNCCD COP14 event. The 14th Conference of Parties (COP14) of the UN Convention to Combat Desertification (UNCCD) was held in Greater Noida, Uttar Pradesh.

- It aims to track, assess and deliver relevant information concerning climatic, hydrologic and water supply trends.
- It is developed through the close partnership among, UNCCD, World Meteorological Organization (WMO), Food and Agriculture Organization (FAO) and global bodies.

Source: Indian Express

- **Q.8)** The "**4 per 1000**" initiative, sometimes seen in news is related to which of the following?
- a) Renewable energy
- b) Electric vehicles
- c) Carbon stock
- d) Biodiversity conservation

ANS: C

Explanation: The international initiative "4 per 1000", launched by France on 1 December 2015 at the COP 21, consists of federating all voluntary stakeholders of the public and private sectors (national governments, local and regional governments, companies, trade organizations, NGOs, research facilities, etc.) under the framework of the Lima-Paris Action Plan (LPAP).

- The aim of the initiative is to demonstrate that agriculture, and in particular agricultural soils can play a crucial role where food security and climate change are concerned.
- An annual growth rate of 0.4% in the soil carbon stocks, or 4‰ per year, in the first 30-40 cm of soil, would significantly reduce the CO2 concentration in the atmosphere related to human activities.
- This growth rate is not a normative target for each country, but is intended to show that even a small increase in the **soil carbon stock** (agricultural soils, notably grasslands and pastures, and forest soils) is crucial to improve soil fertility and agricultural production and to contribute to achieving the long-term objective of limiting the temperature increase to the +2°C threshold, beyond which the IPCC (Intergovernmental Panel on Climate Change) indicates that the effects of climate change are significant.
- The "4 per 1000" initiative is intended to complement those necessary efforts to reduce greenhouse gas emissions, globally and generally in the economy as a whole. It is voluntary; it is up to each member to define how they want to contribute to the goals.

Source: The Hindu

- **Q.9)** Consider the following statements regarding the **1995 Basel Ban Amendment**:
- 1. It is a global waste dumping prohibition.
- 2. It was ratified by India.
- 3. It prohibits all hazardous exports from 29 wealthiest countries of the Organization of Economic Cooperation and Development (OECD) to non-OECD countries.

Which of the statements given above is/are correct?

a) 1 only

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

ANS: C

Explanation: The 1995 Basel Ban Amendment, a **global waste dumping prohibition**, has become an international law after Croatia ratified it on September 6, 2019.

- Croatia became the 97th country to ratify the ban, which was adopted by the parties to the Basel Convention in 1995, to protect human health and the environment against the adverse effects of hazardous wastes, according to Basel Action Network (BAN).
- The Ban Amendment prohibits all export of hazardous wastes, including electronic wastes and obsolete ships from 29 wealthiest countries of the Organization of Economic Cooperation and Development (OECD) to non-OECD countries.
- However, countries like the US, Canada, Japan, Australia, New Zealand, South Korea, Russia, India, Brazil, and Mexico are yet to ratify the ban.

Source: The Hindu

Q.10) Consider the following statements regarding the Nilgiri langur (s):

- 1. It is one of the New World Monkey.
- 2. It is endemic to Western Ghats in South India.
- 3. They are arboreal and diurnal in nature.

Which of the statements given above is/are correct?

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

ANS: C

Explanation: The Nilgiri langur, also known as the hooded leaf monkey, black leaf monkey, Indian hooded leaf monkey, John's langur, Nilgiri black langur, and the Nilgiri leaf monkey, is a **species of Old World monkey endemic to South India**.

- It is found in the Western Ghats, particularly in the Nilgiri Hills from which it derives its name, but also in other hilly areas in that region.
- They prefer to live between 980 and 6,500 ft (300–2,000 m) above sea level, and typically settle in at around 4,600 ft (1,400 m).
- Since they are an **arboreal species**, they seek out habitat with trees, and are known to inhabit secondary moist deciduous forests and evergreen forests. Other considerations include proximity to water and distance from humans.
- This is a **diurnal species**, meaning they are active during the day. While active, they spend approximately half of their time eating and the other half resting.

Source: Envis

Reports

- **Q.1)** Which of the following are the **founder members** of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)?
- 1. Bangladesh
- 2. India
- 3. Sri Lanka
- 4. Myanmar
- 5. Bhutan
- 6. Nepal
- 7. Thailand

Select the correct answer using the code given below:

- a) 1, 2, 3, 4 and 7 only
- b) 1, 2, 5, 6 and 7 only
- c) 1, 2, 3 and 7 only
- d) 1, 2 and 3 only

ANS: C

Explanation: The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional organization comprising seven Member States lying in the littoral and adjacent areas of the Bay of Bengal constituting a contiguous regional unity.

