

Prelims Refresher Programme: Day 49 (Test-16)

QUESTION 1:

With reference to Swadeshi Movement, consider the following pairs:

Leader	Place
1. Bal Gangadhar Tilak	Bombay
2. Ajit Singh	Punjab
3. Syed Haidar Raza	Jammu
4. Chidambaram Pillai	Madras presidency

Which of the pairs given above are correctly matched?

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

Answer: (c)

Explanation

- The formal proclamation of the Swadeshi Movement was made on 7 August 1905, in a meeting held at the Calcutta town hall. At this meeting, the famous Boycott Resolution was passed.
- The day partition took effect – 16 October 1905 – was declared a day of mourning throughout Bengal. People fasted and no fires were lit at the cooking hearth.
- The message of Swadeshi and the boycott of foreign goods soon spread to the rest of the country.
- Lokamanya Tilak took the movement to different parts of India, especially Poona and Bombay.
- Ajit Singh and Lala Lajpat Rai spread the Swadeshi message in Punjab and other parts of northern India.
- Syed Haidar Raza led the movement in Delhi.
- Rawalpindi, Kangra, Jammu, Multan and Haridwar witnessed active participation in the Swadeshi Movement.
- Chidambaram Pillai took the movement to the Madras presidency, which was also galvanized by Bipin Chandra Pal's extensive lecture tour. **Hence, option (c) is correct.**

QUESTION 2:

Consider the following events:

1. Pakistan Resolution at Lahore Session of Muslim League.
2. Congress launches individual Satyagraha.
3. Cripps Mission sent to India under Stafford Cripps.
4. Quit India Resolution ratified by Congress.

Which of the following is the correct chronological sequence of the above events?

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

Answer: (c)

Explanation

- March 1940: 'Pakistan Resolution' passed at Lahore session of Muslim League.
- October 1940: Congress launches individual satyagraha; 25,000 satyagrahis were arrested
- Cripps Mission (March 1942): It offered:
 - An Indian Union with dominion status, with the right to withdraw from the Commonwealth.
 - After war, a constituent assembly elected by provincial assemblies to frame the constitution.
 - Freedom to any province unwilling to join the Union
 - To have a separate agreement with Britain.
- The 'Quit India' Resolution was ratified by the Congress meeting at Gowalia Tank, Bombay, on August 8, 1942. **Hence, option (c) is correct.**

QUESTION 3:

Consider the following statements:

1. G7 consists of the top 7 largest global economies in terms of GDP (PPP).
2. Russia is a member of G7.

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

G7

- The Group of Seven (G7) is a forum of the world's seven largest developed economies whose government leaders meet annually to discuss international economic and monetary issues. The criteria is self-defined not particular like GDP (Purchasing power parity) India is among the top three in the world in GDP (PPP) yet is not a member of G7. **Hence, statement 1 is NOT correct.**
- The group regards itself as 'a community of values', with freedom and human rights, democracy and the rule of law, and prosperity and sustainable development as its key principles.
- The G-7 has its roots in an informal meeting of the finance ministers of France, West Germany, the U.S, Great Britain, and Japan (the Group of Five) in the wake of the 1973 oil crisis.
- Later Italy and Canada also joined and the first meeting with all G-7 nations was hosted by the United States which was held in Puerto Rico in 1976.
- The 45th G7 summit was hosted by France from August 24-26, 2019, in Biarritz in Nouvelle-Aquitaine, France. Members The members are:
 - France,
 - Germany,
 - The United Kingdom,
 - Italy,
 - The United States of America,
 - Canada,
 - Japan
- The European Union is sometimes considered an eighth member of the G-7, since it holds all the rights and responsibilities of full members except to chair or host the meeting.

Note:

- In 1998, Russia was added to the G-7 group as a full-time member, creating a formal G-8.
- However, in 2014, Russia was suspended from the group after the annexation of Crimea and tensions in Ukraine. **Hence, statement 2 is NOT correct.**

QUESTION 4:

With reference to the methods of political work of the early moderates, consider the following statements:

1. It involved constitutional agitation within the confines of law.
2. They created a strong public opinion to arouse consciousness and national spirit.
3. A British committee of the Indian National Congress was established in Calcutta in 1899.

Which of the statements given above are correct?

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

Answer: (a)

Explanation

Era of Moderates (1885-1905)

- The national leaders like Dadabhai Naoroji, Pherozshah Mehta, D.E. Wacha, W.C. Bonnerjea, S.N. Banerjea who dominated the Congress policies during the early period (1885-1905) were staunch believers in 'liberalism' and 'moderate' politics and came to be labelled as Moderates to distinguish them from the neo-nationalists of the early twentieth century who were referred to as the Extremists.

Moderate Approach

- The moderate political activity involved constitutional agitation within the confines of law and showed a slow but orderly political progress. **Hence, statement 1 is correct.**
- The Moderates believed that the British basically wanted to be just to the Indians but were not aware of the real conditions.
- Therefore, if public opinion could be created in the country and public demands be presented to the government through resolutions, petitions, meetings, etc., the authorities would concede these demands gradually.
- To achieve these ends, they worked on a two-pronged methodology –
 - One, create a strong public opinion to arouse consciousness and national spirit and then educate and unite people on common political questions; **Hence, statement 2 is correct.**
 - And two, persuaded the British Government and British public opinion to introduce reforms in India on the lines laid out by the nationalists.
- They used the method of 'prayer and petition' and if that failed, they resorted to constitutional agitation.
- A British committee of the Indian National Congress was established in London in 1899 which had India as its organ. Dadabhai Naoroji spent a substantial portion of his life and income campaigning for India's case abroad. **Hence, statement 3 is NOT correct.**

QUESTION 5:

Consider the following statements regarding Liberalized Remittance Scheme (LRS):

1. The definition of relative is now aligned with relatives defined in the Companies Act, 2013.
2. The regulations of LRS are governed by Foreign Exchange Management Act, 1999.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- The Liberalised Remittance Scheme (LRS) of the Reserve Bank of India (RBI) allows resident living in India to remit a certain amount of money during a financial year to another country for investment and expenditure. According to the prevailing regulations, resident individuals may remit up to \$250,000 per financial year.
- RS restricts buying and selling of foreign exchange abroad, or purchase of lottery tickets or sweepstakes, proscribed magazines and so on, or any items that are restricted under Schedule II of Foreign Exchange Management (Current Account Transactions) Rules, 2000. **Hence, statement 2 is correct.**
- Remittances directly or indirectly to countries identified by the Financial Action Task Force as “non cooperative countries and territories” are prohibited.
- The outflow of funds by resident Indians under LRS over the last five years is almost the same as the inflow of funds by Foreign Portfolio Investors (FPIs) in the same period.
- The sharp rise in the outflow of funds under the LRS scheme over the last five years indicates the flight of capital from the country.
- The RBI narrowed down the definition of relatives under maintenance of close relatives category to check outflow of funds. Thus funds under this category can only be sent to immediate relatives such as parents, spouse, children and their spouses.
- The definition of relatives under LRS has been now aligned with definition of relative with definition given in Companies Act, 2013 instead of Companies Act, 1956. **Hence, statement 1 is correct.**

QUESTION 6:

Recently seen in news ‘Chennai Connect’ is related to:

- (a) Maritime connectivity between Chennai and Vladivostok, Russia
- (b) Informal Summit between India and China
- (c) SagarMala Project
- (d) 5G services in Chennai

Answer: (b)

Explanation

- Recently, the second informal summit between India and China took place in Mamallapuram, Chennai, Tamil Nadu. Among the key takeaways from the Chennai summit, which added the “Chennai Connect” to the “Wuhan Spirit”, was the decision to mark the 70th anniversary, in 2020, of the establishment of India-China relations. **Hence, option (b) is correct.**
- First informal summit took place in Wuhan, China in April 2018. After the summit, India and China arrived at common ground, called the Wuhan Spirit. The Wuhan Consensus showed that India and China will not let differences turn into disputes. And the need for India and China to move forward with the relationship despite all the irritants that exist.

QUESTION 7:

With reference to Non-Cooperation Movement, consider the following statements:

1. In some parts of the country the movement became communal.
2. The programmes envisaged under the Non-Cooperation were not duly observed at several places throughout the country.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- Non-Cooperation Movement was launched formally on 1 August 1920.
- Initiatives undertaken during the movements were:
 - Boycott of foreign cloth
 - Educational boycott
 - Surrendering of titles and honors
 - Boycott of government affiliated schools and colleges, law courts, foreign cloth
 - Resignation from government services and non payment of taxes

During the Non-Cooperation Movement:

- In Avadh kisan sabhas and a kisan movement had been gathering strength since 1918 and it became difficult to distinguish between a Non cooperation meeting and a kisan meeting.
- In Malabar (Kerala) Non cooperation and Khilafat propaganda helped to arouse the Muslims tenants against their landlords, but the movement here, unfortunately, at times took on a communal color. **Hence, statement 1 is correct.**
- The spirit of unrest and defiance of authority in the Non-Cooperation Movement contributed to the rise of many local movements in different parts of the country, movements which did not often adhere strictly to the programme of the Non-Cooperation Movement or even to the policy of non-violence. **Hence, statement 2 is correct.**

QUESTION 8:

Consider the following pairs:

Journal/Organization	Founder
1. Yugantar	Barindra Kumar Ghosh
2. Anushilan Samiti	Promotha Mitter
3. Ramosi Peasant Force	Anant Laxman Kanhere

Which of the pairs given above are correctly matched?

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

Answer: (a)

Explanation

- The first of the revolutionary activities in Maharashtra was the organisation of the Ramosi Peasant Force by Vasudev Balwant Phadke in 1879. **Hence, pair 3 is NOT correctly matched.**
- Anushilan Samiti was a Bengali Indian organisation that existed in the first quarter of the twentieth century, and propounded revolutionary violence as the means for ending British rule in India. It was founded by Promotha Mitter. **Hence, pair 2 is correctly matched.**
- In April 1906, an inner circle within Anushilan (Barindra Kumar Ghosh, Bhupendranath Dutta) started the weekly Yugantar. **Hence, pair 1 is correctly matched.**

QUESTION 9:

Consider the following statements:

1. Quantum computers use the laws that govern the behaviour of atoms and subatomic particles for computing.
2. In a quantum computer, information is stored in qubits.
3. Quantum Supremacy means the ability of a quantum computer to solve problems that are impossible to solve using classical computers in our lifetime.

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

Quantum Computers

- Quantum computers are different from binary digital electronic computers that are based on transistors.
- Common digital computing requires the data to be encoded into binary digits (bits), each of which is always in one of two definite states (0 or 1).
- Quantum computation uses quantum bits (qubits) and uses the laws that govern the behaviour of atoms and subatomic particles for computing. **Hence, statement, 1 is correct.**

Quantum Bit (Qubit)

- A quantum bit (qubit) is the smallest unit of quantum information, which is the quantum analog of the regular computer bit, used in the field of quantum computing. **Hence, statement 2 is correct.**
- They operate according to two key principles of quantum physics: superposition and entanglement.
 - Superposition means that each qubit can represent
 - both a '1' and a '0' at the same time.
 - Entanglement means that qubits in a superposition state can be correlated with each other; that is, the state of one qubit (whether it is a 1 or a 0) can depend on the state of another qubit. It means that particles remain connected so that actions performed on one affect the other, even when separated by great distances.
- According to research, the quantum processor took 200 seconds to perform a calculation that would have been accomplished in 10,000 years by the world's fastest supercomputer 'Summit'.

Quantum Supremacy

- Quantum supremacy, a term coined in the year 2011 by John Preskill, refers to a problem-solving process by the quantum computer that cannot be solved by a classical computer in our normal lifetime. **Hence, statement 3 is correct.**

QUESTION 10:

Who among the following were connected with the Champaran Satyagraha led by Mahatma Gandhi?

1. Narhari Parekh
2. Anusuya Sarabhai
3. Anugrah Narayan Sinha
4. Shambhusharan Varma

Select the correct answer using the code given below:

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

Answer: (b)

Explanation

Champaran Satyagraha (1917) – First Civil Disobedience

- Gandhi was requested by Rajkumar Shukla, a local man, to look into the problems of the farmers.
- The European indigo planters of Champaran had been forcing the peasants to grow indigo on 3/20 part of the total land (called Tinkathia system).
- When Gandhi, joined by Rajendra Prasad, Mazhar-ul-Haq, Mahadeo Desai, Narhari Parekh, and J.B. Kripalani reached Champaran to probe the matter, and the authorities ordered him to leave the area at once.
- Other popular leaders associated with Champaran Satyagraha were Brajkishore Prasad, Anugrah Narayan Sinha, Ram Navami Prasad and Shambhusharan Varma. **Hence, option (b) is correct.**
- Gandhi defied the order and preferred to face the punishment. This passive resistance or civil disobedience of an unjust order was a novel method at that time.
- Gandhi was able to convince the authorities that the Tinkathia system should be abolished and that the peasants should be compensated for the illegal dues extracted from them.
- As a compromise with the planters it was agreed that only 25 percent of the money taken should be compensated.
- Within a decade, the planters left the area.

