# **ForumIAS**



# **Prelims Marathon**

1st to 8th November, 2020

HISTORY
ECONOMICS
POLITY
SCIENCE AND TECHNOLOGY
GEOGRAPHY AND ENVIRONMENT

## History

- Q.1) The term "shroffs" in 16th and 17th century is related to which of the following?
- a) Money exchangers
- b) Village headman
- c) Village protectors
- d) Village artisans

#### ANS: A

**Explanation:** Commercial institutions were also well-developed to promote such extensive trade.

- Because a variety of coins were in circulation, there were money-changers or shroffs to test coins for their purity and decide their value in current terms.
- They also served as local bankers.

Source: NCERT

- **Q.2)** With reference to European rulers/traders, the term "Batavia" is related to which of the following country?
- a) Myanmar
- b) Gulf of Siam
- c) Indonesia
- d) Ceylon

#### ANS: C

**Explanation:** In early 18th Century the Dutch had given up Pulicat and moved their headquarters further south to Nagapattinam.

They had decided to shift their focus to the spice-producing islands of Indonesia and established their capital at Jakarta (Batavia).

Source: NCERT

- **Q.3)** The "Cartaz system protection against piracy" was introduced by which of the following colonial power in India?
- a) Chinese
- b) Portuguese
- c) French
- d) English

#### ANS: B

Explanation: The Portuguese threatened disruption of trade by violence unless their protection, cartaz, was bought.

- Under the cartaz system, the Portuguese exacted money from the traders as price for protection against what they termed as piracy.
- But much of this was caused by Portuguese freebooters themselves and so the whole system was a blatant protection racket.

Source: NCERT

**Q.4)** Which of the following pair (s) is/are **NOT** correctly matched?

Freaty : Governor General

1. Treaty of Perpetual friendship : Lord Hastings

2. Treaty of Bassein : Lord Wellesley3. Treaty of Salbai : Warren Hastings

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: A

**Explanation: Treaty of Salbai**: It was signed on 17 May 1782, by representatives of the Maratha Empire and the British East India Company after long negotiations to settle the outcome of the First Anglo-Maratha War it was signed between Warren Hastings and Mahadaji Scindia.

**Treaty of Bassein**: It was a pact signed on December 31, 1802 between the British East India Company (Lord Wellesley) and Baji Rao II, the Maratha peshwa of Pune (Poona) in India after the Battle of Poona.

The treaty was a decisive step in the dissolution of the Maratha Confederacy, which led to the East India Company's usurpation of the peshwa's territories in western India in 1818.

**Treaty of Perpetual friendship**: Maharaja Ranjit Singh, also called Sher-i-Punjab was born November 1780 at Gujranwala. When he was 12 years old he became the chief of his own misl after the death of his father in 1792.

Ranjit Singh wanted to annex Sind but could not do so because of the English opposition. In 1831 he signed the treaty of perpetual friendship with the English (William Bentinck). Source: NCERT

## Q.5) The "Zeliangrong or Haomei movement" was related to which of the following area?

- a) Chotanagpur plateau
- b) Mumbai presidemcy
- c) Mizo Hills
- d) Naga Hills

#### ANS: D

**Explanation:** The ongoing national movement influenced the tribal movements in the early decades of 20th century: The Tana Bhagat movement of Gumla in Ranchi district, and the **Zeliangrong movement in the Naga Hills** were two such instances.

- Jadonang (1905-193 I), who set up the Haraka religious cult with three basic objectives started the complex Zeliangrong or Haomei movement in 1925.
- The first aimed at reformation of the tribes, particularly the Zemi, Liangrnei and Rangmei, to enable them to face the onslaught of Christianity.
- Secondly, the overthrows of the exploitative colonial laws by attacking British rule.
- And third, establishment of the Naga Raj.
- The movement was also aimed against the Kuki tribe, the "outsider".
- From 1927 onwards, influenced by Gandhi, Jadonang began a civil disobedience movement in the area.
- On 13 June 1931, Jgdonang was arrested and sentenced to death, and finally hanged on 29 August 1931

Source: NCERT

Q.6) Which of the following pair (s) is/are NOT correctly matched?

Museum:State1. Calico Museum:Kerala

2. Janapadaloka Museum : Karnataka3. National Museum : New Delhi

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

#### ANS: A

**Explanation:** Chariots were primarily used in south Indian temples; in some, new chariots have been replaced old ones.

- If the chariots become very old and fragile, or caught with fire or even damaged beyond repair, they are not be drawn during Rathotsava but abandoned outside the town in an open field.
- They are acquired by the museums and private collectors, who restore and place them in museums.
- Today, we can see a massive chariot beautifully positioned in the newly built
  Manjusha Museum at Dharmasthala (Karnataka), Calico Museum at
  Ahemadabad, Janapadaloka at Ramnagar (Karnataka), and Government
  Museum at Kanyakumari and at the National Museum in New Delhi.

Source: The Hindu

# Q.7) Consider the following statements regarding the Indian National Trust for Art and Cultural Heritage (INTACH):

- 1. It was founded in 1984 with the vision to spearhead heritage awareness and conservation in India.
- 2. It is an autonomous body under Ministry of Culture.

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: B

**Explanation:** The Indian National Trust for Art and Cultural Heritage (INTACH) was founded in 1984 in New Delhi with the vision to spearhead heritage awareness and conservation in India.

- Today INTACH is recognized as one of the world's largest heritage organizations, with over 190 Chapters across the Country.
- In the past 31 years INTACH has pioneered the conservation and preservation of not just our natural and built heritage but intangible heritage as well.
- Headquartered in New Delhi, it operates through various divisions such as Architectural Heritage, Natural Heritage, Material Heritage, Intangible Cultural Heritage, Heritage Education and Communication Services (HECS), Crafts and Community Cell, Chapters, INTACH Heritage Academy, Heritage Tourism, Listing Cell and Library, Archives and Documentation Centre.

Source: The Hindu

- Q.8) "Jogimara caves" of pre-historic paintings are located in which of the following state?
- a) Madhya Pradesh
- b) West Bengal

- c) Bihar
- d) None

#### ANS: D

**Explanation:** Some of the paintings from the later period can be seen in the Jogimara caves in the Ramgarh hills in Surguja district of Chhattisgarh. These are dated to be painted around 1000 BCE.

- Chhattisgarh is also home to the variety of caves in the district of Kanker like the shelter of Udkuda, Garagodi, Khairkheda, Gotitola, Kulgaon, etc.
- These shelters depict the human figurines, animals, palm prints, bullock carts, etc. which show a higher and sedentary type of living.

Source: Nitin Singhania

**Q.9)** In 1859, the British passed a **Limitation Law** that stated that the loan bonds signed between moneylenders and ryots would have validity for how many years?

- a) One year
- b) Three years
- c) Five years
- d) Seven years

#### ANS: B

**Explanation:** The ryots came to see the moneylender as devious and deceitful.

- They complained of moneylenders manipulating laws and forging accounts.
- In 1859 the British passed a Limitation Law that stated that the loan bonds signed between moneylenders and ryots would have validity for only three years.
- This law was meant to check the accumulation of interest over time.