- This sub-regional organization came into being on 6 June 1997 through the Bangkok Declaration.
- It constitutes seven Member States: five deriving from South Asia, including Bangladesh, Bhutan, India, Nepal, Sri Lanka, and two from Southeast Asia, including Myanmar and Thailand.
- Initially, the economic bloc was formed with four Member States with the acronym 'BIST-EC' (Bangladesh, India, Sri Lanka and Thailand Economic Cooperation).
- Following the inclusion of Myanmar on 22 December 1997 during a special Ministerial Meeting in Bangkok, the Group was renamed 'BIMST-EC' (Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic Cooperation).
- With the admission of Nepal and Bhutan at the 6th Ministerial Meeting (February 2004, Thailand), the name of the grouping was changed to 'Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation' (BIMSTEC).

Source: BIMSTEC

- **Q.2)** Which of the following country is recently **re-joined** the Commonwealth group?
- a) Sri Lanka
- b) Syria
- c) Omen
- d) Maldives

ANS: D

Explanation: The **Maldives re-joined the Commonwealth**, more than three years after the Indian Ocean island nation quit the association amid mounting criticism of its human rights record then.

- In 2016, the Maldives pulled out of the Commonwealth terming "unjust" the grouping's decision to penalise the country over former President Mohamed Nasheed's controversial ouster in 2012.
- It followed the Commonwealth Ministerial Action Group (CMAG)'s warning to Maldives of suspension from the bloc, voicing "deep disappointment" over the country's lack of progress in resolving the political crisis during former President Abdulla Yameen's presidency, whose authoritarian slant sparked concern domestically and internationally.

Source: Indian Express

Q.3) Consider the following statements regarding the **G-20**:

- 1. It is an inter-governmental treaty between 19 member countries and European Union.
- 2. It was created after the collapse of Soviet Russia to promote economic growth among developing and developed countries.
- 3. It has members from every continent.

Which of the statements given above is/are correct?

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

ANS: C

Explanation: The Group of Twenty, or the G20, is the **premier forum for international** economic cooperation.

- The G20 brings together the leaders of both developed and developing countries from every continent.
- Collectively, G20 members represent around 80% of the world's economic output, two-thirds of global population and three-quarters of international trade.
- Throughout the year, representatives from G20 countries gather to discuss financial and socioeconomic issues.
- **Originated in 1999** at the level of Finance Ministers and Central Bank Governors, the G20 gathered for high-level discussions on macro-financial issues.
- In the wake of the 2008 global financial crisis, the G20 was elevated to include the leaders of member countries.
- The first G20 Leaders' Summit took place in Washington D.C. in November 2008.
- Consequently, the G20 agenda expanded beyond macro-financial issues, to include socio-economic and development issues.

Source: The Hindu

- **Q.4)** The term **Principle of Non-Refoulement** often seen in news is related to which of the following?
- a) Economic offender
- b) Refugees
- c) Right to property
- d) Polluter pay principle

ANS: B

Explanation: Non-refoulement is a fundamental principle of international law.

• It prohibits states from forcibly returning **refugees** to conditions that caused them to flee their homes in the first place, where they would be likely in danger of

persecution based on race, religion, nationality, membership of a particular social group or political opinion.

• It is also in charge of the exchequer control and internal audits.

Source: The Hindu

Q.5) Which of the following pair (s) is/are **NOT** correctly matched?

Organization : Founder

Dharma Sabha
 Raja Radhakant Deb
 Tattvabodhini Sabha
 Rabindranath Tagore
 Brahmo Samaj of India
 Rammohan Roy
 Select the correct answer using the codes given below:

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

ANS: C

Explanation: Dharma Sabha: The orthodox Hindu led by **Raja Radhakant Deb** organised the 'Dharma Sabha' with the object of countering the propaganda of BrahmoSamaj.

Tatvabodhini Sabha: **Debendranath Tagore**, father of Rabindranath Tagore founded the Tatvabodhini Sabha in 1839 to propagate Rammohun Roy's ideas. The Tatvabodhini Sabha and its organ the Tatvabodhini Patrika promoted a systematic study of India's past in Bengali language and helped spread rational outlook.

Brahmo Samaj of India: **Keshubsen** and his followers broke away from Brahmo samaj in 1866 and established what was called the 'Brahmo Samaj of India'.

Source: e-gyankosh

Q.6) Consider the following statements regarding the Directorate General of Foreign Trade (DGFT) organization:

- 1. Its mandate is to formulating and implementing the Foreign Trade Policy with the main objective of promoting India's exports.
- 2. It is an attached office of the Ministry of Commerce and Industry.