QUESTION 11:

With reference to the Savanna Landscape, consider the following statements:

1. Typically, the vegetation of the savanna landscape contains tall grass and scattered trees with short heights.
2. The Savanna of the East African Plateau is inhabited by the Hausa tribe.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- The savanna landscape is typified by tall grass and short trees. Trees in this landscape occur in clumps or as scattered individuals. **Hence, statement 1 is correct.**

- The trees are deciduous, shedding their leaves in the cool, dry season to prevent excessive loss of water through transpiration.
- **Human life in Savanna:** Within the savanna land of the tropics live many different tribes who are either cattle pastoralists like the Masai of the East African plateau or settled cultivators like the Hausa of northern Nigeria. **Hence, statement 2 is NOT correct.**

QUESTION 12:

With reference to the Organisation of Islamic Cooperation (OIC), consider the following statements:

1. Recently India has been granted observer status in OIC.
2. It is the largest intergovernmental organisation after the United Nations.

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

- The Organisation of Islamic Cooperation (OIC) is the second-largest intergovernmental organization after the United Nations with a membership of 57 states spread over four continents. The Organization is the collective voice of the Muslim world. It endeavours to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony among various people of the world. **Hence, statement 2 is correct.**
- The Organization was established upon a decision of the historical summit which took place in Rabat (Morocco) on 25 September 1969 following the criminal arson of Al-Aqsa Mosque in occupied Jerusalem.
- Recently, India's External Affairs Minister (EAM) attended the 46th Session of the Council of Foreign Ministers of the Organisation of Islamic Cooperation (OIC) held in Abu Dhabi, United Arab Emirates (UAE). India was invited by the host UAE as the 'Guest of Honour' to attend the inaugural plenary of the OIC. India is neither a member nor an observer in the OIC. **Hence, statement 1 is NOT correct.**

QUESTION 13:

Consider the following statements:

1. With the increase in depth of the water in oceans, coral reefs have more chances of survival.
2. Maximum number of coral reefs are present in the Pacific and Atlantic oceans.

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

The reef-building corals survive best under the following conditions:

- The water temperature must not fall below 20 degrees celsius. This limits the areal distribution of corals to the tropical, and subtropical zones.

- Coral reefs do not flourish where there are cold currents because of the upwelling of cold water from the depths that cools the warm surface water.
- The depth of water should not exceed 180 feet, because beyond this depth sunlight is too faint for photosynthesis to take place. This is essential for the survival of the microscopic algae on which the coral polyps depend. **Hence, statement 1 is NOT correct.**
- The Pacific and the Indian Oceans, have the most numerous coral reefs. **Hence, statement 2 is NOT correct.**

QUESTION 14:

Consider the following pairs:

Plateau	Continent
1. Highveld	Africa
2. Deosai	Europe
3. Hardangervidda	North America
4. Western	Oceania
5. Andean	South America

Which of the pairs given above are correctly matched?

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

Answer: (a)

Explanation

- African plateau is the Highveld, an immense plateau located in South Africa. **Hence, pair 1 is correctly matched.**
- Asia is home to many of the world's largest plateaus including Deosai Plateau, the Tibetan Plateau, the Iranian Plateau, the Deccan Plateau, and the Mongolian Plateau. **Hence, pair 2 is NOT correctly matched.**
- Hardangervidda is a major plateau in Europe and is the continent's largest plateau. The plateau is situated in southern Norway and covers 1,321 square miles. **Hence, pair 3 is NOT correctly matched.**
- Australia has the highest number of plateaus of any country in Oceania, a feat made possible by its large land area. The Western Plateau is the largest of Australia's plateaus and covers hundreds of thousands of square miles. **Hence, pair 4 is correctly matched.**
- Some plateaus found in South America include the Altiplano Cundiboyacense and the Andean Plateau. The Andean Plateau is the largest high plateau in the western hemisphere and is the second-largest high plateau in the world. **Hence, pair 5 is correctly matched.**

QUESTION 15:

With reference to the Circum-Pacific belt or Ring of Fire, consider the following statements:

1. A large number of earthquakes and volcanoes occur in this region.
2. It traces boundaries between Pacific, Juan de Fuca, Cocos, Indian-Australian, Nazca, North American and Philippine Plates.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

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

Answer: (c)

Explanation

- The Ring of Fire also referred to as the Circum-Pacific Belt, is a path along the Pacific Ocean characterized by active volcanoes and frequent earthquakes. **Hence, statement 1 is correct.**
- Its length is approximately 40,000 kilometres (24,900 miles). It traces boundaries between several tectonic plates – including the Pacific, Juan de Fuca, Cocos, Indian-Australian, Nazca, North American, and Philippine Plates. **Hence, statement 2 is correct.**
- Seventy-five percent of Earth's volcanoes – more than 450 volcanoes – are located along the Ring of Fire. Ninety percent of Earth's earthquakes occur along its path, including the planet's most violent and dramatic seismic events.
- The border between the Pacific and North American Plates forms a transform boundary, where plates move sideways past one another. This type of boundary generates a large number of earthquakes as tension in Earth's crust builds up and is released.

QUESTION 16:

Pradhan Mantri JI-VAN Yojana is related to which of the following?

- (a) Scheduled Tribe welfare
- (b) Enhancing Biofuel production
- (c) Providing healthcare facilities to the elderly
- (d) None of the above

Answer: (b)

Explanation

- **Pradhan Mantri JI-VAN (Jaiv Indhan-Vatavaran Anukool fasal awashesh Nivaran) Yojana.**
- The scheme has been launched to promote Second Generation (2G) Integrated Bioethanol Projects using lignocellulosic biomass and other renewable feedstock. **Hence, option (b) is correct.**

Features

- The objective of the scheme is to create an ecosystem for setting up commercial projects and boost Research and Development in the 2G Ethanol sector.
 - Phase-I (2018-19 to 2022-23) 6 Commercial and 5 demonstration projects will be supported.
 - Phase-II (2018-19 to 2022-23) Remaining 6 Commercial and 5 demonstration projects will be supported.
- The ethanol produced by the scheme beneficiaries will be mandatorily supplied to Oil Marketing Companies (OMCs) to further enhance the blending percentage under Ethanol Blending Programme (EBP).
- Centre for High Technology (CHT), a technical body under the aegis of MoP&NG, will be the implementation agency for the scheme.

Benefits

- This scheme is promoting Second Generation (2G) Biofuels Technology moving away from food crops used in First Generation (1G) to feedstocks, nonfood crops agricultural residues or waste.
- Making progressive Blending/Substitution of fossil fuels for achieving GreenHouse Gas emission reduction targets.
- Stopping burning of biomass/crop residues & improving the health of citizens and improving farmer income.

- Creating Employment opportunities in 2G Ethanol projects and Biomass supply chain.
- Contributing towards Swachh Bharat Mission by disposing of nonfood biofuel feedstocks such as waste biomass and urban waste.
- Development of Second Generation Biomass to Ethanol technologies in the country by promoting Research & Development.

Biofuels

- Biofuels are fuels manufactured from biomass.
- Biomass resources are the biodegradable fraction of products, wastes, and residues from agriculture, forestry and related industries as well as the biodegradable fraction of industrial and municipal wastes.

BIOFUELS		
Generation	Characteristics	Remarks
First	Produced from food crops like maize corn, sugarcane, rapeseed, palm, & soybean into ethanol and biodiesel, using a similar process to that used in beer and wine-making.	Impose significant costs on food security by demanding a share of staple crops, traditionally used solely for food and feed. Resulting in a conflict between fuel and food security. At the same time, lift the price of staple crops
Second	Produced from non-food crops and organic agricultural waste, which contain cellulose.	Grasses like switchgrass, non-edible oilseeds like Jatropha, castor seed can be transformed into biofuels.
Third	Derived from algae. Also known as green hydrocarbons.	The list of fuels that can be derived from algae includes: Bio-diesel, Ethanol, and Jet-fuel.
Fourth	Produce sustainable energy as well as capture and store CO ₂ by converting biomass materials, which have absorbed CO ₂ while growing, into fuel.	At all stages of production, the CO ₂ is captured using various Processes. Rather than simply being carbon neutral, the fourth generation biofuel production is carbon negative, since it 'locks' away more carbon than it produces and also lowers CO ₂ emissions by substituting fossil fuels

QUESTION 17:

Which of the following countries have borders with the Red Sea?

1. Yemen
2. Egypt
3. Jordan
4. Sudan
5. Libya

Select the correct answer using the code given below:

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

Answer: (c)

Explanation

- There are six countries (Saudi Arabia, Yemen, Egypt, Sudan, Eritrea, and Djibouti) bordering the Red Sea. **Hence, option (c) is correct.**

- The Red Sea is a strip of water and an inlet of the Indian Ocean occupying the area separating the continent of Africa from Asia.
- It is linked to the ocean on the south via the Bab el Mandeb strait and the Gulf of Aden.
- The northern portion of the Red Sea is the Gulf of Suez which links to the famous Suez Canal.

QUESTION 18:

The Andean coast is entirely devoid of continental shelf, which of the following is the probable reason?

- (a) Shallow water
- (b) Mountainous coast
- (c) Steep coast
- (d) Continuous-wave erosion

Answer: (b)

Explanation

- Continental shelf: It is the seaward extension of the continent from the shoreline to the continental edge, marked, approximately, by 600 feet isobath (isobaths are contours marking depths below sea level).
- In some places where coasts are extremely mountainous, such as the Rocky Mountain and Andean coasts, the continental shelves may be entirely absent. **Hence, option (b) is correct.**

QUESTION 19:

Which of the following transactions can be done using 'One Nation One Card'?

1. Cash Withdrawal
2. Toll Tax payment
3. Payment of Bus fare
4. Payment of parking fees

Select the correct answer using the code given below:

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

Answer: (d)

Explanation

- Recently the indigenously-developed National Common Mobility Card (NCMC) was launched to enable people to pay multiple kinds of transport charges, including metro services and toll tax, across the country.
- Dubbed as 'One Nation One Card', the inter-operable transport card would allow the holders to pay for:
 - Bus travel
 - Toll taxes
 - Parking charges
 - Retail shopping
 - Withdraw money

Hence, option (d) is correct.

- In December 2018 the Delhi government had also launched a common mobility card for travelling in Metro trains, Delhi Transport Corporation, and cluster buses. These cards, however, cannot be used for paying parking fees, at toll booths in the Capital, or for retail. Features
- This is India's First Indigenously Developed Payment Eco-system for transport and consists of NCMC Card, SWEETAR (Swachalit Kiraya: Automatic Fare Collection System) and SWAGAT (Swachalit Gate-a gate and card-reader system) which is based on NCMC Standards.
 - The three together will enable the use of the national mobility card across the country without a conflict with existing point-of-sale (PoS) machines.
- The cards can be issued by all public and private banks the same way credit, debit, and prepaid cards are issued.
- The Ministry of Housing & Urban Affairs brought to the fore the National Common Mobility Card (NCMC) to enable seamless travel by different metros and other transport systems across the country besides retail shopping and purchases.

QUESTION 20:

Consider the following statements:

1. Block mountains flanked by lowland basins are caused by the crustal rifting.
2. When there is a horizontal movement between the two lithospheric plates sliding past one another, transcurrent faults are produced.
3. Crustal compression produces reverse fault and the overthrust fault.

Which of the statements given above are correct?

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

Answer: (d)

Explanation

- Normal faults are a common type of fault produced by crustal rifting. They usually occur as a set of parallel faults creating fault scarps, grabens, and horsts.
- Where normal faulting occurs on a grand scale, it produces ranges of block mountains flanked by down-dropped lowland basins. **Hence, statement 1 is correct.**
- When lithospheric plates slide past one another horizontally along major transform faults, we refer to these faults as transcurrent faults. **Hence, statement 2 is correct.**
- Reverse fault and the overthrust fault are caused by crustal compression. **Hence, statement 3 is correct.**

QUESTION 21:

Which of the following are applications of the NavIC?

1. Disaster managements
2. Precise timing
3. Geodetic data capture
4. Vehicle tracking and fleet management
5. Navigation

Select the correct answer using the code given below:

- (a) 1, 4 and 5 only
- (b) 1, 3, 4 and 5 only

(c) 1, 2 and 3 only

(d) 1, 2, 3, 4 and 5

Answer: (d)

Explanation

Indian Regional Navigation Satellite System (IRNSS):

■ NavIC

- It is an independent regional navigation satellite system being developed by India.
- It is designed to provide accurate position information service to users in India as well as the region extending up to 1500 km from its boundary, which is its primary service area.

■ Some applications of NavIC:

- Terrestrial, Aerial and Marine Navigation.
- Disaster Management
- Vehicle tracking and fleet management
- Integration with mobile phones
- Precise Timing
- Mapping and Geodetic data capture
- Terrestrial navigation aid for hikers and travellers
- Visual and voice navigation for drivers

Hence, option (d) is correct.