Source: NCERT

**Q.10) "New India and Commonweal"** newspapers are started by whom among the following?

- a) Subhash Chandra Bose
- b) Gandhiji
- c) Bal Gangadhar Tilak
- d) Annie Besant

#### ANS: D

**Explanation:** By early 1915, Annie Besant had launched a campaign to demand self-government for India after the war on the lines of white colonies.

- She campaigned through her newspapers, New India and Commonweal, and through public meetings and conferences.
- At the annual session of the Congress in 1915, the efforts of Tilak and Besant met with some success. It was decided that the Extremists be admitted to the Congress.
- Although Besant failed to get the Congress to approve her scheme of Home Rule Leagues, the Congress did commit itself to a programme of educative propaganda and to a revival of local-level Congress committees.
- Not willing to wait for too long, Besant laid the condition that if the Congress did not implement its commitments, she would be free to set up her own league-which she finally had to, as there was no response from the Congress.

Source: NCERT

## **Economy**

- **Q.1)** Which of the following principle/reform is **NOT** part of "Washington Consensus"?
- a) Fiscal Discipline
- b) Fixed exchange rate
- c) Market determined interest rates
- d) Privatization

#### ANS: B

**Explanation:** The term 'Washington Consensus' was coined by the US economist John Williamson (in 1989) under which he had suggested a set of policy reforms which most of the official in Washington (i.e., International Monetary Fund countries of the time. The policy reforms included ten propositions:

- Fiscal discipline
- A redirection of public expenditure priorities toward fields offering both high economic returns and the potential to improve income distribution, such as primary health care, primary education, and infrastructure.
- Tax reform (to lower marginal rates and broaden the tax base)
- Interest rate liberalisation
- A competitive exchange rate
- Trade liberalisation
- Liberalisation of FDI inflows
- Privatisation
- Deregulation (in the sense of abolishing barriers to entry and exit)
- Secure property rights

Source: Ramesh Singh

- **Q.2)** The economic idea of "Interventionist state" was given by which of the following economist?
- a) Adam Smith
- b) David Ricardo
- c) Karl Marx
- d) J M Keynes

#### ANS: D

**Explanation:** In the aftermath of the Great Recession (after the 'US sub-prime' crisis) in the Western economies, it is believed that dependence on market to correct the growth and development may not sustain any longer—and the world might agree in favour of a development state, as in the case of the East Asian nations which never went for the Consensus for their robust growth.

The Keynesian idea of 'interventionist state' seems the ultimate alternative in the present times, as is suggested by the US Nobel economist Paul Krugman and being followed by the Japanese Prime Minister, Shinzo Abe (the Three Arrows of Abenomics).

Source: Ramesh Singh

- **Q.3)** Which of the following is/are the characteristic/s of Indian economy?
- 1. The contribution of primary sector in the GDP has fallen down regularly.
- 2. The dependency of population on the primary sector for employment is still high.

Which 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:** Indian economy did show some traits which were unique:

- The contribution of primary sector in the GDP has fallen down regularly and today it stands at 14.1 %.
- The dependency of the population on the primary sector for employment is still high is a symptom of agrarian economy.
- The expansion of industries was not sufficient to attract labour from the primary sector activities.

Source: Ramesh Singh

## Q.4) Consider the following statements regarding "World Development Report":

- 1. It was launched by United Nations along with lines of Human Development Report (HDR).
- 2. It is a biannual report.
- 3. It provides in-depth analysis of a specific aspect of economic development.

Which of the statements above given is/are correct?

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

## ANS: D

**Explanation:** The World Development Report is an annual report published since 1978 by the International Bank for Reconstruction and Development or World Bank. Each WDR provides in-depth analysis of a specific aspect of economic development.

Source: World Bank

- **Q.5)** "SAMRUDHI is a new state agriculture policy (SAP)" is recently in news is launched by which of the following state?
- a) Kerala
- b) Andhra Pradesh
- c) Madhya Pradesh
- d) Odisha

#### ANS: D

**Explanation:** The Odisha government launched its new State Agricultural Policy (SAP) 2020-SAMRUDHI that focuses on profitability for farmers.

- Samrudhi is focused on the social and economic well-being of farmers, sharecroppers and landless agriculture households.
- It aims to actualise the untapped potential of agriculture, while ensuring growth process is environmentally, economically and technologically inclusive.
- It is based on an 8-pillar strategy focused on simultaneous reforms.

Source: The Hindu

**Q.6)** The "**Prompt Corrective Action (PCA)**" framework is seen in news is related to which of the following?

- a) Banking sector
- b) Insurance sector
- c) Disinvestment
- d) Foreign exchange

#### ANS: A

**Explanation:** Prompt Corrective Action or PCA is a framework under which banks with weak financial metrics are put under watch by the RBI.

- The PCA framework deems banks as risky if they slip below certain norms on three parameters capital ratios, asset quality and profitability.
- It has three risk threshold levels (1 being the lowest and 3 the highest) based on where a bank stands on these ratios.
- Banks with a capital to risk-weighted assets ratio (CRAR) of less than 10.25 per cent but more than 7.75 per cent fall under threshold 1.
- Those with CRAR of more than 6.25 per cent but less than 7.75 per cent fall in the second threshold.
- In case a bank's common equity Tier 1 (the bare minimum capital under CRAR) falls below 3.625 per cent, it gets categorized under the third threshold level.
- Banks that have a net NPA of 6 per cent or more but less than 9 per cent fall under threshold 1, and those with 12 per cent or more fall under the third threshold level.
- On profitability, banks with negative return on assets for two, three and four consecutive years fall under threshold 1, threshold 2 and threshold 3, respectively.

Source: Hindu - Business line

- Q.7) Which of the following is/are direct tax/taxes in India?
- 1. Minimum Alternate Tax
- 2. Dividend Distribution Tax
- 3. Securities Transactions Tax

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:** As the name suggests these taxes are directly paid by the assesse to the government. These are not paid on behalf of the taxpayers but are imposed directly by the regulator.

Furthermore, this liability is non-transferable to another taxpayer. Different types of direct taxes in India are:

- **Corporate tax:** Such tax is levied on domestic companies that are different from the shareholders. This tax is also payable by foreign corporations whose income arises or is deemed to arise in India. Income earned as interest, royalties, dividends, technical services fees, or gains through the sale of assets based in India is taxable. Corporate tax also includes the following:
- **Minimum Alternate Tax (MAT):** Levied on zero tax companies whose accounts are prepared as per the guidelines of the Companies Act.
- **Fringe Benefits Tax:** Such direct tax is paid by companies on fringe benefits (drivers, maids, etc.) provided to employees.

- **Dividend Distribution Tax (DDT):** This tax is levied on any amounts that are declared, distributed, or paid by domestic entities as dividends to the shareholders; foreign companies are exempt from DDT.
- **Securities Transaction Tax (STT):** This liability arises from income earned through taxable securities transactions.

Source: Financial Express

## Q.8) The "Ricardian Equivalence" term is related to which of the following?

- a) International Trade
- b) Government Deficits (fiscal and revenue)
- c) Banking reforms
- d) Agriculture sector

#### ANS: B

**Explanation:** An idea which (generated too much controversies) originally suggested by David Ricardo (1772–1823) and more recently by Barro, that government deficits do not affect the overall level of demand in an economy.