Which of the statements given above is/are correct?

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

ANS: C

Explanation: Directorate General of Foreign Trade (DGFT) **organization is an attached office of the Ministry of Commerce and Industry** and is headed by Director General of Foreign Trade.

- Right from its inception till 1991, when liberalization in the economic policies of the Government took place, this organization has been essentially involved in the regulation and promotion of foreign trade through regulation.
- Keeping in line with liberalization and globalization and the overall objective of increasing of exports, DGFT has since been assigned the role of "facilitator".
- The shift was from prohibition and control of imports/exports to promotion and facilitation of exports/imports, keeping in view the interests of the country.

- This Directorate, with headquarters at New Delhi, is responsible for formulating and implementing the Foreign Trade Policy with the main objective of promoting India's exports.
- The DGFT also issues scrips/authorization to exporters and monitors their corresponding obligations through a network of 38 regional offices and an extension counter at Indore.

Source: DGFT

Q.7) Which of the following is/are correctly matched?

Committee/Panel : Significance

Ranga Rajan Committee : Balance of Payments
 Vijay Kelkar Committee : Goods & Service Tax
 Tarapore Committee : Currency Convertibility

Select the correct answer using the codes given below:

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

ANS: A

Explanation: Besides, economic reforms in various sectors, various Committees were set up from time to time (by the Government of India and by RBI) to discuss policy issues related to international trade and balance of payments.

Some of the important Committees were -

- Committee on Export Import Policies & Procedures (Alexander Committee, 1978),
- Committee on Trade policy (Abid Hussain Committee, 1984),
- High level Committee on Balance of Payments (Rangarajan Committee 1993), and
- Committee on Capital Account Convertibility (Tarapore Committee I 1997 & Tarapore Committee II 2006).

In 2003, the Vajpayee government forms a task force under Vijay Kelkar to recommend tax reforms. In 2004, Vijay Kelkar, then advisor to the Finance Ministry, recommends GST to replace the existing tax regime.

Source: Ramesh Singh

- **Q.8)** The "Global Social Mobility Index" is released by which of the following International Institution?
- a) UNESCO
- b) United Nations Development Programme (UNDP)
- c) World Economic Forum (WEF)
- d) UNICEF

ANS: C

Explanation: India has been ranked very low at 76th place out of 82 countries on a **new Social Mobility Index compiled by the World Economic Forum**, while Denmark has topped the charts.

The report, released ahead of the 50th Annual Meeting of the WEF, also lists India among the five countries that stand to gain the most from a better social mobility score that seeks to measure parameters necessary for creating societies where every person has the same opportunity to fulfill his potential in life irrespective of socioeconomic background.

Source: The Hindu

Q.9) Consider the following statements regarding the World Population Prospects 2019 report:

- 1. It is published and released by United Nations (UN).
- 2. According to the report, India is projected to overtake China as the world's most populous country by 2050.

Which of the statements given above is/are correct?

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

ANS: A

Explanation: The key message from the **UN's World Population Prospects 2019 report** is that national leaders must redouble their efforts to raise education, health and living standards for people everywhere.

- India is projected to become the most populous country by 2027 surpassing China, and host 1.64 billion people by 2050;
- The world as a whole could be home to 8.5 billion people in just over a decade from now, and the number could go up to 9.7 billion by mid-century.
- The largest increases in population between 2019 and 2050 will take place in: India, Nigeria, Pakistan, the Democratic Republic of the Congo, Ethiopia, the United Republic of Tanzania, Indonesia, Egypt and the United States of America (In descending order of the expected increase).
- The UN report shows migration to countries with a falling ratio of working-age people to those above 65 will be steady, as those economies open up to workers to sustain economic production.
- Japan has the lowest such ratio, followed by Europe and the Caribbean; in over three decades, North America, Eastern and Southeastern Asia will join this group.
- India meanwhile will have a vast number of young people and insufficient natural resources left for exploitation. Preparing for the changes and opportunities migration offers will depend on a skills revolution.

Source: The Hindu

- **Q.10)** According to the International Labour Organization (ILO) report, working on a warmer planet: The impact of heat stress on labour productivity and decent work, which of the following **sector** is the most affected?
- a) Agriculture sector
- b) Manufacturing sector
- c) Construction business
- d) Service sector

ANS: A

Explanation: According to the International Labour Organization (ILO) report, Working on a warmer planet: The impact of heat stress on labour productivity and decent work, **Globally** two sectors projected to be hit worst are agriculture and construction, with agriculture worse affected.

- The ILO says 940 million people around the world work in the agricultural sector, which is projected to account for 60% of working hours lost due to heat stress by 2030.
- In construction, an estimated 19% of global working hours are likely to be lost.

Source: The Hindu