QUESTION 22:

Consider the following pairs:

Rocket	Country/Group
1. Ariane:	EU
2. Atlas:	Russia
3. Long March:	China
4. Soyuz:	United States of America

Which of the pairs given above is/are correctly matched?

(a) 1 only

(b) 1 and 2 only

(c) 1 and 3 only

(d) 1 and 4 only

Answer: (c)

Explanation

- **Ariane:** It is a series of European Expendable Launch Vehicles for space launch use.
- **Atlas:** It is a family of American missiles and space launch vehicles.
- **Long March rocket or Changzheng rocket:** It is a rocket in a family of expendable launch systems operated by the People's Republic of China.
- **Soyuz:** It is a family of expendable launch systems developed by OKB-1 and produced by Progress Rocket Space Centre in Samara, Russia. The Soyuz launch vehicle is the most frequently used launch vehicle in the world. **Hence, option (c) is correct.**

QUESTION 23:

Which of the following pairs is/are correctly matched?

Eye defect	Explanation
1. Myopia	Near-Sightedness
2. Presbyopia	Receding of near point of accommodation
3. Hypermetropia	Far-sightedness

Select the correct answer using the code below:

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

Answer: (d)

Explanation

- Myopia is also known as near-sightedness. A person with myopia can see nearby objects clearly but cannot see distant objects distinctly. **Hence, pair 1 is correctly matched.**
- Hypermetropia is also known as far-sightedness. A person with hypermetropia can see distant objects clearly but cannot see nearby objects distinctly. **Hence, pair 3 is correctly matched.**
- The power of accommodation of the eye usually decreases with aging. For most people, the near point of accommodation gradually recedes away. They find it difficult to see nearby objects comfortably and distinctly without corrective eye-glasses. This defect is called Presbyopia. **Hence, pair 2 is correctly matched.**

QUESTION 24:

What does the term Transcription mean?

- (a) Copying genetic information from one strand of the DNA into RNA
- (b) Replication of the genetic information by parent DNA
- (c) Transformation of R strain bacteria to S strain bacteria
- (d) Genetic variation resulting in the occurrence of several different forms or types of individuals among the members of a single species

Answer: (a)

Explanation

The process of copying genetic information from one strand of the DNA into RNA is termed as transcription. However, unlike in the process of replication, which once set in, the total DNA of an organism gets duplicated, in transcription only a segment of DNA and only one of the strands are copied into RNA. **Hence, option (a) is correct.**

QUESTION 25:

In the context of ICESat-2 satellite, consider the following statements:

- 1. It is ISRO's satellite designed to measure changes in Earth's ice sheets.
- 2. It carries a photon-counting laser altimeter which is used to measure height.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

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

Answer: (b)

Explanation

- ICESat-2 is NASA's most advanced space satellite designed to precisely measure changes in Earth's ice sheets, glaciers, sea ice and vegetation around the world. **Hence, statement 1 is NOT correct.**
- ICESat-2 will orbit Earth carrying a photon-counting laser altimeter known as ATLAS (Advanced Topographic Laser Altimeter System).
- This instrument will measure height by determining how long it takes photons to travel from the spacecraft to Earth and back. **Hence, statement 2 is correct.**
- ICESat-2 will also survey heights of the world's forests, lakes, urban areas, cloud cover and more, adding a detailed third dimension to flat images of Earth from space.
- The mission will provide insight into Earth's frozen regions – the Cryosphere – which is rapidly changing with our warming climate.

QUESTION 26:

Consider the following statements about Measles-Rubella:

1. Both Measles and Rubella are caused by viruses.
2. Rubella is of particular concern because it can cause severe birth defects.
3. Measles leads to secondary health problems such as pneumonia, diarrhoea and encephalitis.

Which of the statements given above are correct?

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

Answer: (d)

Explanation

- Measles is a highly contagious virus, spread by contact with an infected person through coughing and sneezing. Rubella, also called German measles, is a contagious viral infection best known by its distinctive red rash. Thus both are communicable diseases. **Hence, statement 1 is correct.**
- Rubella causes a milder illness than measles, but it is of particular concern because if a pregnant woman becomes infected, the virus can cause severe birth defects. It can cause blindness, deafness, mental retardation and heart defects in newborn babies. **Hence statement 2 is correct.**
- Measles weakens the immune system and opens the door to secondary health problems, such as pneumonia, blindness, diarrhoea, and encephalitis. These debilitating effects are most common in children under five and adults over twenty. Even if a child recovers, he or she can be left with permanent disabilities. **Hence statement 3 is correct.**

QUESTION 27:

Consider the following statements:

1. Bacille Calmette–Guerin (BCG) vaccine is used to vaccinate children to provide them protection from severe forms of TB.
2. Highest burden of TB globally has been found to affect men in general.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

WHO's Global tuberculosis report 2019:

- The main health care intervention available to reduce the risk of latent TB infection progressing to active.
- TB disease is TB preventive treatment.
- Vaccination of children with the Bacille Calmette– Guérin (BCG) vaccine can also confer protection, especially from severe forms of TB in children. **Hence, statement 1 is correct.**
- Ten countries accounted for 75% of the global gap between treatment enrolments and the estimated number of new cases of MDR/RR-TB in 2018, and thus will have a strong influence on progress in closing this gap.
- Those 10 countries were China, India, Indonesia, Mozambique, Myanmar, Nigeria, Pakistan, the Philippines, the Russian Federation and Viet Nam. China and India alone accounted for 43% of the global gap.
- TB affects people of both sexes in all age groups but the highest burden is in men (aged ≥ 15 years), who accounted for 57% of all TB cases in 2018. **Hence, statement 2 is correct.**

QUESTION 28:

With reference to Frictional Force, consider the following statements:

1. It is independent of the area of contact.
2. It opposes the relative motion between two surfaces.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- Frictional force opposes (impending or actual) relative motion between two surfaces in contact. **Hence, statement 2 is correct.**
- It is the component of the contact force along the common tangent to the surface in contact. There are two types of friction: Static and Kinetic. Static friction opposes impending relative motion; kinetic friction opposes actual relative motion. They are independent of the area of contact. **Hence, statement 1 is correct.**

QUESTION 29:

Which of the following is 'Active Transport'?

- (a) It is the movement of a substance against a diffusion gradient with the use of energy from Respiration.
- (b) It is the movement of a substance against a diffusion gradient without the use of energy.

- (c) It is the movement of a substance against a diffusion gradient with the use of energy from Photosynthesis.
- (d) It is the movement of a substance along a diffusion gradient with the use of energy from respiration.

Answer: (a)

Explanation

- Active Transport is defined as a process that involves the movement of molecules from a region of lower concentration to a region of higher concentration against a gradient or an obstacle with the use of external energy. **Hence, option (a) is correct.**
- Active transport uses energy to pump molecules against a concentration gradient. Active transport is carried out by membrane-proteins.
- During the process of active transport, a protein pump makes use of stored energy in the form of ATP, to move molecules.

QUESTION 30:

Lidar technology, seen in the news, can be used for which of the following?

1. Autonomous driving
2. Infrastructure projects
3. Measuring air pollution

Select the correct answer using the code given below:

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

Answer: (d)

Explanation

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

It is similar to radar but instead of sound used in radar, Lidar uses light. Thus, it is faster. Lidar technology can be used in:

1. Airborne Lidar Mapping for forest management and planning, flood modelling, pollution modelling, mapping and cartography, urban planning, coastline management, transport planning, oil and gas exploration, archaeology, cellular network planning, etc.
2. Ground Based Lidar Mapping for visualisation and gaming, scene of accident/crime, architecture, building, restoration, navigation (autonomous vehicles), meteorology (Raman LiDAR is used for measuring the concentration of atmospheric gases, but can also be used to retrieve aerosol parameters) etc. **Hence, option (d) is correct.**

QUESTION 31:

The free legal services under National Legal Services Authority (NALSA) is given to:

1. Industrial workmen
2. Persons in custody
3. Women and children

Select the correct answer using the code given below:

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

Answer: (d)

Explanation

The persons eligible for getting free legal services under NALSA include:

- (i) Women and children. **Hence, statement 3 is correct.**
- (ii) Members of SC/ST
- (iii) Industrial workmen. **Hence, statement 1 is correct.**
- (iv) Victims of mass disaster, violence, flood, drought, earthquake, industrial disaster.
- (v) Disabled persons.
- (vi) Persons in custody. **Hence, statement 2 is correct.**
- (vii) Persons whose annual income does not exceed ₹1 lakh (in the Supreme Court Legal Services Committee the limit is ₹1,25,000/-).
- (viii) Victims of trafficking in human beings or beggar.

QUESTION 32:

Regarding the Supreme Court, consider the following statements:

1. 55 years of age is the minimum age for appointment as a judge of the Supreme Court.
2. Judge of the Supreme Court holds office until he attains the age of 65 years.
3. The maximum strength of judges (excluding CJI) in the Supreme Court is 33.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) None of the above

Answer: (b)

Explanation

- A person to be appointed as a judge of the Supreme Court should have the following qualifications:
 1. He should be a citizen of India.
 2. (a) He should have been a judge of a High Court for five years; or (B) He should have been an advocate of a High Court (or High Courts in succession) for ten years; or (C) He should be a distinguished jurist in the opinion of the President.
- From the above, it is clear that the Constitution has not prescribed a minimum age for appointment as a judge of the Supreme Court. **Hence, statement 1 is NOT correct.**
- Tenure of Judges The Constitution has not fixed the tenure of a judge of the Supreme Court. However, it makes the following three provisions in this regard:
 1. He holds office until he attains the age of 65 years. Any question regarding his age is to be determined by such authority and in such manner as provided by Parliament.
 2. He can resign from his office by writing to the President.
 3. He can be removed from his office by the President on the recommendation of the Parliament. **Hence, statement 2 is correct.**

- The Supreme Court (Number of Judges) Act, 1956 originally provided for a maximum of 10 judges (excluding the CJI). This number was increased to 13 by the Supreme Court (Number of Judges) Amendment Act, 1960, and to 17 in 1977.
- In 1986, the strength of the top court was increased to 25, excluding the CJI. Subsequently, the Supreme Court (Number of Judges) Act, 1956 was last amended in 2019 to increase the judges' strength from 31 to 33 (excluding the CJI). **Hence, statement 3 is correct.**
- At present, the Supreme Court is working with its full sanctioned strength of 31.

QUESTION 33:

With reference to High Court, consider the following statements:

1. Delhi and Puducherry are the only union territories that have a high court of their own.
2. The chief justice is appointed by the President after consultation with the Chief Justice of India only.

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

- At present, there are 24 high courts in the country. Out of them, four are common high courts. Delhi is the only union territory that has a high court of its own (since 1966). The other union territories fall under the jurisdiction of different state high courts Puducherry comes under the jurisdiction of Chennai High Court. **Hence, statement 1 is NOT correct**
- **Appointment of Judges:** The judges of the high court are appointed by the President. The chief justice is appointed by the President after consultation with the chief justice of India and the governor of the state concerned. **Hence, statement 2 is NOT correct.**

QUESTION 34:

With reference to Gram Nyayalayas, consider the following statements:

1. The Gram Nyayalayas Act, 2008 is based on the recommendation of 'Law Commission'.
2. Appeal in criminal cases shall lie to the District Court while appeal in civil cases shall lie to the Court of Session.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- The Gram Nyayalayas Act, 2008 has been enacted to provide for the establishment of the Gram Nyayalayas at the grass roots level for the purposes of providing access to justice to the citizens at their doorsteps and to ensure that opportunities for securing justice are not denied to any citizen due to social, economic or other disabilities.

- The Gram Nyayalayas Act, 2008 is broadly based on the recommendations of the Law Commission. **Hence, statement 1 is correct.**
- Appeal in criminal cases shall lie to the Court of Session and Appeal in civil cases shall lie to the District Court, which shall be heard and disposed of within a period of six months from the date of filing of the appeal. **Hence, statement 2 is NOT correct.**

QUESTION 35:

With reference to the salaries, allowances, privileges, leave and pension of the judges of the Supreme Court, consider the following statements:

1. They are determined from time to time by the Parliament.
2. They are votable by the Parliament.
3. They are charged on the Contingency Fund of India.

Which of the statements given above are NOT correct?

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

Answer: (b)

Explanation

- The salaries, allowances, privileges, leave and pension of the judges of the Supreme Court are determined from time to time by the Parliament. They cannot be changed to their disadvantage after their appointment except during a financial emergency. Thus, the conditions of service of the judges of the Supreme Court remain the same during their term of Office. **Hence, statement 1 is correct.**
- The salaries, allowances and pensions of the judges and the staff as well as all the administrative expenses of the Supreme Court are charged on the Consolidated Fund of India. **Hence, statement 3 is NOT correct.**
- Thus, the salaries, allowances, privileges, leave and pension of the judges of the Supreme Court are non-votable by the Parliament. **Hence, statement 2 is NOT correct.**

QUESTION 36:

Which of the following statements are correct?