- This is because tax-payers know that any deficit has to be paid later, and so they increase their savings in anticipation of a higher tax bill in future;
- Thus government attempts to stimulate an economy by increasing public spending or cutting taxes, will be rendered impotent by private sector reaction.
- The equivalence can be seen as part of a thread of economic thinking which holds that only decisions about real variables (e.g., consumption and production) matter, and that decision about financing will, in a perfectly functioning market, never have an effect.

Source: Ramesh Singh

## Q.9) "Special Safeguard Mechanism" of WTO is related to which of the following?

- a) Agriculture sector
- b) Insurance sector
- c) Manufacturing sector
- d) Shipping sector

#### ANS: A

**Explanation:** In recent times, India has become more conscious towards protecting its agricultural trade interests at the international platforms. At the 10th Ministerial Conference of the WTO (Nairobi, December 2015), the Government of India adopted the following approach towards agri-trade policy:

- A Special Safeguard Mechanism (SSM) for developing countries.
- Public stockholding food for security purposes,
- A commitment to abolish export subsidies for farm exports, and
- Measures related to cotton.

Source: Ramesh Singh

#### Q.10) Consider the following statements regarding Government e-Market place (GeM):

- 1. It is an online marketplace for procurement of commonly used goods and services by government ministries, departments and CPSEs.
- 2. It functions under Directorate General of Supplies and Disposals (DGS&D), Ministry of Commerce

Which 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 e Marketplace is an online marketplace setup in 2016 for procurement of commonly used goods and services by government ministries, departments and CPSEs.

- It aims to enhance transparency, efficiency and speed in public procurement.
- It is a National Procurement Portal of India. It functions under Directorate General of Supplies and Disposals (DGS&D), Ministry of Commerce and Industry.

of Supplies and Disposals (DGS&D), Ministry of Commerce and Industry.

Source: The Hindu

## Polity

- **Q.1)** "Forced labour or beggar" is a violation of which one of the following article of the Constitution of India?
- a) Article 16
- b) Article 17
- c) Article 19
- d) Article 23

**ANS:** Article 23 of Indian constitution: Prohibition of traffic in human beings and forced labour.

- Traffic in human beings and begar and other similar forms of forced labour are prohibited and any contravention of this provision shall be an offence punishable in accordance with law.
- Nothing in this article shall prevent the State from imposing compulsory service for public purposes, and in imposing such service the State shall not make any discrimination on grounds only of religion, race, caste or class or any of them.

Source: Laxmikanth

- **Q.2)** Which one of the following is **NOT** a constitutional body?
- a) Finance Commission
- b) Election Commission of India
- c) State Public Service Commission
- d) National Commission for Women

#### ANS: D

**Explanation:** The National Commission for Women was set up as statutory body in January 1992 under the National Commission for Women Act, 1990 (Act No. 20 of 1990 of Govt.of India ) to:

- review the Constitutional and Legal safeguards for women;
- recommend remedial legislative measures;
- facilitate redressal of grievances and
- advise the Government on all policy matters affecting women.

In keeping with its mandate, the Commission initiated various steps to improve the status of women and worked for their economic empowerment during the year under report.

- The Commission completed its visits to all the States / UTs except Lakshdweep and prepared Gender Profiles to assess the status of women and their empowerment.
- It received a large number of complaints and acted suo-moto in several cases to provide speedy justice.
- It took up the issue of child marriage, sponsored legal awareness programmes, Parivarik Mahila Lok Adalats and reviewed laws such as Dowry Prohibition Act, 1961, PNDT Act 1994, Indian Penal Code 1860 and the National Commission for Women Act, 1990 to make them more stringent and effective.
- It organized workshops / consultations, constituted expert committees on economic empowerment of women, conducted workshops / seminars for gender awareness and took up publicity campaign against female feticide, violence against women etc. in order to generate awareness in the society against these social evils.

Source: NCW

- **Q.3)** Consider the following statements regarding "regulating act of 1773":
- 1. It was the first step of the British Government to control and regulate the affairs of the East India Company in India.
- 2. It was created an Executive Council of three members to assist Governor General of Bengal.

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: B

**Explanation:** Regulating act of 1773was of great constitutional importance as

- it was the first step taken by the British Government to control and regulate the affairs of the East India Company in India;
- it recognised, for the first time, the political and administrative functions of the Company; and
- it laid the foundations of central administration in India.

The features of this Act were as follows:

- It designated the Governor of Bengal as the 'Governor- General of Bengal' and created an Executive Council of four members to assist him. The first such Governor General was Lord Warren Hastings.
- It made the governors of Bombay and Madras presidencies subordinate to the governor-general of Bengal, unlike earlier, when the three presidencies were independent of one another.
- It provided for the establishment of a Supreme Court at Calcutta (1774) comprising one chief justice and three other judges.
- It prohibited the servants of the Company from engaging in any private trade or accepting presents or bribes from the 'natives'.

Source: Laxmikanth

- **Q.4)** Which of the following act was granted one lakh rupees for the development of education in British India?
- a) Pitts India Act of 1784
- b) Regulating Act of 1793
- c) Charter Act of 1813
- d) Charter Act of 1833

## ANS: C

**Explanation:** Charter Act of 1813 was an act that continued the British East India Company's rule in India by the Parliament of Britain.

- There was a provision that Company should invest Rs. 1 Lakh every year on the education of Indians.
- The State system of education began with the Charter Act.

Source: NCERT

- Q.5) Which of the following statement is NOT correct about Constituent Assembly?
- a) It was constituted under the scheme formulated by the Cripps Mission.
- b) The total strength of the Constituent Assembly was to be 389.
- c) Each province and princely state was to be allotted seats in proportion to their respective population.

d) Seats allocated to each British province were to be divided among the three principal communities–Muslims, Sikhs and General.

#### ANS: A

**Explanation:** The Constituent Assembly was constituted in November 1946 under the scheme formulated by the Cabinet Mission Plan.

The features of the scheme were:

- The total strength of the Constituent Assembly was to be 389. Of these, 296 seats were to be allotted to British India and 93 seats to the princely states. Out of 296 seats allotted to the British India, 292 members were to be drawn from the eleven governors' provinces and four from the four Chief Commissioners' provinces, one from each.
- Each province and princely state (or groups of states in case of small states) were to be allotted seats in proportion to their respective population. Roughly, one seat was to be allotted for every million population.
- Seats allocated to each British province were to be divided among the three principal communities–Muslims, Sikhs and General (all except Muslims and Sikhs), in proportion to their population.
- The representatives of each community were to be elected by members of that community in the provincial legislative assembly and voting was to be by the method of proportional representation by means of single transferable vote.
- The representatives of the princely states were to be nominated by the heads of the princely states.

Source: Laxmikanth

**Q.6)** The Constituent Assembly appointed a number of committees to deal with different tasks of constitution-making. Which of the following is/are correctly matched?