1. 69th Constitutional Amendment Act of 1991 provided a special status to the Union Territory of Delhi.
2. The strength of the Council of Ministers of Delhi is fixed at fifteen percent of the total strength of the assembly.
3. The Administrator of Dadra and Nagar Haveli is concurrently the Administrator of Daman and Diu.

Select the correct answer using the code given below:

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

Answer: (b)

Explanation

- The 69th Constitutional Amendment Act of 1991 provided a special status to the Union Territory of Delhi, and redesignated it the National Capital Territory of Delhi and designated the administrator of Delhi as the lieutenant (Lt.) governor. It created a legislative assembly and a Council of Ministers for Delhi. **Hence, statement 1 is correct.**
- The strength of the Council of Ministers of Delhi is fixed at ten percent of the total strength of the assembly, that is, seven – one chief minister and six other ministers. **Hence, statement 2 is NOT correct.**
- The Administrator of Dadra and Nagar Haveli is concurrently the Administrator of Daman and Diu. Lakshadweep has a separate Administrator. **Hence, statement 3 is correct.**
- The Governor of Punjab is concurrently the Administrator of Chandigarh.

QUESTION 37:

With reference to National Legal Services Authority (NALSA), consider the following statements:

1. NALSA constituted under the Legal Services Authorities Act, 1987.
2. NALSA provides free legal services to the poor.
3. NALSA helps in organizing Lok Adalats for amicable settlement of disputes.

Which of the statements given above the correct?

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

Answer: (d)

Explanation

- Article 39A of the Constitution of India provides for free legal aid to the poor and weaker sections of the society and ensures justice for all. Articles 14 and 22(1) of the Constitution also make it obligatory for the State to ensure equality before the law and a legal system which promotes justice on the basis of equal opportunity to all.
- The National Legal Services Authority (NALSA) has been constituted under the Legal Services Authorities Act, 1987 to monitor and evaluate implementation of legal aid programmes and to lay down policies and principles for making legal services available under the Act. **Hence, statement 1 is correct.**
- Functions are as follows:
 1. To provide free and competent legal services to the eligible persons. **Hence, statement 2 is correct.**
 2. To organize Lok Adalats for amicable settlement of disputes. **Hence, statement 3 is correct.**
 3. To organize legal awareness camps in the rural areas.
- The free legal services include:
 - (a) Payment of court fee, process fees and all other charges payable or incurred in connection with any legal proceedings.
 - (b) Providing service of lawyers in legal proceedings.
 - (c) Obtaining and supply of certified copies of orders and other documents in legal proceedings.
 - (d) Preparation of appeal, paper book including printing and translation of documents in legal proceedings.

QUESTION 38:

Consider the following statements regarding qualification for being a judge in the High Court?

1. It is mandatory to be a citizen of India.
2. He should be a respected jurist in the eyes of Parliament.
3. He should have held a judicial office in the territory of India for ten years.

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

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

Answer: (b)

Explanation

Qualifications of Judges:

A person to be appointed as a judge of a high court, should have the following qualifications:

1. He should be a citizen of India. **Hence, statement 1 is correct.**
2. (a) He should have held a judicial office in the territory of India for ten Years. **Hence, statement 3 is correct.**

or

(b) He should have been an advocate of a high court (or high courts in succession) for ten years.

From the above, it is clear that the Constitution has not prescribed a minimum age for appointment as a judge of a high court. Moreover, unlike in the case of the Supreme Court, the Constitution makes no provision for appointment of a distinguished jurist as a judge of the high court. **Hence, statement 2 is NOT correct.**

QUESTION 39:

Which of the following statements is/are correct about Judicial Review?

1. The power of judicial review can be curtailed by a constitutional amendment.
2. The phrase 'Judicial Review' has nowhere been used in the Constitution.

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

Answer: (b)

Explanation

- **The doctrine of judicial review originated and developed in the USA.**
- The Supreme Court has declared the power of judicial review as a basic feature of the Constitution or an element of the basic structure of the Constitution. Hence, the power of judicial review cannot be curtailed or excluded even by a constitutional amendment. **Hence, statement 1 is NOT correct.**
- The phrase 'Judicial Review' has nowhere been used in the Constitution. **Hence, statement 2 is correct.**
- The constitutional validity of a legislative enactment or an executive order can be challenged in the Supreme Court or in the High Courts on the following three grounds:
 - (a) it infringes the Fundamental Rights (Part III),

- (b) it is outside the competence of the authority which has framed it, and
- (c) it is repugnant to the constitutional provisions.

QUESTION 40:

With reference to Original Jurisdiction of Supreme Court, consider the following statements:

1. The dispute must not involve a question on political nature.
2. No suit by a private citizen against the Centre or a state can be entertained before the Supreme Court.

Which of the statements given above is/ are correct?

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

Answer: (c)

Explanation

With regard to the exclusive original jurisdiction of the Supreme Court, two points are as follows:

1. The dispute must involve a question (whether of law or fact) on which the existence or extent of a legal right depends. Thus, the questions of political nature are excluded from it.
2. Any suit brought before the Supreme Court by a private citizen against the Centre or a state cannot be entertained under this. **Hence, statements 1 and 2 are both correct.**

QUESTION 41:

With reference to Zonal Councils, consider the following statements:

1. They are neither constitutional or statutory bodies.
2. The Prime Minister is the chairman of the zonal councils.
3. Their recommendations are only advisory in nature.

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

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

Answer: (d)

Explanation

- The Zonal Councils are statutory (and not constitutional) bodies. They are established by an Act of Parliament, that is, States Reorganisation Act of 1956. **Hence, statement 1 is NOT correct.**
- The act divided the country into five zones (Northern, Central, Eastern, Western and Southern) and provided a zonal council for each zone. In addition to the above Zonal Councils, a North-Eastern Council was created by a separate Act of Parliament – the North-Eastern Council Act of 1971. Its members include Assam, Manipur, Mizoram, Arunachal Pradesh, Nagaland, Meghalaya, Tripura and Sikkim.
- Each zonal council consists of the following members:
 - Home Minister of the Central Government.
 - Chief Ministers of all the States in the zone.
 - Two other Ministers from each State in the zone.
 - Administrator of each Union Territory in the zone.

- Besides, the following persons can be associated with the zonal council as advisors (i.e., without the right to vote in the meetings):
 - a person nominated by the Planning Commission;
 - Chief Secretary of the government of each State in the zone; and
 - Development Commissioner of each State in the zone.
- The Home Minister of the Central Government is the common chairman of the zonal councils. Each Chief Minister acts as a Vice-Chairman of the Council by rotation, holding office for a period of one year at a time. **Hence, statement 2 is NOT correct.**
- The Zonal Councils aim at promoting cooperation and coordination between States, Union Territories and the Centre. They discuss and make recommendations regarding matters like economic and social planning, linguistic minorities, border disputes, inter-state transport, and so on. They are only deliberative and advisory bodies. **Hence, statement 3 is correct.**

QUESTION 42:

During the rule of which of the following Governor-General of India the Age of Consent Act, 1891 was passed?

- (a) Lord Minto
- (b) Lord Lansdowne
- (c) Lord Curzon
- (d) Lord Bentick

Answer: (b)

Explanation

- Lord Lansdowne (1888-1894) was the governor-general of India when the Age of Consent Act, 1891 was passed by the central legislative council. During his regime, Indian Council Act (1892) and Second Factory Act (1891) were also passed. He also appointed the Durand Commission to define a line between British India and Afghanistan. **Hence, option (b) is correct.**
- The Age of Consent Act, 1891, also known as Act X of 1891, was a legislation enacted in British India on 19 March 1891 which raised the age of consent for sexual intercourse for all girls, married or unmarried, from ten to twelve years in all jurisdictions, its violation subject to criminal prosecution as rape.

QUESTION 43:

With reference to the differences between Council of Ministers and the Cabinet, consider the following statements:

1. Council of Ministers is a smaller body consisting of 15 to 20 ministers while Cabinet is a wider body consisting of 60 to 70 ministers.
2. Council of Ministers does not meet, as a body, to transact government business.
3. Council of Ministers is a constitutional body, dealt in detail by the Articles 74 and 75 of the Constitution while Cabinet is nowhere mentioned in the constitution.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

The Council of Ministers (COM) vs Cabinet

- COM is a wider body consisting of 60 to 70 ministers, while the cabinet is a smaller body consisting of 15 to 20 ministers. **Hence, statement 1 is NOT correct.**
- COM includes all the three categories of ministers, that is, Cabinet Ministers, Ministers of State, and Deputy Ministers. While Cabinet includes the Cabinet Ministers only. Thus, it is a part of the Council of Ministers.
- COM does not meet, as a body, to transact government business. It has no collective functions. While the Cabinet meets, as a body, frequently and usually once in a week to deliberate and take decisions regarding the transaction of government business. **Hence, statement 2 is correct.**
- COM It is a constitutional body, dealt in detail by the Articles 74 and 75 of the Constitution. Its size and classification are, however, not mentioned in the Constitution. The Cabinet was inserted in Article 352 of the Constitution in 1978 by the 44th Constitutional Amendment Act. Thus, it did not find a place in the original text of the Constitution. Now also, Article 352 only defines the cabinet saying that it is 'the council consisting of the prime minister and other ministers of cabinet rank appointed under Article 75' and does not describe its powers and functions. **Hence, statement 3 is NOT correct.**

QUESTION 44:

Who among the following is the author of Ghulamgiri (1873), which gives a historical survey of the slavery of lower castes?

- (a) Dr. B.R. Ambedkar
- (b) Mahatma Jyotirao Govindrao Phule
- (c) Savitribai Phule
- (d) E.V. Ramaswamy Naicker

Answer: (b)

Explanation

- Mahatma Jyotirao Govindrao Phule (1827-1890), also known as Jyotiba Phule was a social activist, thinker, anti-caste social reformer and writer from Maharashtra. His work extended to many fields including eradication of untouchability and the caste system and women's emancipation.
- In 1873, Phule, along with his followers, formed the Satya Shodhak Samaj (Society of Seekers of Truth) to attain equal rights for people from lower castes. People from all religions and castes could become a part of this association which worked for the upliftment of the oppressed classes.
- Phule is regarded as an important figure in the social reform movement in Lagrange. He and his wife, Savitribhai Phule, were pioneers of women's education in India. He is mostly known for his efforts in educating women and lower caste people. Phule Started the first school for girls in 1848 at Pune.
- In Brahmanache Kasab (1869), Phule exposed the exploitation by Brahmin priests. In Gulamgiri (1873) he has given a historical survey of the slavery of lower castes. **Hence, option (b) is correct.**
- Some ten years before writing this book, the American Civil War had been fought, leading to the end of slavery in America. Phule dedicated his book to all those Americans who had fought to free slaves, thus establishing a link between the conditions of the "lower" castes in India and the black slaves in America.

QUESTION 45:

Consider the following statements:

1. This Act provided for the first time for the association of Indians with the executive Councils of the Viceroy and Governors.

2. This Act introduced a system of communal representation called a Separate electorate.
3. This Act retained official majority in the Central Legislative Council but allowed the provincial legislative councils to have non-official majority.

The above mentioned features are the provisions of:

- (a) Indian Councils Act of 1861
- (b) Indian Councils Act of 1892
- (c) Indian Councils Act of 1909
- (d) Government of India Act of 1919

Answer: (c)

Explanation

Features of the Indian Council Act of 1909: This Act is also known as Morley-Minto Reforms

- It considerably increased the size of the legislative councils, both Central and provincial.
- It retained an official majority in the Central Legislative Council but allowed the provincial legislative councils to have a non-official majority.
- It enlarged the deliberative functions of the legislative councils at both the levels. For example, members were allowed to ask supplementary questions, move resolutions on the budget, and so on.
- It provided (for the first time) for the association of Indians with the executive Councils of the Viceroy and Governors.
- It introduced a system of communal representation for Muslims by accepting the concept of 'separate electorate'. **Hence, option (c) is correct.**

QUESTION 46:

Consider the following statements with reference to the Self Respect Movement:

1. Dr. B.R. Ambedkar founded the Self Respect Movement.
2. This movement was aimed at fighting untouchability.

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

- In the early twentieth century, the non-Brahman movement started. The initiative came from those non-Brahmin castes that had acquired access to education, wealth and influence. They argued that Brahmins were heirs of Aryan invaders from the north who had conquered southern lands from the original inhabitants of the region – the indigenous Dravidian races.
- They also challenged Brahmanical claims to power. E.V. Ramaswamy Naicker, or Periyar, as he was called, came from a middle-class family. Interestingly, he had been an ascetic in his early life and had studied Sanskrit scriptures carefully.
- Later, he became a member of the Congress, only to leave it in disgust when he found that at a feast organised by nationalists, seating arrangements followed caste distinctions – that is, the lower castes were made to sit at a distance from the upper castes. E.V. Ramaswamy Naicker founded the Self Respect Movement. **Hence, statement 1 is NOT correct.**
- Convinced that untouchables had to fight for their dignity, Periyar argued that untouchables were the true upholders of an original Tamil and Dravidian culture which had been subjugated by Brahmins.

- He felt that all religious authorities saw social divisions and inequality as God-given. Untouchables had to free themselves, therefore, from all religions in order to achieve social equality. Periyar was an outspoken critic of Hindu scriptures, especially the Codes of Manu, the ancient lawgiver, and the Bhagavad Gita and the Ramayana. He said that these texts had been used to establish the authority of Brahmins over lower castes and the domination of men. **Hence, statement 2 is correct.**

QUESTION 47:

With reference to Judicial Review in India, consider the following statements:

1. The provision of judicial review has been adopted from the constitution of the United States of America.
2. The scope of judicial review power of the Supreme Court in India is wider than that of the US Supreme Court.
3. All laws (including those in the Ninth Schedule) come under Judicial Review if they violate the basic structure of the Constitution.

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

- The doctrine of judicial review originated and developed in the USA. the Supreme Court has declared the power of judicial review as a basic feature of the Constitution or an element of the basic structure of the Constitution. Hence, the power of judicial review cannot be curtailed or excluded even by a constitutional amendment. **Hence, statement 1 is correct.**
- Judicial review is the power of the judiciary to examine the constitutionality of legislative enactments and executive orders of both the Central and State governments. On examination, if they are found to be violative of the Constitution (ultra vires), they can be declared as illegal, unconstitutional and invalid (null and void) by the judiciary. Consequently, they cannot be enforced by the Government.
- **Judicial review is needed for the following reasons:**
 - (a) To uphold the principle of the supremacy of the Constitution.
 - (b) To maintain federal equilibrium (balance between the Centre and the states).
 - (c) To protect the Fundamental Rights of the citizens.
- The scope of judicial review in India is narrower than what exists in the USA, though the American Constitution does not explicitly mention the concept of judicial review in any of its provisions. This is because the American Constitution provides for 'due process of law' against that of 'procedure established by law' which is contained in the Indian Constitution. The difference between the two is: "The due process of law gives wide scope to the Supreme Court to grant protection to the rights of its citizens. It can declare laws violative of these rights void not only on substantive grounds of being unlawful, but also on procedural grounds of being unreasonable. Our Supreme Court, while determining the constitutionality of a law, however examines only the substantive question i.e., whether the law is within the powers of the authority concerned or not. It is not expected to go into the question of its reasonableness, suitability or policy implications". **Hence, statement 2 is NOT correct.**
- The first amendment to the Indian Constitution added the Ninth Schedule to it. The First Amendment that brought in Articles 31A and 31B conferring upon the state the right to make laws to acquire private property and to deem such laws as not being discriminatory and to further protect all such

laws from any judicial review by creating something called the Ninth Schedule. In a landmark ruling on 11 January 2007, the Supreme Court of India ruled that all laws (including those in the Ninth Schedule) would be open to Judicial Review if they violated the basic structure of the constitution. Chief Justice of India, Yogesh Kumar Sabharwal noted, "If laws put in the Ninth Schedule abridge or abrogate fundamental rights resulting in violation of the basic structure of the constitution, such laws need to be invalidated."

- The Supreme Court judgment laid that the laws placed under Ninth Schedule after April 24, 1973 shall be open to challenge in court if they violated fundamental rights guaranteed under Article 14, 19, 20 and 21 of the Constitution. **Hence, statement 3 is correct.**

QUESTION 48:

Consider the following statements:

1. She was the main driving force behind the renaissance of Indian handicrafts, hand looms, and theater in independent India.
2. She was in charge of the women's section of the Sewa Dal in the Non-Cooperation Movement.

Which of the following prominent women leaders of national freedom struggle is being referred to in the statements given above?

- (a) Sarojini Naidu
- (b) Kamaladevi Chattopadhyay
- (c) Annie Besant
- (d) Usha mehta

Answer: (b)

Explanation

- Kamaladevi Chattopadhyay (3 April 1903 – 29 October 1988) was an Indian social reformer and freedom activist. She was most remembered for her contribution to the Indian Independence movement; for being the driving force behind the renaissance of Indian handicrafts, hand looms, and theater in independent India; and for upliftment of the socio-economic standard of Indian women by pioneering the co-operation.
- Kamaladevi came to know of Mahatma Gandhi's Non-Cooperation Movement in 1923, and she promptly joined the Seva Dal a Gandhian organisation set up to promote social upliftment. Soon she was placed in charge of the women's section of the Dal, where she got involved in recruiting, training and organising girls and women of all ages across India, to become voluntary workers, 'sevikas'. **Hence, option (b) is correct.**
- In 1926, she met the suffragette Margaret E. Cousins, the founder of All India Womens' Conference (AIWC), who inspired her to run for the Madras Provincial Legislative Assembly. Thus she became the first woman to run for a legislative seat in India. 'Inner Recesses and Outer Spaces' is an autobiography of Kamaladevi Chattopadhyay which was published in 1986.

QUESTION 49:

Which of the following is NOT enumerated in the Constitution of India as a fundamental duty?

- (a) To safeguard public property
- (b) To protect and improve the natural environment
- (c) To develop the scientific temper and spirit of enquiry
- (d) To promote international peace and security

Answer: (d)

Explanation

- Swaran Singh Committee setup in the aftermath of the internal emergency (1975-1977) recommended the inclusion of a separate chapter on fundamental duties. The 42nd Constitutional Amendment Act, 1976 added part IVA which consists of only one article that is Article 51A.

According to Article 51 A, it shall be the duty of every citizen of India:

- To abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem.
- To cherish and follow the noble ideals that inspired the national struggle for freedom
- To uphold and protect the sovereignty, unity and integrity of India.
- To defend the country and render national service when called upon to do so.
- To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities and to renounce practices derogatory to the dignity of women.
- To value and preserve the rich heritage of the country's composite culture.
- To protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.
- To develop scientific temper, humanism and the spirit of inquiry and reform.
- To safeguard public property and to abjure violence.
- To strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement and
- To provide opportunities for education to his child or ward between the age of six and fourteen years. This duty was added by the 86th Constitutional Amendment Act, 2002. Promotion of international peace and security is a Directive Principle under Article 51 of the Constitution. **Hence, option (d) is correct.**

QUESTION 50:

Consider the following statement:

In 1851 Governor General Lord Dalhousie described a kingdom as a "A cherry that will drop into our mouth one day."

Which of the following kingdoms was referred to by Lord Dalhousie in the statement given above?

- (a) Maratha
- (b) Awadh
- (c) Jhansi
- (d) Mysore

Answer: (b)

Explanation

- In 1851 Governor General Lord Dalhousie described the kingdom of Awadh as "a cherry that will drop into our mouth one day". Five years later, in 1856, the kingdom was formally annexed to the British Empire. **Hence, option (b) is correct.**
- The conquest happened in stages. The Subsidiary Alliance had been imposed on Awadh in 1801. By the terms of this alliance the Nawab had to disband his military force, allowing the British to position their troops within the kingdom, and act in accordance with the advice of the British Resident who was now to be attached to the court.
- Deprived of his armed forces, the Nawab became increasingly dependent on the British to maintain law and order within the kingdom. He could no longer assert control over the rebellious chiefs and taluqdars.

QUESTION 51:

Consider the following statement:

1. Pneumonia is an acute respiratory infection of the lungs.
2. Pneumonia is contagious that can be spread through coughing or sneezing.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- Pneumonia is an **acute respiratory infection of the lungs**. It doesn't have one single cause – it can develop from either bacteria, viruses or fungi in the air. **Hence, statement 1 is correct.**
 - Children whose immune systems are immature (i.e. newborns) or weakened – such as by undernourishment, or diseases like HIV – are more vulnerable to pneumonia.
- Pneumonia is contagious and can be **spread through coughing or sneezing**. It can also be spread through fluids, like blood during childbirth, or from contaminated surfaces. **Hence, statement 2 is correct.**
- Pneumococcal vaccines are vaccines against the bacterium *Streptococcus pneumoniae*.

QUESTION 52:

Consider the following statements regarding 'Azad Pattan hydel power project':

1. It is being built on the Indus river.
2. It is a part of China-Pakistan Economic Corridor (CPEC).

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

- Pakistan and China have signed an agreement for the 700 MW **Azad Pattan hydel power project on the Jhelum river** in Sudhnoti district of **Pakistan occupied Kashmir (PoK)**. **Hence, statement 1 is not correct.**
 - The 1.5-billion USD project is under the China Pakistan Economic Corridor (CPEC).
- The **Azad Pattan project** is one of five hydropower schemes on the Jhelum, the other four are Mahl, Kohala, Chakothi Hattian and Karot projects.
 - **Azad Pattan, Kohala and Karot** are being developed under the CPEC framework. **Hence, statement 2 is correct.**

QUESTION 53:

With reference to Melghat Tiger Reserve, consider the following statements:

1. It is part of Nandadevi Biosphere reserve.
2. It is the largest tiger reserve in India.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 and 2

Answer: (d)

Explanation

- **Melghat Tiger Reserve lies in Melghat Forests of Amravati district in Vidarbha region of Maharashtra** bordering Madhya Pradesh in the North and East. It is a part of the Satpura-Maikal landscape. **Hence, statement 1 is not correct.**
- **Nagarjunsagar-Srisailem Tiger Reserve, Andhra Pradesh is the largest tiger reserve in India. Hence, statement 2 is not correct.**
 - **Pench Tiger Reserve, Madhya Pradesh** is home to the largest number of tigers in India.

QUESTION 54:

Consider the following statements:

1. Biocatalysis refers to the use of natural substances from biological sources to speed up chemical reactions.
2. Cryogenic reactions are chemical reactions performed at high temperatures.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- **Biocatalysis refers to the use of natural substances from biological sources (such as enzymes) to speed up (catalyze) chemical reactions. Hence, statement 1 is correct.**
- **Cryogenic reactions are chemical reactions performed at very low temperatures (below -150°C). Hence, statement 2 is not correct.**

QUESTION 55:

Which of the following statements is/are correct about the Trans-shipment Terminal in India:

1. It is a terminal at a port which handles containers and stores them permanently.
2. India's first trans-shipment hub International Container Trans-shipment Terminal (ICTT) is being developed at Vallarpadam Terminal.
3. Vallarpadam Terminal is part of the Cochin Port in Kochi, Kerala.

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

Answer: (b)

Explanation

- Trans-shipment Terminal is a terminal at a port which handles containers, stores them temporarily and transfers them to other ships for the onward destination. **Hence the statement 1 is not correct.**
 - It basically acts as a switching point for cargo carried by deep-sea vessels operating on trans-continental trade routes.
- International Container Trans-shipment Terminal (ICTT) is the country's first trans-shipment hub. **Recently, the Ministry of Shipping reviewed the development of ICTT** which is locally known as the Vallarpadam Terminal. **Hence statement 2 is correct.**
- Vallarpadam Terminal is a part of the Cochin Port in Kochi, Kerala. **Hence statement 3 is correct.**
 - It is located on Vallarpadam Island.

QUESTION 56:

With reference to Eco-Sensitive Zones, consider the following statements:

1. They are notified under Wildlife Protection Act 1972.
2. Organic Farming is allowed in these zones.

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

- Eco-Sensitive Zones (ESZs) are areas within 10 kms around Protected Areas, National Parks and Wildlife Sanctuaries.
- ESZs are notified by the Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India under **Environment Protection Act 1986**. **Hence, statement 1 is not correct.**
- In case of places with sensitive corridors, connectivity and ecologically important patches, crucial for landscape linkage, even areas beyond 10 km width can also be included in the eco-sensitive zone.
- **Prohibited activities:** Commercial mining, saw mills, industries causing pollution (air, water, soil, noise etc), establishment of major hydroelectric projects (HEP), commercial use of wood, Tourism activities like hot-air balloons over the National Park, discharge of effluents or any solid waste or production of hazardous substances.
- **Regulated activities:** Felling of trees, establishment of hotels and resorts, commercial use of natural water, erection of electrical cables, drastic change of agriculture system, e.g. adoption of heavy technology, pesticides etc, widening of roads.
- **Permitted activities:** Ongoing agricultural or horticultural practices, rainwater harvesting, **organic farming**, use of renewable energy sources, adoption of green technology for all activities. **Thus, organic farming is allowed in ESZs. Hence, statement 2 is correct.**

QUESTION 57:

With reference to Anti-Defection Law, consider the following statements:

1. The member of any house is disqualified on voluntarily giving up his membership of the political party.
2. There is no judicial review against an order of a Speaker or Chairman in anti-defection proceedings.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

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

Answer: (a)

Explanation

- The **Anti-Defection Law** was passed in 1985 through the **52nd amendment** to the Constitution. It added the **Tenth Schedule to the Indian Constitution**. According to it, a member of a House belonging to any political party becomes disqualified for being a member of the House, if:
 - He **voluntarily gives up his membership** of such political party; or
 - He votes or abstains from voting in such House contrary to any direction issued by his political party without obtaining prior permission of such party and such act has not been condoned by the party within 15 days. **Hence, statement 1 is correct.**
- The Supreme Court in the **Kihoto Hollohan versus Zachillu and Others, 1992** has said that judicial review cannot be available at a stage prior to the making of a decision by the Speaker/Chairman.
 - Nor would interference be permissible at an interlocutory stage of the proceedings.
 - The only exception for any interlocutory interference (decree or judgment) being cases of interlocutory disqualifications or suspensions which may have grave, immediate and irreversible repercussions and consequences.
 - Therefore, Constitutional courts cannot judicially review disqualification proceedings under the Tenth Schedule (anti-defection law) of the Constitution until the Speaker or Chairman makes a final decision on merits.
- The Bench explained that the reason for limiting the role of courts in ongoing defection proceedings is that the office of the Speaker is held in the highest respect and esteem in parliamentary traditions.
- The scope of **judicial review** against an order of a Speaker or Chairman in **anti-defection proceedings would be confined** to jurisdictional errors, that is infirmities based on violation of constitutional mandate, mala fide actions and non-compliance with rules of natural justice. **Hence, statement 2 is not correct.**

QUESTION 58:

Consider following statements in context of newly developed method of earthquake prediction-

1. The new method is based on the analysis of frictional strength of phyllosilicates.
2. Phyllosilicates are the mineral in the form of thick plates found along the weakest part of the faults where earthquakes occur.