Committee : Headed by

Provincial Constitution Committee
 Jawaharlal Nehru
 Drafting Committee
 Dr. B. R. Ambedkar
 Rules of Procedures Committee
 Dr. Rajendra Prasad

Select the correct answer using the code given below:

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

#### ANS: D

**Explanation:** The Constituent Assembly appointed a number of committees to deal with different tasks of constitution-making. Out of these, eight were major committees and the others were minor committees. The names of these committees and their Chairman are given below:

#### Major Committees:

- 1. Union Powers Committee Jawaharlal Nehru
- 2. Union Constitution Committee -Jawaharlal Nehru
- 3. Provincial Constitution Committee -Sardar Patel
- 4. Drafting Committee Dr. B.R. Ambedkar
- 5. Advisory Committee on Fundamental Rights, Minorities and Tribal and Excluded Areas Sardar Patel. This committee had the following five sub-committees:
- (a) Fundamental Rights Sub-Committee J.B. Kripalani
- (b) Minorities Sub-Committee H.C. Mukherjee

- (c) North-East Frontier Tribal Areas and Assam Excluded & Partially Excluded Areas Sub-Committee –Gopinath Bardoloi
- (d) Excluded and Partially Excluded Areas (other than those in Assam) Sub-Committee A.V. Thakkar
- (e) North-West Frontier Tribal Areas Sub-Committee
- 6. Rules of Procedure Committee Dr. Rajendra Prasad
- 7. States Committee (Committee for Negotiating with States) Jawaharlal Nehru
- 8. Steering Committee Dr. Rajendra Prasad

Source: Laxmikanth

## Q.7) Which of the following statement is **NOT** correct about enactment of Constitution?

- a) Dr. B.R. Ambedkar introduced the final draft of the Constitution in the Assembly on November 4, 1948.
- b) All members of Constituent Assembly were present on November 26<sup>th</sup> 1949 and signed the Constitution.
- c) Date of 26th November 1949 mentioned in the Preamble as the date on which the people of India in the Constituent Assembly adopted, enacted and gave to them-selves Indian Constitution.
- d) The Constitution as adopted on November 26, 1949, contained a Preamble, 395 Articles and 8 Schedules.

#### ANS: B

**Explanation:** Dr. B.R. Ambedkar introduced the final draft of the Constitution in the Assembly on November 4, 1948 (first reading). The Assembly had a general discussion on it for five days (till November 9, 1948).

- The second reading (clause by clause consideration) started on November 15, 1948, and ended on October 17, 1949.
- During this stage, as many as 7653 amendments were proposed and 2473 were actually discussed in the Assembly.
- The third reading of the draft started on November 14, 1949. Dr. B.R. Ambedkar moved a motion—'the Constitution as settled by the Assembly be passed'.
- The motion on Draft Constitution was declared as passed on November 26, 1949, and received the signatures of the members and the president.
- Out of a total 299 members of the Assembly, only 284 were actually present on that day and signed the Constitution.
- This is also the date mentioned in the Preamble as the date on which the people of India in the Constituent Assembly adopted, enacted and gave to them-selves this Constitution.
- The Constitution as adopted on November 26, 1949, contained a Preamble, 395 Articles and 8 Schedules. The Preamble was enacted after the entire Constitution was already enacted.

Source: Laxmikanth

- **Q.8)** The **Eleventh Schedule** was introduced in the Constitution of India during the prime ministership of?
- a) Rajiv Gandhi
- b) Charan Singh
- c) P V Narasimha Rao
- d) Atal Bihari Vajpayee

#### ANS: C

**Explanation:** Mahatma Gandhi had first championed the idea of little village republics but it was under P.V. Narasimha Rao that the 73rd Constitutional Amendment Act, better known as the Panchayati Raj Act, became effective.

Source: Indian Express

- **Q.9)** The "**Article 256**" of Indian constitution is often seen in news is related to which of the following?
- a) Jurisdiction of Union in relation to territories outside India.
- b) The state government to ensure implementation of the laws made by Parliament.
- c) Legislation for giving effect to international agreements.
- d) Power of Parliament to legislate for two or more states by consent.

#### ANS: B

**Explanation:** Article 256 of the Constitution obligates the State government to ensure implementation of the laws made by Parliament.

- If the State government fails to do so, the Government of India is empowered to give "such directions to a State as may appear... to be necessary".
- The refusal to enforce the law even after the Centre issues directions would empower the President to impose President's Rule in those States under Articles 356 and 365.
- The Supreme Court of India has also confirmed this reading of the law in S.R. Bommai v. Union of India.

Source: The Hindu

- **Q.10)** Which of the following language is **NOT** in the list of scheduled languages of eighth schedule of Indian Constitution?
- a) Bhojpuri
- b) Sindhi
- c) Nepali
- d) Maithili

#### ANS: A

**Explanation:** The Eighth Schedule to the Indian Constitution contains a list of 22 scheduled languages viz. Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Malayalam, Marathi, Odia, Punjabi, Sanskrit, Tamil, Telugu, Urdu, Sindhi(added by 21st Amendment Act, 1967) Konkani, Manipuri, Nepali (added by 71st Amendment Act, 1992), Bodo, Dogri, Maithili, Santal (added by 92nd Amendment 2003). The list had originally 14 languages only but subsequently through amendments 8 new languages were added.

Source: Laxmikanth

- Q.11) Which of the following treaty is also called as "Zero Yield Treaty"?
- a) Comprehensive Nuclear-Test-Ban Treaty (CTBT)
- b) Nuclear Non Proliferation Treaty (NPT)
- c) START Treaty
- d) Pelindaba Treaty

#### ANS: A

**Explanation:** The Comprehensive Nuclear-Test-Ban Treaty (CTBT) is the Treaty banning all nuclear explosions - everywhere, by everyone.

• The Treaty was negotiated at the Conference on Disarmament in Geneva and adopted by the United Nations General Assembly.

- It was opened for signature on 24 September 1996. The Treaty has not entered into force yet.
- The signature to a treaty indicates that the country accepts the treaty.
- The ratification symbolizes the official sanction of a treaty to make it legally binding for the government of a country.
- The CTBT is essentially a "zero-yield" treaty.
- This means that the agreement prohibits all nuclear explosions that produce a selfsustaining, supercritical chain reaction of any kind whether for weapons or peaceful purposes.

Source: The Hindu

**Q.12)** Spratly and Paracel Islands are often seen in news is located in which of the following sea?

- a) Japan Sea
- b) Coral Sea
- c) South China Sea
- d) Andaman Sea

## ANS: C Explanation:



Source: The Hindu

- Q.13) Consider the following statements regarding "World Health Organization (WHO)":
- 1. It was established after First World War.
- 2. It is funded through a system of assessed and voluntary contributions.

Which 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 WHO was established in 1948 as a United Nations (UN) specialised agency. The WHO has a three-tiered structure, comprising:

- The World Health Assembly- It is the supreme decision making body comprising all member states to determine policy direction.
- The Executive Board- It comprises of technical experts to oversee the implementation of WHA's decisions.
- The Secretariat- It is headed by the Director General and functions as WHO's administrative and technical organ with the overall responsibility for implementing its activities.

Funding- The WHO is funded through a system of assessed and voluntary contributions.

- Assessed contributions are paid by all member states, and are calculated on the basis of a country's gross national product and population.
- Voluntary contributions are amounts voluntarily paid by other UN organisations, private companies, individuals, NGOs as well as member states.
- The US was the WHO's largest contributor and paid a total of \$893 million in both assessed and voluntary contributions in 2019.

Source: WHO

**Q.14)** The "Global Report on Internal Displacement, 2020" is published by which of the following organization?

- a) World Economic Forum
- b) UNESCO
- c) The Internal Displacement Monitoring Centre (IDMC)
- d) UNDP

#### ANS: C

**Explanation:** The Internal Displacement Monitoring Centre (IDMC) recently published the Global Report on Internal Displacement, 2020 (GRID, 2020).