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

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

Answer: (b)

Explanation

- Researchers have now used a different approach for earthquake prediction by trying to predict the frictional strength of phyllosilicates. **Hence statement 1 is correct.**
 - Frictional Strength is the force required to cause movement along a fault.
 - Earthquakes usually occur along faults (fractures between rocks which can range from a few millimetres to thousands of kilometres).
 - When two blocks of earth slip past one another, seismic waves are generated in a short span of time and earthquakes occur.

- **Phyllosilicates minerals** in the form of **thin plates** found along the weakest part of the faults where earthquakes occur. **Hence statement 2 is not correct.**
 - The new model predicts that movement along phyllosilicate-rich fault zones becomes more difficult as it becomes faster and this has been consistent with experiments.

QUESTION 59:

Consider the following statements:

1. The scope of the pardoning power of the President is wider than the pardoning power of the Governor.
2. The pardoning power of the Governor extends to the sentence of any person convicted of any offence against any State law.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- **Article 72 and Article 161 of the Indian Constitution empowers the President and the Governors** respectively, the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence.
- The scope of the **pardoning power of the President under Article 72 is wider** than the pardoning power of the Governor under Article 161. **Hence, statement 1 is correct.**
- The **pardoning power of the Governor extends** to the sentence of any person convicted of any **offence against any State law. Hence, statement 2 is correct.**
 - However, the Governor cannot pardon against the death sentence and sentence of a Court Martial.

QUESTION 60:

Consider the following International bodies:

1. International Labour Organization
2. United Nations Educational, Scientific and Cultural Organization
3. World Health Organization
4. World Bank Group

Which of these comes under the purview of the United Nations Economic and Social Council?

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

Answer: (d)

Explanation

- **The United Nations Economic and Social Council (ECOSOC)** is one of the principal organs of the United Nations.
- It is the principal body for coordination, policy review, policy dialogue and recommendations on economic, social and environmental issues, as well as the implementation of internationally agreed development goals.

- It has 54 members, elected by the General Assembly for overlapping three-year terms.
- It coordinates the work of the 14 UN specialized agencies, ten functional commissions and five regional commissions, receives reports from nine UN funds and programmes and issues policy recommendations to the UN system and to member states.
- **Few important bodies under the purview of ECOSOC:**
 - **International Labour Organization (ILO)**
 - Food and Agriculture Organization (FAO)
 - **United Nations Educational, Scientific and Cultural Organization (UNESCO)**
 - **World Health Organization (WHO)**
 - **Bretton Woods Twins (World Bank Group and International Monetary Fund)**
 - United Nations Children's Fund (UNICEF)
- **Hence, option (d) is correct.**

QUESTION 61:

'Bathynomus raksasa', recently seen in the news, is a

- (a) Dance form performed by the Kharia tribe of Jharkhand.
- (c) Scientific name of giant Squirrel found in Sundarbans.
- (c) Super giant isopod species found in the Indian Ocean.
- (d) Variety of super giant trees of western Ghats.

Answer: (c)

Explanation

- Recently, scientists have reported the discovery of the **first super giant isopod species in the eastern Indian Ocean named 'Bathynomus raksasa'.** Hence, option C is correct.
 - It has been described as the **'cockroach of the sea'.**
 - A team of researchers from Singapore discovered it while exploring waters of the Indian Ocean in Bantan, off the southern coast of West Java in Indonesia in 2018.
- It is the sixth 'supergiant' species from the Indo-West Pacific, and is one of the largest known members of the genus Bathynomus.
- It's discovery will contribute towards increasing knowledge about the deep sea.

QUESTION 62:

Consider the following statements:

1. The clones of Casuarina plant genus are suitable for salt-affected soils.
2. The Casuarina have a role in nitrogen fixation in symbiotic association with bacteria Frankia.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- The National Award of Excellence for Outstanding Research in Forestry for the year 2019 has been awarded to Kannan C S Warriar, a scientist at Institute of Forest Genetics and Tree Breeding (IFGTB).
 - The award has been awarded to Kannan C S Warriar for releasing three **salt-tolerant productive clones of Casuarina** that are suitable for **salt-affected soils**, for the first time in the country.

- India has 6.73 million hectares of salt affected land and is also the largest producer of Casuarina in the world which makes the production of these clones a significant achievement. **Hence, statement 1 is correct.**
- Casuarina, also known as kattadi and savukku, is a plant genus with over 17 species with Casuarina equisetifolia being introduced in India in the 19th century.
 - They have a **role in nitrogen fixation in symbiotic association** with bacteria Frankia.
 - They provide fuel wood, pulp for paper making and of late is a preferred choice for biomass-based power generation.
 - They also play a key role in reclaiming mined areas and afforesting nutrient-poor sites. **Hence, statement 2 is correct.**

QUESTION 63:

BlackRock Android Malware was recently in the news. What type of malware is it?

- (a) Virus
- (b) Trojan
- (c) Ransomware
- (d) Worms

Answer: (b)

Explanation

- BlackRock is a banking Trojan and said to be an enhanced version of existing Xerxes malware which itself is a variant of the LokiBot Android trojan.
- A trojan is any type of malicious program disguised as a legitimate one. Often, they are designed to steal sensitive information (login credentials, account numbers, financial information, credit card information, and the like) from users.
- Banking trojans are a specific kind of trojan malware. Once installed onto a client machine, banking trojans use a variety of techniques to create botnets, steal credentials, inject malicious code into browsers, or steal money. **Hence, option B is correct.**

Other Types of Malware

- **Viruses:** A computer virus modifies other legitimate host files (or pointers to them) in such a way that when a victim's file is executed, the virus is also executed.
- **Worms:** The distinctive trait of the worm is its self-replicating malware. For example, **Iloveyou worm**
 - Iloveyou worm hit nearly every email user in the world, overloaded phone systems (with fraudulently sent texts), brought down television networks, and even delayed my daily afternoon paper for half a day.
- **Ransomware:** These malware programs that encrypt your data and hold it as hostage waiting for a cryptocurrency or digital pay off.
- **Adware:** It attempts to expose the compromised end-user to unwanted, potentially malicious advertising. A common adware program might redirect a user's browser searches to look-alike web pages that contain other product promotions.

QUESTION 64:

With reference to National Disaster Response Fund (NDRF), consider the following statements:

1. The fund is placed in the contingency fund of the Government of India.
2. Expenditures from it are not required to be approved by the Parliament.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

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

Answer: (b)

Explanation

- National Calamity Contingency Fund (NCCF) was renamed as **National Disaster Response Fund (NDRF)** with the enactment of the Disaster Management Act in 2005.
- It is defined in Section 46 of **the Disaster Management Act, 2005 (DM Act)**.
- It is placed in the **“Public Account”** of Government of India under “reserve funds not bearing interest”.
 - Public Accounts are constituted under **Article 266 (2)** of the Constitution. It accounts for flows for those transactions where the government is merely acting as a banker eg. provident funds, small savings etc.
 - These funds do not belong to the government and have to be paid back at some time. **Hence, statement 1 is not correct.**
- **Expenditures from it are not required to be approved by the Parliament. Hence, statement 2 is correct.**

QUESTION 65:

With reference to Sacred groves, consider the following statements:

1. These are protected forests having significant religious connotation for the protecting community.
2. It is legally protected under the Environment Protection Act, 1986.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- Sacred groves are protected forests which usually have a significant religious connotation for the protecting community.
 - In India, there are over a lakh sacred groves across different states called by different names like Kaavu in Malayalam, Koyil kaadu in Tamil, Orans in Rajasthan, Devara kaadu in Karnataka, and Sernas in Madhya Pradesh. **Hence, statement 1 is correct.**
- Many rare and endemic species, and species having medicinal and economic value can be found here, thus making them Biodiversity Hotspots. They house gene pools of some critically endangered plant species.
 - They are often associated with religious beliefs and felling of trees in sacred groves is considered taboo.
- Sacred groves have been legally protected under ‘**community reserves**’ in the **Wildlife (Protection) Amendment Act, 2002. Hence, statement 2 is not correct.**

QUESTION 66:

Which of the following bodies is not involved in the preparation of ‘The State of Food Security and Nutrition in the World’ report:

- (a) Food and Agriculture Organization of the United Nations (FAO)
- (b) International Fund for Agricultural Development (IFAD)

- (c) International Labour Organization (ILO)
- (d) World Health Organization (WHO)

Answer: (c)

Explanation

- **The State of Food Security and Nutrition in the World** is an annual flagship report **jointly prepared by** Food and Agriculture Organization of the United Nations (**FAO**), the International Fund for Agricultural Development (**IFAD**), the United Nations Children's Fund (**UNICEF**), the World Food Programme (**WFP**) and the World Health Organization (**WHO**) to inform on progress towards ending hunger, achieving food security and improving nutrition and to provide in-depth analysis on key challenges for achieving this goal in the context of the 2030 Agenda for Sustainable Development.
 - **International Labour Organization (ILO) is not involved** in the preparation of 'The State of Food Security and Nutrition in the World' report. **Hence, option C is correct.**
- The report targets a wide audience, including policy-makers, international organizations, academic institutions and the general public.
- According to the recent report, hunger and malnutrition is increasing around the world. In this scenario, achieving the **Sustainable Development Goal (2) of 'Zero Hunger' by 2030** will be very difficult.

QUESTION 67:

With reference to 'Sero-surveillance', consider the following statements:

1. It seeks to assess the prevalence of a disease in a population by detecting the presence of specific antibodies.
2. It indicates past infections and also detects active infections.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- **Sero-surveillance** seeks to **assess the prevalence of disease** in a population by **detecting the presence of specific antibodies** against the virus. **Hence, statement 1 is correct.**
- It can also be conducted to check if a person has developed immunity to certain diseases.
- It indicates past infections (and which triggered an immune response), **and is not used to detect active infections. Hence, statement 2 is not correct.**
- Tested Immunoglobulin G Using ELISA: The Sera (a part of blood) of samples were tested for IgG antibodies and Covid-19 infection using Covid Kavach ELISA kits approved by the Indian Council of Medical Research (ICMR).
 - IgG (Immunoglobulin G) is a type of antibody which develops in most Covid-19 patients (infections) at around two weeks after infection and remains in the blood even after recovery.
 - ELISA (Enzyme-Linked Immunosorbent Assay) is a test that detects and measures antibodies in blood.

QUESTION 68:

With reference to Dichlorodiphenyltrichloroethane (DDT), consider the following statements:

1. It was banned for agricultural use under the Stockholm Convention.
2. It is used as a chemical effective in reducing malaria infections.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

Dichlorodiphenyltrichloroethane (DDT)

- Originally developed as an insecticide, it became infamous for its environmental impacts.
- A worldwide ban on agricultural use was formalized under the **Stockholm Convention on Persistent Organic Pollutants**. Hence, **statement 1 is correct**.
- However, its limited use in disease vector control continues, because of its effectiveness in reducing malarial infections.
- The World Health Organisation (WHO) recommends DDT as one of the efficient Indoor Residual Spraying (IRS) chemicals to curb mosquito menace and it is widely used by Southern African countries like South Africa, Zimbabwe, Zambia, Namibia, Mozambique and India. Hence, **statement 2 is correct**.
- DDT is a colorless, tasteless, and almost odorless crystalline chemical compound.
 - It was first synthesized in 1874 by the Austrian chemist Othmar Zeidler.
 - Its insecticidal action was discovered by the Swiss chemist Paul Hermann Muller in 1939.
 - He was awarded the Nobel Prize in Physiology or Medicine in 1948 for his discovery of the high efficiency of DDT as a contact poison against several arthropods.

QUESTION 69:

Consider the following statements regarding “Manodarpan initiative”:

1. It is aimed at psychosocial support to students for their mental health and well-being during the times of Covid-19.
2. The initiative has been launched by the Ministry of Health and Family Welfare.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- Recently, the **Ministry of Human Resources Development (MHRD)** has launched the ‘**Man Darpan**’ initiative under Atmanirbhar Bharat Abhiyan. Hence, **statement 2 is not correct**.
- It is aimed to **provide psychosocial support to students**, family members and teachers for their mental health and well-being during the times of Covid-19. Hence, **statement 1 is correct**.
- The platform includes a national toll free helpline for students of schools, universities and colleges, which will be manned by a pool of experienced counsellors, psychologists and mental health professionals.
- It also has a website, a national database of counsellors which will host an interactive online chat platform, advisories and tips through webinars and other resources.

QUESTION 70:

With reference to Global Fund, consider the following statements:

1. The fund was created to end Tuberculosis, Acquired Immuno-Deficiency Syndrome and Malaria as epidemics.
2. India shares a partnership with the Global Fund only as a recipient.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- The Global Fund (with a total investment of \$2 billion) was created in 2002 to pool the world's resources & invest them strategically in programs to **end Tuberculosis (TB), Acquired Immuno-Deficiency Syndrome (AIDS), and Malaria as epidemics. Hence, statement 1 is correct.**
 - It is a partnership of governments, civil society, technical agencies, the private sector and people affected by the diseases.
 - India has set a precedent for other donors to contribute generously to the cause.
- India has recently **announced a contribution of \$22 million** to the Global Fund for AIDS, TB, and Malaria.
 - India has stepped an inch closer by enhancing the Global Fund efforts to strengthen health systems and save 16 million more lives across the globe.
 - The Global Fund to fight AIDS, Tuberculosis, and Malaria was created to raise, manage and invest the world's money in eliminating three of the deadliest infectious diseases the world has ever known.
- India shares a sustained partnership with the Global Fund since its formation, **both as a recipient and as a donor. Hence, statement 2 is not correct.**

QUESTION 71:

Malimath Committee, often seen in the news, is related to?

- (a) Reforms in the criminal justice system.
- (b) Reforms in the agriculture produce and marketing committee.
- (c) Restructuring of rural banking structure in India.
- (d) Formulating policies regarding small scale industries.

Answer: (a)

Explanation

- In 2000, the Government formed a panel headed by the former Chief Justice of Kerala and Karnataka, **Justice V.S. Malimath**, to suggest an **overhaul of the century-old criminal justice system.**
- Two years later, the Justice Malimath Committee submitted a report with 158 recommendations. The Committee was of opinion that the existing system "weighed in favour of the accused and did not adequately focus on justice to the victims of crime." **Hence, option A is correct.**

QUESTION 72:

With reference to 'Bal Gangadhar Tilak', consider the following statements:

1. He was the founder of the Deccan Education Society.
2. He founded the All India Home Rule League whose operations was limited to Maharashtra only.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- **Bal Gangadhar Tilak** founded the **Deccan Education Society (1884)** along with his associate Gopal Ganesh Agarkar and others. He was also one of the founders of the **Fergusson College (1885)** in Pune through the Deccan Education Society. **Hence, statement 1 is correct.**
- Contribution of Tilak in freedom movement:
 - **Propagated swadeshi movements** and encouraged people to boycott foreign goods.
 - **Indian Home Rule Movement** was a movement in British India on the lines of Irish Home Rule movement.
 - Started in 1916, it is believed to have set the stage for the independence movement under the leadership of Annie Besant and Bal Gangadhar Tilak for the educated English speaking upper class Indians.
 - **All India Home Rule League** founded by Tilak in April 1916 at Belgaum. It **worked in Maharashtra (except Bombay), the Central Provinces, Karnataka and Berar.** **Hence, statement 2 is not correct.**

QUESTION 73:

With reference to Government e-Marketplace (GeM) portal, consider the following statements:

1. It is operated under the Ministry of Agriculture & Farmers Welfare.
2. It provides facilities of reverse e-auction.

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

- **Government e-Marketplace (GeM)** is a one-stop National Public Procurement Portal to facilitate online procurement of common use Goods & Services required by various Central and State Government Departments/Organizations/Public Sector Undertakings (PSUs).
- It operates under the **Ministry of Commerce and Industry.** **Hence, statement 1 is not correct.**
- The procurement of goods and services by Ministries and the Central Public Sector Enterprises (CPSEs) is mandatory for goods and services available on GeM.
- It also provides the tools of **e-bidding** and **reverse e-auction** to facilitate the government users achieve the best value for their money. **Hence, statement 2 is correct.**

QUESTION 74:

With reference to 'Representation of the People Act (RPA), 1950', consider the following statements:

1. It provides for the allocation of seats in the House of the People and in the Legislative Assemblies and Legislative Councils of States.
2. It disqualifies a person convicted with a sentence of two years or more from contesting elections.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

Representation of the People Act (RPA), 1950:

- It lays down procedures for delimitation of constituencies.
- **It provides for the allocation of seats** in the House of the People (**Lok Sabha**) and in the Legislative Assemblies and Legislative Councils of States. **Hence, statement 1 is correct.**
- It also lays procedure for the preparation of electoral rolls and the manner of filling seats.
- RPA-1950 lays down the qualification of voters.
- **Section 8 of the Representation of the People Act, 1951 (not the RPA-1950)** disqualifies a person convicted with a sentence of two years or more from contesting elections. But those under trial continued to be eligible to contest elections. **Hence, statement 2 is not correct.**

QUESTION 75:

With reference to Chandra Shekhar Azad, consider the following statements:

1. He established the Hindustan Socialist Republican Association (HSRA).
2. The manifesto of HSRA was titled 'The Revolutionary'.
3. Martyrs' Day is observed all across India, as a tribute to Chandra Shekhar Azad.

Which of the following statements is/are correct?

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

Answer: (c)

Explanation

- After the suspension of the non-cooperation movement in 1922 by Gandhi, Chandra Shekhar Azad joined the **Hindustan Republican Association (HRA)**. HRA was later reorganised as the Hindustan Socialist Republican Army (HSRA).
 - **HSRA was established in 1928** at Feroz Shah Kotla in New Delhi by **Chandra Shekhar Azad**, Ashfaqulla Khan, Bhagat Singh, Sukhdev Thapar and Jogesh Chandra Chatterjee. **Hence, statement 1 is correct.**
- HSRA's manifesto titled The Revolutionary was produced as evidence in the **Kakori conspiracy case of 1925**. **Hence, statement 2 is correct.**
 - The **Kakori conspiracy case** (train robbery) was executed by Chandra Shekhar Azad, Ram Prasad Bismil, Ashfaqulla Khan, Rajendra Lahiri, and Manmathnath Gupta.
- Every year, **March 23 is observed as Martyrs' Day** as a tribute to freedom fighters **Bhagat Singh, Sukhdev Thapar, and Shivaram Rajguru**. **Hence, statement 3 is not correct.**

QUESTION 76:

Consider the following statements regarding National Biopharma Mission:

1. The mission is being implemented by the Biotechnology Industry Research Assistance Council (BIRAC).
2. The Innovate in India (i3) programme has been launched under this mission to promote indigenous manufacturing in the biopharma sector.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- **National Biopharma Mission** is an industry-academia collaborative mission for accelerating biopharmaceutical development in the country.
 - It was launched in 2017 at a total cost of ₹1500 crore and is 50% co-funded by World Bank loan.
- It is being implemented by the Biotechnology Industry Research Assistance Council (BIRAC). Hence, statement 1 is correct.
 - BIRAC is a Public Sector Enterprise, set up by the Department of Biotechnology (DBT), Ministry of Science & Technology.
- **Under this Mission, the Government has launched Innovate in India (i3) programme** to create an enabling ecosystem to promote entrepreneurship and indigenous manufacturing in the biopharma sector. **Hence, statement 2 is correct.**
- Objectives of the mission are development of vaccines, medical devices, diagnostics and biotherapeutics besides, strengthening the clinical trial capacity and building technology transfer capabilities in the country.

QUESTION 77:

With reference to the fundings of Rural Local Bodies (RLBs), consider the following statements:

1. The RLBs receive the grants from the Union Government based on the recommendations of the Finance Commission.
2. The Basic grants received from the Union Government can be used by RLBs for location-specific needs.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- Grants from the **Union Government to Panchayats** (Rural Local Bodies (RLBs)) are based on the recommendations of the **Central Finance Commission** as per **Article 280** of the Constitution. **Hence, statement 1 is correct.**
 - The Ministry of Finance has recently released a part of grants-in-aid of ₹15187.50 crore for around 2.63 lakh Rural Local Bodies (RLBs) of 28 States.

- This has been made on the recommendations of the Ministry of Panchayati Raj and the Department of Drinking Water and Sanitation, Ministry of Jal Shakti.
- This forms part of the Tied Grant as recommended by the 15th Finance Commission (FC) for the Financial Year (FY) 2020-2021.
- **The allocation** made by the Finance Commission is done in two parts, namely **Basic Grant** and **Tied Grant** in 50:50% mode.
 - **Basic grants** are **untied** and can be used by RLBs for location-specific needs, except for salary or other establishment expenditure.
 - ◆ The 'Untied' funds are utilised for the works of emergent nature which are normally not covered under the schemes decentralized at the district level. **Hence, statement 2 is correct.**
 - Tied grants are used for the basic services of:
 - ◆ Sanitation and maintenance of Open-Defecation Free (ODF) status.
 - ◆ Supply of drinking water, rain water harvesting and water recycling.
 - ◆ The RLBs shall, as far as possible, earmark one half of these grants each to these two critical services.
 - ◆ However, if any RLB has fully saturated the needs of one category it can utilize the funds for the other category.

QUESTION 78:

Which of the following statements is/are **correct** about the 2nd voluntary national review of Sustainable Development Goals (SDGs) report:

1. Voluntary national review of Sustainable Development Goals (SDGs) report is presented by Niti Ayog.
2. Around 271 million people were lifted out of multidimensional poverty in the last decade.
3. The poverty estimates presented were drawn from the global Multidimensional Poverty Index-2019 (MPI).

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

Answer: (d)

Explanation

- **Voluntary national review of Sustainable Development Goals (SDGs) report** has been presented by the **Niti Ayog** at the High-Level Political Forum on Sustainable Development. **Hence the Statement 1 is correct.**
 - This is the 2nd VNR of SDG report. The title of this year's report is '**Decade of Action: Taking SDGs from Global to Local**'.
- According to the report, at least 271 million people were lifted out of multi-dimensional poverty between 2005-06 and 2016-17. **Hence statement 2 is correct.**
- The poverty estimates presented were drawn from the Global Multidimensional Poverty Index-2019 (MPI-2019). **Hence the statement 3 is correct.**
 - As per the MPI-2019, the number of people living under poverty decreased to around 369.55 million by 2016-2017 from 640 million people in 2005-06.
- The Multidimensional Poverty Index was launched by the United Nations Development Programme (UNDP) and the Oxford Poverty & Human Development Initiative (OPHI) in 2010.

- MPI uses three dimensions and ten indicators which are:
 - **Education:** Years of schooling and child enrollment (1/6 weightage each, total 2/6);
 - **Health:** Child mortality and nutrition (1/6 weightage each, total 2/6);
 - **Standard of living:** Electricity, flooring, drinking water, sanitation, cooking fuel and assets (1/18 weightage each, total 2/6).

QUESTION 79:

With reference to the Delimitation Commission, consider the following statements:

1. It is appointed by the President of India and works in collaboration with the Election Commission of India.
2. It redraws Lok Sabha, state assembly constituencies and urban local body constituencies.
3. It works on the principle of One Vote One Value.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- The Delimitation Commission is appointed by the President of India and works in collaboration with the Election Commission of India. **Hence, statement 1 is correct.**
 - It is usually composed of the retired Supreme Court judge, Chief Election Commissioner and respective states' Election Commissioners.
- **Article 82 and Article 170** of the Indian constitution provides that the **Parliamentary constituencies and state legislative assemblies** respectively to be redrawn by a Delimitation commission, established after every Census.
 - However, there is **no such commission for urban local bodies. Hence, statement 2 is not correct.**
- It redraws the boundaries and determines the number of constituencies to make the population of all constituencies nearly equal. Thereby, working on the principle of One Vote One Value. **Hence, statement 3 is correct.**

QUESTION 80:

With reference to 'NISHTHA programme', consider the following statements:

1. It has been launched to improve learning outcomes at the higher secondary level in the country.
2. It is a capacity building programme for improving the quality of school education through integrated teacher training.

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

- Recently, the **National Initiative for School Heads and Teachers Holistic Advancement (NISHTHA)** programme has been launched for the first time in online mode in the state of Andhra Pradesh.