- Globally, 33.4 million new displacements took place in 2019 which is the highest figure since 2012.
- South Asia region has the highest share of new displacements.
- Total number of internally displaced people (IDPs) reached 50.8 million.
- 18.3 million IDPs are children under 15 and 3.7 million are over 60.
- India had the highest number of new disaster displacements (five million) in the world in 2019.

Source: Indian Express

- Q.15) Which of the following provision (s) is/are NOT comes under union list?
- 1. Sanctioning of cinematograph films for exhibition.
- 2. Money lending.
- 3. Preventive detention for maintenance of public order.

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:** Sanctioning of cinematograph films for exhibition – comes under union list.

- Money lending and money lenders, relief of agriculture indebtedness comes under state list.
- Preventive detention for the reasons connected with the security of a state, the maintenance of public order, or the maintenance of supplies and services essential to the community comes under concurrent list.

Source: Laxmikanth

**Q.16)** Which of the following feature of Indian constitution is called as "**Instrument of Instructions**"?

- a) Fundamental Rights
- b) Constitutional Bodies
- c) Directive Principles of State Policy
- d) Fundamental Duties

#### ANS: C

**Explanation:** The Directive Principles resemble the 'Instrument of Instructions' enumerated in the Government of India Act of 1935.

- In the words of Dr B R Ambedkar, 'the Directive Principles are like the instrument of instructions, which were issued to the Governor-General and to the Governors of the colonies of India by the British Government under the Government of India Act of 1935.
- What is called Directive Principles is merely another name for the instrument of instructions.
- The only difference is that they are instructions to the legislature and the executive'.

Source: Laxmikanth

- **Q.17)** Which of the following are the member countries of Regional Comprehensive Economic Partnership (RCEP)?
- a) Laos, Cambodia, Australia and Russia
- b) Vietnam, Thailand, Japan and United States
- c) New Zealand, North Korea, Japan and China
- d) China, Philippines, South Korea and Japan

ANS: D Explanation:



Source: BBC

**Q.18)** The "**Tenth Schedule**" of Indian Constitution is often seen in news is related to which of the following?

- a) Impeachment procedure of Chairman/Speaker of Rajya/Lok Sabha.
- b) Disqualification of MP's of Parliament and MLA's of State Legislative Assembly.
- c) Impeachment procedure of Vice President of India.
- d) Impeachment procedure of President of India.

#### ANS: B

**Explanation:** The 10th Schedule of the Indian Constitution (which talks about the antidefection law) is designed to prevent political defections prompted by the lure of office or material benefits or other like considerations.

- The Anti-defection law was passed by Parliament in 1985 and reinforced in 2002.
- The 10th Schedule of the Indian Constitution popularly referred to as the 'Anti-Defection Law' was inserted by the 52nd Amendment (1985) to the Constitution.
- The anti-defection law was enacted to ensure that a party member does not violate the mandate of the party and in case he does so, he will lose his membership of the House.
- The law applies to both Parliament and state assemblies.

Source: Laxmikanth

**Q.19)** Which of the following pairs is/are correctly matched?

Article : State

1. Article 371 (D) : Andhra Pradesh

2. Article 371 (E) : Goa

3. Article 371 (F) : Karnataka

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: A

**Explanation:** As the government abrogated Article 370 that gave special status to Jammu and Kashmir, Article 371, which has special provisions for other States, mostly from the Northeast, has invited some attention.

- Article 371(A) states that no act of Parliament shall apply to the State of Nagaland in respect of the religious or social practices of the Nagas, its customary law and procedure, administration of civil and criminal justice involving decisions according to Naga customary law and ownership and transfer of land and its resources.
- Article 371B deals with special provision with respect to the State of Assam.
- The main objective of inserting Article 371B was to facilitate the creation of the sub-State 'Meghalaya'.
- Article 371C deals with special provisions with respect to Manipur which became a State in 1972.
- Articles 371F, 371H talk about special provisions with respect to States of Sikkim and Arunachal Pradesh, respectively.
- Article 371 gives the power to the President of India to establish separate development boards for Vidarbha, Marathwada regions of Maharashtra and the rest of the State and Saurashtra, Kutch and rest of Gujarat.

Special provisions with respect to Andhra Pradesh, Karnataka, and Goa are dealt in Articles 371D and 371E, 371J, 371I respectively.

Source: Laxmikanth

Q.20) Which Constitutional Amendment Act reduced the voting age from 21 to 18?

- a) 61st Constitutional Amendment
- b) 65th Constitutional Amendment
- c) 67th Constitutional Amendment
- d) 69th Constitutional Amendment

## ANS: A

**Explanation:** The Indian Constitution adopts universal adult franchise as a basis of elections to the Lok Sabha and the state legislative assemblies.

- Every citizen who is not less than 18 years of age has a right to vote without any discrimination of caste, race, religion, sex, literacy, wealth and so on.
- The voting age was reduced to 18 years from 21 years in 1989 by the 61st Constitutional Amendment Act of 1988.

Source: Laxmikanth



## Science and technology

- **Q.1)** Major Atmospheric Cerenkov Experiment Telescope (MACE) is recently seen in news is located in which of the following place?
- a) Siberia
- b) Alaska
- c) Ladakh
- d) Swiss Alps

#### ANS: C

**Explanation:** Major Atmospheric Cerenkov Experiment Telescope (MACE) is an Imaging Atmospheric Cerenkov telescope (IACT) located at Hanle, Ladakh, India.

- It is the highest (in altitude) Cerenkov telescope in the World and was built by Electronics Corporation of India, Hyderabad, for the Bhabha Atomic Research Centre.
- It was assembled at the campus of Indian Astronomical Observatory at Hanle.
- Operational since 2016, it is remotely operated and runs on solar power.

Source: The Hindu

- Q.2) Consider the following statements regarding the "X-ray Polarimeter Satellite (XPoSat)":
- 1. It is a planned space observatory to study polarization of cosmic X-rays.
- 2. It is being developed by NASA and European Space Agency.

Which 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 X-ray Polarimeter Satellite (XPoSat) is a planned space observatory to study polarization of cosmic Xrays.

- It is planned to be launched in 2021, and to provide a service time of at least five years.
- The telescope is being developed by the Indian Space Research Organization (ISRO) and the Raman Research Institute.
- Studying how radiation is polarized gives away the nature of its source, including the strength and distribution of its magnetic fields and the nature of other radiation around it.
- XPoSat will study the 50 brightest known sources in the universe, including pulsars, black hole X-ray binaries, active galactic nuclei, and non-thermal supernova remnants.

Source: Indian Express

- Q.3) Red Flag Exercise is recently seen in news is related to which of the following?
- a) Unites States of America
- b) Russia
- c) China
- d) United Kingdom

#### ANS: A

**Explanation:** Red Flag is USA's flagship multilateral air exercise.

- It is a Pacific Air Forces-sponsored exercise meant to provide realistic training in a simulated combat environment over the Joint Pacific Alaska range complex.
- The Red Flag Alaska 20-1 was scheduled to be held in Alaska from 30th April to 15th May, 2020.
- Recently, the U.S. Air Force has cancelled the Phase-I of Red Flag due to the COVID-19 outbreak.
- The Indian Air Force (IAF) was also to take part in the exercise with its Sukhoi Su-30 fighter jets.
- The IAF joined Red Flag for the first time in 2008 in Nevada.

Source: The Hindu

- **Q.4)** Under Operation Sanjeevani an Indian Air Force (IAF) C-130J transport aircraft delivered 6.2 tons of essential medicines and hospital consumables to which of the following country?
- a) Myanmar
- b) Sri Lanka
- c) Maldives
- d) Madagascar

#### ANS: C

**Explanation:** Under Operation Sanjeevani an Indian Air Force (IAF) C-130J transport aircraft delivered 6.2 tons of essential medicines and hospital consumables to Maldives.

- These medicines and consumables were procured from eight suppliers in India but couldn't be transported through any other means due to the 21-day lockdown imposed to contain the spread of COVID-19.
- At the request of the government of Maldives, the IAF aircraft activated Operation Sanjeevani and lifted these medicines from airports in New Delhi, Mumbai, Chennai and Madurai before flying to the Maldives.
- Among other things, these medicines include influenza vaccines, anti-viral drugs such as lopinavir and ritonavir which have been used to treat patients with COVID-19 in other countries.

Source: Indian Express

- Q.5) Consider the following statements regarding "project praana":
- 1. It was launched by ministry of health and family welfare.
- 2. Prototype indigenous ventilators are developed under project praana.

Which 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:** IISc Bengaluru has developed an indigenous ventilator prototype under project Praana in view of COVID-19 crisis.

- The project is a voluntary effort to help the nation at the time of crisis. The ventilator has been developed using materials readily available in India.
- The prototype has mass flow sensors and controllers which accurately tell how much oxygen is flowing and what volume the patient is inhaling in one breath.

- Pneumatics is built around mass produced water filter hardware. The control system is built around open source industrial controller.
- In a large country like India, the biggest challenge is the manufacturing of such ventilators on a mass-scale due to limited access to pneumatic and electronic hardware, sensors and actuators in the global marketplace.
- The indigenous ventilator prototype build under Project Praana will address the issue.

Source: The Hindu

## **Q.6)** Consider the following statements regarding the "CollabCAD":

- 1. It is an indigenous three dimensional computer aided design system which helps the used to build models in virtual 3d space and create and engineering drawings.
- 2. It is jointly launched by Atal Innovation Mission, NITI Aayog and National Informatics Centre (NIC).

Which 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:** CollabCAD is an indigenous three dimensional computer aided design system which helps the used to build models in virtual 3d space and create and engineering drawings for shop floor which makes it a complete package for smart manufacturing.

- It is jointly launched by Atal Innovation Mission, NITI Aayog and National Informatics Centre (NIC).
- CollabCAD initiative aims to provide a great platform to students of Atal Tinkering Labs (ATLs) across country to create and modify 3d designs with free flow of creativity and imagination.
- This software would also enable students to create data across the network and concurrently access the same design data for storage and visualization.
- NIC is playing a crucial role in pushing the online module to reach to the students all across the country by providing a huge source of data through this software CAD system.
- CollabCAD will be used by around 5000 schools where Atal Tinkering Labs are established.

Source: The Hindu

## Q.7) In which of the following areas geo-fencing can be used?

- 1. Social Networking
- 2. Marketing
- 3. Smart appliances
- 4. Telematics

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:** Geo-fencing is a location-based service in which an app or other software uses GPS, RFID, Wi-Fi or cellular data to trigger a pre-programmed action when a mobile

device or RFID tag enters or exits a virtual boundary set up around a geographical location, known as a geo-fence.

- The —geo-fencing| is accurate by up to 300 m.
- Depending on how a geo-fence is configured it can prompt mobile push notifications, trigger text messages or alerts, send targeted advertisements on social media, allow tracking on vehicle fleets, disable certain technology or deliver location-based marketing data.
- To make use of geo-fencing, an administrator or developer must first establish a virtual boundary around a specified location in GPS- or RFID-enabled software.
- This virtual defense will then trigger a response when an authorized device enters or exits that area, as specified by the administrator or developer.
- Other applications of geo-fence Social networking, Marketing, Audience engagement, Smart appliances, Human Resource management, Telematics, Security.

Source: The Hindu

- Q.8) Consider the following statements regarding the "Prime Minister National Relief Fund":
- 1. It was instituted by Narendra Modi in 2016.
- 2. It is currently used primarily to tackle natural calamities like floods, cyclones and earthquakes.

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:** PMNRF was instituted in 1948 by then Prime Minister Jawaharlal Nehru, to assist displaced persons from Pakistan.

- The fund is currently used primarily to tackle natural calamities like floods, cyclones and earthquakes.
- The fund is also used to help with medical treatment like kidney transplantation, cancer treatment and acid attack.
- The fund consists entirely of public contributions and does not get any budgetary support.
- It accepts voluntary contributions from Individuals, Organizations, Trusts, Companies and Institutions etc.
- The corpus of the fund is also invested in various forms with scheduled commercial banks and other agencies.
- Disbursements are made with the approval of the Prime Minister.
- The fund is recognized as a Trust under the Income Tax Act and the same is managed by the Prime Minister or multiple delegates for national causes.
- Contributions towards PMNRF are notified for 100% deduction from taxable income under section 80(G) of the Income Tax Act, 1961.

Source: The Hindu

**Q.9)** The "**SIPRI report**" is often seen in news is related to which of the following?

- a) Weapons and arms
- b) Nutrition
- c) Food Security
- d) Primary health

#### ANS: A

**Explanation:** Stockholm International Peace Research Institute (SIPRI) is an international institute based in Sweden, dedicated to research into conflict, armaments, arms control and disarmament.

- Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.
- SIPRI has released its annual report "Trends in World Military Expenditure, 2019".
- Recent report of SIPRI showcases an increase of 5.5 per cent in the volume of international arms transfers during 2015–19, compared with the previous five-year period.

Source: The Hindu

**Q.10)** Migration and Development Briefs is often seen in news is published by which of the following international organization?

- a) UNESCO
- b) World Economic Forum
- c) World Bank
- d) UNICEF

#### ANS: C

**Explanation:** Migration and Development Briefs are prepared by the Migration and Remittances Unit, Development Economics (DEC), World Bank.

- The brief aims to provide an update on key developments in the area of migration and remittance flows and related policies over the past six months.
- India, the country that received the most remittances in the world, \$79 billion in 2018, according to the World Bank's Migration and Development Brief.

Source: The Hindu



## Geography

## Q.1) Consider the following statements regarding "Physical geography of India":

- 1. The distance between east to west extension is greater than north to south.
- 2. Gujarat has the longest coastline.

Which 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:** India is the seventh largest country in the world.

- It has land boundaries of 15,200 km and 6100 km long coast line. Gujarat has the longest coastline in comparison to other coastal states followed by Andhra Pradesh.
- India's landmass covers 3.28 million square kilometer of area.
- This accounts for nearly 2.42 percent of the total geographical area of the world. It is surrounded by ocean.
- The shape of India is not totally triangular but quadrangular. It measures 2,933 km from east to west and 3,214 km from north to south.

Source: Periyar Geography

## **Q.2)** Which of the following statement is **NOT** correct about India?

- a) India is the largest country in terms of area and population in South-Asia.
- b) The main India-Tibet trade route that connects Kalimpong near Darjeeling with Lhasa in Tibet passes through Jelepa La.
- c) Meghalaya plateau is part of Purvanchal hills.
- d) The average elevation of the Western Ghats is 2000 metres.

#### ANS: D

**Explanation:** Western Ghats or Sahyadris lie on the Western edge of the Deccan plateau.

- It runs parallel to the western coast for about 1600 km. The average elevation of the Western Ghats is 1000 metres.
- The famous peaks in this area are Doda Betta, Anaimudi amd Makurti. The highest peak in this region is Anaimudi (2695m.).
- Western ghats are continuous and can be crossed through passes like Pal Ghat,
   Thal Ghot and Bhor Ghat.
- The rivers like Godavari, Bhima and Krishna flow eastward while the river Tapti flows westward.
- The streams form rapids & water falls before entering the Arabian Sea. The famous waterfalls are Jog falls on Sharavati, Shiva Samudram falls on Kaveri etc.

Source: NCERT

## Q.3) Consider the following statements regarding "Peninsular Plateau":

- 1. It is part of ancient land mass called Gondwana land.
- 2. The Deccan plateau is separated by a fault from Chota Nagpur plateau.
- 3. The Central highlands extend from Narmada River and the northern plains.

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:** Peninsular plateau is a triangular shaped table land. It is part of ancient land mass called Gondwana land.

- It covers an area of nearly 5 lakh sq.km.
- It is spread over the states of Gujarat, Maharashtra, Bihar, Karnataka and Andhra Pradesh.
- River Narmada divides the peninsular plateau into two parts: The central highlands and Deccan Plateau.
- The central Highlands: It extends from Narmada River and the northern plains. Aravallis is the important mountain which extends from Gujrat through Rajasthan to Delhi.
- The Deccan plateau is separated by a fault (A fracture in the rock along which rocks have been relatively replaced), from Chota Nagpur plateau.
- The black soil area in the Deccan plateau is known as Deccan trap. It is formed due to volcanic eruptions.

Source: NCERT

## Q.4) Consider the following statements regarding "Indian Desert":

- 1. The Indian Desert lies towards the western margin of Aravali Hills.
- 2. It is the ninth largest desert in the world.
- 3. It spreads over the states of Gujarat, Rajasthan, Haryana and Punjab.

Which of the statements given above is/are correct?

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

#### ANS: B

**Explanation:** The Indian Desert lies towards the western margin of Aravali Hills.

- It is also called Thar Desert. It is the ninth largest desert in the world.
- It spreads over the states of Gujarat and Rajasthan. This region has semi-arid and arid weather conditions. It receives less than 150 mm of rainfall per year.
- The vegetation cover is low with thorny bushes. Luni is the main river in this area.
- All other streams appear only at the time of rainfall otherwise they disappear into the sand.

Source: NCERT

## Q.5) Consider the following statements regarding "Dharwar Rock System":

- 1. They are the oldest metamorphosed rocks.
- 2. They possess valuable minerals like high grade iron-ore, high grade coal manganese, copper, lead, gold, etc.

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: B

**Explanation:** Formation period of dharwar rock system ranges from 4 billion years ago to – 1 billion years ago.

- Highly metamorphosed sedimentary rock-system. [Formed due to metamorphosis of sediments of Archaean gneisses and schists].
- They are the oldest metamorphosed rocks.
- Found in abundance in the Dharwar district of Karnataka.
- Economically the most important rocks because they possess valuable minerals like high grade iron-ore, manganese, copper, lead, gold, etc.

Source: NCERT

Q.6) "Rohtang Pass" is often seen in news is located in which of the following state?

- a) Himachal Pradesh
- b) Uttarakhand
- c) Sikkim
- d) Arunachal Pradesh

## ANS: A

**Explanation:** Rohtang Pass (elevation 3,978 m) is located in the state of Himachal Pradesh, It is present on the Pir Panjal Range of Himalayas.

- It connects the Kullu Valley with Lahaul and Spiti Valleys of Himachal Pradesh.
- The Ravi River rises west of the Rohtang pass in the Kullu hills of Himachal Pradesh.
- The world's longest tunnel (8.8km) above 10,000 feet -Rohtang Tunnel (Atal Tunnel) is under construction to connect villages in Lahaul-Spiti (Himachal Pradesh) to the rest of the country even during winters.

Source: NCERT and Indian Express

Q.7) Mekong River is NOT flows through which of the following country?

- a) Myanmar
- b) Laos
- c) Thailand
- d) Singapore

#### ANS: D

**Explanation:** From the Tibetan Plateau the river runs through China, Myanmar, Laos, Thailand, Cambodia, and Vietnam.



Source: The Hindu

Q.8) The "Kasowal Bridge" is often seen in news is constructed on which river?

- a) Ravi
- b) Beas
- c) Sutlej
- d) Jhelum

#### ANS: A

**Explanation:** BRO has constructed and opened a 484- metre long permanent bridge on the river Ravi to connect the Kasowal enclave of Punjab along the Pakistan border to the rest of the country.

- Kasowal enclave is around 35 square km, It was connected through a pontoon bridge of limited load capacity.
- The enclave was formed because it has the Ravi behind it and the International Border ahead of it.
- There are similar enclaves of Pakistani territory too, which lie ahead of Ravi and face Indian Territory.
- These Pakistani enclaves Dera Baba Nanak enclave and Jassar enclave were occupied by the Indian Army in the 1965 and 1971 wars.

Source: Indian Express

Q.9) Consider the following statements regarding the "altitude of the midday sun":

- 1. The sun is vertically overhead at the equator only.
- 2. Beyond the tropics the sun is never overhead at any time of the year.

Which of the statements given above is/are correct?

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

## ANS: B

**Explanation:** In the course of a year, the earth's revolution round the sun with its axis inclined at 66 ½ to the plane of the ecliptic changes the apparent altitude of the midday sun.

- The sun is vertically overhead at the equator on two days each year. These are usually 21st march and 21st September.
- After the March equinox the sun appears at move north and is vertically overhead at the tropic of cancer on about 21st June.
- By about 22<sup>nd</sup> December, the sun will be overhead at the tropic of Capricorn.
- The tropics thus mark the limits of the overhead sun, for beyond these, the sun is never overhead at any time of the year.

Source: NCERT

## **Q.10)** Consider the following statements regarding the "igneous rocks":

- 1. The acid igneous rocks are highly dense and darker in colour.
- 2. The basic igneous rocks are less dense and lighter in colour.

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: C

**Explanation:** Igneous rocks may be subdivided on the basis of mineral composition.

- When they contain a high proportion of silica they are said to be acid.
- Acid igneous rocks, such as granite, are less dense and are lighter in colour than basic rocks.

These contain a greater proportion of basic oxides, e.g. of iron, aluminum or magnesium, and are thus denser and darker in colour.



## Environment

- **Q.1)** Consider the following statements regarding "Green Bonds":
- 1. The proceeds from green bonds are ear-marked to finance green projects.
- 2. India's First Green Bond was issued by SEBI in 2015.

Which 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:** Green bonds are debt instruments issued by financial, non-financial or public entities where the proceeds are 'ear-marked' for use towards financing 'green' projects.

- India's First Green Bond was issued by Yes Bank Ltd in 2015.
- In 2016, India became second country (after China) to provide national level guidelines for Green bonds, issued by SEBI.
- According to the 2019-20 Economic Survey, India has the second largest green bond market among emerging economies after China.
- India has issued \$10.2 billion of green bonds in the first half of 2019.
- India's first listed Green Bond on 'India INX' issued by Indian Railway Finance Corporation.

Source: The Hindu

- **Q.2)** "Selective Catalytic Reduction" is often seen in news is related to which of the following?
- a) Thermal power stations
- b) Bharat Stage VI norms
- c) Nuclear power plants
- d) Stubble burning

#### ANS: B

**Explanation:** Diesel Particulate Filter (DPF) and Selective Catalytic Reduction (SCR) are being introduced with the roll-out of BS VI norms, which were not a part of BS IV.

- Real Driving Emission (RDE) will be introduced in India for the first time with the implementation of Bharat Stage VI emission norms.
- It will measure a vehicle's emission in real-time conditions against laboratory conditions.
- Onboard Diagnostics (OD) has been made mandatory for all vehicles which will give
  the vehicle owner or repair technician access to the status of the various vehicle
  sub-systems.

Source: MOEFCC

- **Q.3)** Which of the following is/are the characteristics of "Petcoke"?
- 1. It is a by-product of oil refinery process.
- 2. It is a high grade fuel with high calorific value.
- 3. Low ash with low sulphur content.

Select the correct answer using the code given below:

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

#### ANS: B

**Explanation:** Petcoke is a by-product (carbonaceous solid) of the oil refinery process mainly "the bottom of the barrel."

It is characterized as a high grade fuel with high calorific value of more than 8,000 Kcal per kg, having low ash content and low volatile matter but high sulphur content, up to 7%. Source: Indian Express

Q.4) Consider the following statements regarding "uranium contamination in India":

- 1. The permissible limit according to the World Health Organization (WHO) is 30 microgram per litre.
- 2. There is no limit maintained for uranium under Bureau of Indian Standards' Drinking Water Specifications.

Which 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:** The permissible limit according to the World Health Organization (WHO) is 30 microgram per litre.

- However, unlike the limits for arsenic and other toxic or heavy metals specified in the under Bureau of Indian Standards' Drinking Water Specifications, there is no limit maintained for uranium.
- Earlier, a report brought by Central Ground Water Board noted widespread uranium contamination in groundwater from aquifers across 16 states in India including Punjab, Rajasthan, Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, etc.

Uranium can cause serious ailments such as:

- If uranium-laced water, more than permissible level, is consumed for long, it can cause thyroid cancer, blood cancer, depression and other serious ailments.
- Some studies have also linked the excessive ingestion of uranium to chronic kidneys disease.

Source: Down to Earth

- Q.5) "Dobson Unit" is the measurement unit for which of the following?
- a) Ocean depth
- b) Solar concentration
- c) Ozone concentration
- d) None

#### ANS: C

**Explanation:** Dobson Unit is the most common unit for measuring ozone concentration. One Dobson Unit is the number of molecules of ozone that would be required to create a layer of pure ozone 0.01 millimeters thick at a temperature of 0 degrees Celsius and a pressure of 1 atmosphere.

Source: NOAA

- Q.6) Consider the following statements regarding "Petersburg Dialogue":
- 1. It was started in 2010 by Russia.
- 2. It is a formal annual meeting of the high-level ministers and representatives of various countries that enables them to have constructive exchanges on the issues of international climate actions.

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: C

**Explanation:** Petersburg Dialogue was launched in 2010 by Germany after failed climate negotiations at the 2009 Copenhagen Summit.

- It is an informal annual meeting of the high-level ministers and representatives of various countries that enables them to have constructive exchanges on the issues of international climate actions.
- The co-chair of the Climate Dialogue is the country presiding over the next conference of United Nations Framework Convention on Climate Change (UNFCCC).

Source: The Hindu

- **Q.7)** The term "Southern Annular Mode" is often seen on news is associated with which of the following?
- a) Arctic Ocean
- b) Antarctic Oscillation
- c) Pacific Gyres
- d) None

#### ANS: B

**Explanation**: The Southern Annular Mode (SAM), also known as the Antarctic Oscillation (AAO), refers to the (non-seasonal) north-south movement of the strong westerly winds that blow almost continuously in the mid- to high latitudes of the southern hemisphere.

- **Q.8)** "Agasthyavanam biological Park" is recently seen in news is located in which of the following state?
- a) Kerala
- b) Tamil Nadu
- c) Telangana
- d) Karnataka

#### ANS: A

**Explanation:** Agasthyavanam was established in 1997, Agasthyavanam Biological Park is a wildlife sanctuary in Kerala.

- The park is located near Thiruvananthapuram, the capital city of Kerala.
- Agasthyavanam Biological Park is spread over an area of 23 sq. km., of which 17.5 sq. km. of the park has been dedicated for natural regeneration to develop into a dense forest.
- It is contiguous to Neyyar Wildlife Sanctuary and Peppara Wildlife Sanctuary.
- The rest area of the park is left for systematic conservation programs.
- The park has been named after the Agasthyamalai Agasthyakoodam Peak, which can be seen at a distance from the park.

• Forest Department is procuring forest produce collected by the tribes people of the Agasthyavanam Biological Park (ABP) and surrounding forest ranges to be sold to commercial establishments and various collectives to deal with the lockdown necessitated by the COVID-19 pandemic

Source: The Hindu

**Q.9)** The "Task Force on Climate-Related Financial Disclosures (TCFD)" is sometimes seen in news is related to which of the following?

- a) UNEP Finance Initiative
- b) Global Environment Facility
- c) UNFCCC
- d) World Economic Forum

#### ANS: A

**Explanation:** The Task Force on Climate-Related Financial Disclosures (TCFD) was created in 2015 by the Financial Stability Board (FSB) to develop consistent climate-related financial risk disclosures for use by companies, banks, and investors in providing information to stakeholders.

- Increasing the amount of reliable information on financial institutions' exposure to climate-related risks and opportunities will strengthen the stability of the financial system, contribute to greater understanding of climate risks and facilitate financing the transition to a more stable and sustainable economy.
- Following the publication of the final recommendations by FSB's TCFD in June 2017, **UNEP FI** began a series of TCFD Pilot Projects' for banks, investors, and insurers. Participants in these pilots have worked to pioneer practical approaches for the assessment and disclosure of climate risks and opportunities.

Source: World Bank

**Q.10)** Recently researchers have found a **dragon tree species** for the first time in which of the following state?

- a) Karnataka
- b) Andhra Pradesh
- c) Tripura
- d) Assam

## ANS: D

**Explanation:** Assam has added to India's botanical wealth a plant that yields dragon's blood — a bright red resin used since ancient times as medicine, body oil, varnish, incense and dye.

- A trio of researchers led by Assam forest officials has discovered Dracaena cambodiana, a dragon tree species in the Dongka Sarpo area of West Karbi Anglong.
- This is for the first time that a dragon tree species has been reported from India.
- Dracaena cambodiana is an important medicinal plant as well as an ornamental tree.
- It is a major source of dragon's blood, a precious traditional medicine in China.

Several antifungal and antibacterial compounds, antioxidants, flavonoids, etc., have been extracted from various parts of the plant.

Source: The Hindu