- Initially, the NISHTHA programme was launched in 2019 through face-to-face mode to improve learning outcomes at the **elementary level** in the country. **Hence, statement 1 is not correct.**
- Covid-19 pandemic situation and lockdown has affected the conduct of this programme in face-to-face mode. Therefore, NISHTHA has been customized for online mode to be conducted through Digital Infrastructure for Knowledge Sharing (DIKSHA) and NISHTHA portals.
- Aim:
 - National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA) is a **capacity building programme** for improving the quality of school education **through integrated teacher training**. **Hence, statement 2 is correct.**
 - It aims to build competencies among all the teachers and school principals at the elementary stage.

QUESTION 81:

With reference to 'PASSEX', consider the following statements:

1. It is an annual naval exercise conducted near Andaman and Nicobar islands.
2. It is a trilateral exercise involving the United States, Japan and India.

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

- Indian Naval ships conducted a **Passage Exercise (PASSEX) with the U.S. Navy's USS Nimitz** carrier strike group near the Andaman and Nicobar islands.
 - A passage exercise is **normally undertaken whenever an opportunity arises**, in contrast to pre-planned maritime drills. **Hence, statement 1 is not correct.**
 - Four frontline Indian naval ships which included INS Shivalik, INS Sahyadri, INS Kamorta and INS Rana, teamed up with carrier USS Nimitz and three other U.S. ships to conduct the exercise.
 - USS Nimitz is the U.S. Navy's largest aircraft carrier.
- Recently, the Indian Navy had also conducted similar PASSEXs with the Japanese Navy and the French Navy. **It is not a trilateral exercise. Hence, statement 2 is not correct.**

QUESTION 82:

With reference to 'Direct monetisation', consider the following statements:

1. The Reserve Bank of India directly funds the Central government's deficit against the bonds or securities.
2. The government bonds are a liability for the Reserve Bank of India.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- In **direct monetisation**, the government asks the **Reserve Bank of India (RBI)** to print new currency in return for new bonds that the government gives to the RBI.
 - It simply means that the Reserve Bank of India (RBI) directly funds the Central government's deficit against government bonds or securities.
 - This is different from the "indirect" monetisation that RBI does when it conducts the Open Market Operations (OMOs) and/ or purchases bonds in the secondary market. **Hence, statement 1 is correct.**
- In lieu of printing new cash, which is a liability for the RBI (since, every currency note has the RBI Governor promising to pay the bearer the designated sum of rupees), it gets government bonds.
 - The **government bonds or securities are an asset for the RBI** since such bonds carry the government's promise to pay back the designated sum at a specified date. **Hence, statement 2 is not correct.**

QUESTION 83:

Regarding 'Consumer Protection Act-2019', consider the following statements:

1. It envisages a Central Consumer Protection Authority which aims to promote, protect and enforce the rights of consumers.
2. The Consumer Protection (E-commerce) Rules, 2020 are advisory in nature.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- The new **Consumer Protection Act, 2019** came into force on 20th July 2020 and it will **empower consumers and help them in protecting their rights** through its various notified rules and provisions.
- The new act will be swift and less time consuming compared to the older Consumer Protection Act, 1986 in which single-point access to justice was given making it a time-consuming exercise.
- The **Consumer Protection Act, 2019** establishes the **Central Consumer Protection Authority (CCPA)** whose primary objective will be **to promote, protect and enforce the rights of consumers. Hence, statement 1 is correct.**
- CCPA is empowered to:
 - Conduct investigations into violations of consumer rights and institute complaints/prosecution.
 - Order discontinuance of unfair trade practices and misleading advertisements.
- Now, the **Consumer Protection (E-commerce) Rules, 2020 are mandatory and are not advisories. Hence, statement 2 is not correct.**
 - The rules also prohibit the e-commerce companies from manipulating the price of the goods or services to gain unreasonable profit through unjustified prices.

QUESTION 84:

Regarding 'Postal Ballots System' in India, consider the following statements:

1. Ballot papers are distributed electronically to electors and are returned to the election officers via post.
2. As of now only the Service voters are allowed to cast their votes through postal ballot.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

Postal Ballots System

- Ballot papers are **distributed electronically to electors and are returned to the election officers via post. Hence, statement 1 is correct.**
- Currently, the following voters are allowed to cast their votes through postal ballot:
 - **Service voters** (armed forces, the armed police force of a state and government servants posted abroad).
 - **Voters on election duty.**
 - **Voters above 80 years of age or Persons with Disabilities (PwD).**
 - **Voters under preventive detention.**
 - **Hence, statement 2 is not correct.**
- The exception to the above-mentioned category of voters is provided under Section 60 of the Representation of the People Act, 1951.

QUESTION 85:

Consider the following statements:

1. National Financial Reporting Authority (NFRA) is a statutory body.
2. NFRA is an independent regulator for the enforcement of auditing standards.
3. NFRA can probe all listed companies and unlisted public companies.

Which of the following statements is/are correct?

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

Answer: (b)

Explanation

- The **National Financial Reporting Authority (NFRA)** was constituted on 1st October 2018 by the Government of India under section 132 (1) of the Companies Act, 2013. Therefore, it is not a statutory body. **Hence, statement 1 is not correct.**
- It was established as an **independent regulator for enforcement of auditing standards** and ensuring the quality of audits so as to enhance investor and public confidence in the financial disclosures of companies. **Hence, statement 2 is correct.**
 - It can also investigate professional misconduct committed by members of the Institute of Chartered Accountants of India (ICAI) for the prescribed class of body corporate or persons.
- It can probe listed companies and those unlisted public companies having paid-up capital of no less than ₹500 crore or annual turnover of no less than ₹1,000 crore. **Hence, statement 3 is not correct.**

QUESTION 86:

With reference to 'Madhubani paintings', consider the following statements:

1. This art form is practised only in the Mithila region of Bihar.
2. The painted themes & designs highlight religious beliefs only.

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

- **Madhubani painting** is one of the oldest and most famous Indian art forms. It is also known as **Mithila or Madhubani art**. It is practised in **Bihar and Nepal**. Hence, **statement 1 is not correct**.
- Traces of Madhubani art can also be noticed in the Ramayana, the Indian epic. It is based on the themes which depict the life of Hindu deities like Krishna, Rama, Lakshmi, Shiva, Durga, and Saraswati.
- The **themes & designs widely painted** are of Hindu deities such as Krishna, Rama, Siva, Durga, Lakshmi, Saraswati, **Sun and Moon**, Tulasi plant, **court scenes, wedding scenes, social happenings** etc.
 - Also, heavenly bodies like the **Sun and the Moon** often form the **centrepiece of Madhubani paintings**. Hence, **statement 2 is not correct**.
 - The style of this painting includes **geometrical patterns**. The colours used in Madhubani paintings comprise natural extracts from plants and other natural sources. E.g.: Black colour is obtained by mixing soot with cow dung; blue from indigo; white from rice powder; orange from palasha flowers, etc.
- This style of painting has been traditionally done by the women of the region, though today men are also involved to meet the demand.

QUESTION 87:

Regarding the 'Criticality of nuclear reactor, which of the following statements is correct?

- (a) It is a condition where the maximum limit of nuclear fuel is exhausted.
- (b) The nuclear fuel inside a reactor sustains a fission chain reaction.
- (c) It is a condition of a nuclear accident leading to fatal radiation in the atmosphere.
- (d) The stage is specifically engineered to produce an uncontrolled reaction in a nuclear weapon.

Answer: (b)

Explanation

- Criticality is the **normal operating condition** of a reactor, in which **nuclear fuel sustains a fission chain reaction**. A reactor achieves criticality (and is said to be critical) when each fission event releases a **sufficient number of neutrons to sustain an ongoing series of reactions**.
- Criticality is the **first step towards power production**. Heat is produced in the event, which is used to generate steam that spins a turbine to create electricity. Hence, **option B is correct**.

QUESTION 88:

Haloarchaea due to which recently the Lonar lake turned pink is a kind of

- (a) Bacteria
- (b) Fungi

- (c) Lichen
- (d) Fern

Answer: (a)

Explanation

- According to the Agharkar Research Institute, the colour of Lonar lake water in Maharashtra's Buldhana district turned pink due to a large presence of the salt-loving '**Haloarchaea**' microbes.
- The increased salinity and pH facilitated the growth of halophilic microbes, mainly Haloarchaea.
- Halophiles are a group of microorganisms that can grow and often thrive in areas of high salt (NaCl) concentration.
- **Haloarchaea is a bacteria culture which produces pink pigment and is found in water saturated with salt. Hence, option A is correct.**

QUESTION 89:

With reference to Indian BullFrog, consider the following statements:

1. It is an invasive species.
2. It is listed as critically endangered in the IUCN Red List.
3. It is protected under the Indian Wildlife Act 1972.

Which of the following statements is/are correct?

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

Answer: (c)

Explanation

- Indian bullfrog is an invasive species that poses a threat to small endemic vertebrates of Andamans and Nicobar islands. **Hence, statement 1 is correct.**
 - An invasive species is a species that is accidentally or artificially introduced into a biosphere where it is not normally found.
 - In the absence of a natural predator, as it generally happens, the invasive species thrive and causes economic and environmental damage due to the imbalance created by its introduction.
- Its IUCN Red List Category status is Least Concern. **Hence, statement 2 is not correct.**
- It is placed **under Schedule IV** (Animals not in danger of becoming extinct; hunting invokes penalties) of the Indian Wildlife Act 1972. **Hence, statement 3 is correct.**

QUESTION 90:

Regarding 'Dibru-Saikhowa National Park', consider the following statements:

1. Dibru-Saikhowa is a National Park as well as a Biosphere Reserve.
2. It is the largest swamp forest in India.
3. It is an identified Important Bird Area (IBA).

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

Dibru-Saikhowa National Park

- Dibru-Saikhowa is a **National Park as well as a Biosphere Reserve** situated in the south bank of the river Brahmaputra in Assam. **Hence, statement 1 is correct.**
- The forest type of Dibru-Saikhowa comprises semi-evergreen forests, deciduous forests, littoral and swamp forests and patches of wet evergreen forests.
- It is the **largest swamp forest in north-eastern India** (Sundarban is the largest in India). **Hence, statement 2 is not correct**
- Mammals found in the Park include Tiger, Elephant, Leopard, Jungle Cat, Bears, Small Indian Civet, Squirrels, Gangetic Dolphin, Hoolock Gibbon, etc.
- **It is an identified Important Bird Area (IBA)**, notified by the Birdlife International. It is most famous for the rare white-winged wood ducks as well as feral horses. **Hence, statement 3 is correct.**
- Maguri Motapung wetland is a part of the Reserve.

QUESTION 91:

With reference to Turtle Survival Alliance, consider the following statements:

1. It aims to exclusively address the Asian Turtle Crisis.
2. India is a member of the Turtle Survival Alliance.

Which of the following statements is/are correct?

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

Answer: (b)

Explanation

- The Turtle Survival Alliance (TSA) was formed in 2001 as an International Union for Conservation of Nature (IUCN) partnership for sustainable captive management of freshwater turtles and tortoises.
 - Though it arose in response to the rampant and unsustainable harvest of Asian turtle populations to supply Chinese markets, a situation is known as the Asian Turtle Crisis, its **mission is to achieve 'Zero Turtle Extinctions in the 21st Century'**. **Hence, statement 1 is not correct.**
- **India is a member of the Turtle Survival Alliance.** Indian Turtle Conservation Action Network (ITCAN) in collaboration with the Turtle Survival Alliance-India and Wildlife Conservation Society-India has developed a mobile-based application (KURMA) aimed at turtle conservation. **Hence, statement 2 is correct.**

QUESTION 92:

With reference to Electronics Manufacturing Clusters (EMC) Scheme, consider the following statements:

1. The scheme has been launched by the Ministry of Commerce and Industry.
2. The scheme provides assistance for setting up of Greenfield EMCs only.

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

- **The Ministry of Electronics and Information Technology (MeitY)** launched the Electronics Manufacturing Clusters (EMC) Scheme in 2012. **Hence, statement 1 is not correct.**
- The objective of the scheme was to provide support for creation of world class infrastructure for attracting investments in the Electronics Systems Design and Manufacturing (ESDM) sector.
- The scheme provided grant assistance for setting up of both **Greenfield and Brownfield EMCs** across the country. **Hence, statement 2 is not correct.**
 - For projects in Greenfield Electronics Manufacturing Clusters, assistance is provided to the extent of 50% of the project cost subject to a ceiling of ₹50 crore for every 100 acres of land.
 - For Brownfield EMCs, 75% of the cost of infrastructure is provided, subject to a ceiling of ₹50 crore.

QUESTION 93:

With reference to Financial Stability Report (FSR), consider the following statements:

1. The Financial Stability Report is published annually by RBI.
2. It assesses the resilience of the financial sector through stress tests.

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

- The Reserve Bank of India released the Financial Stability Report (FSR) recently. FSR is a biannual publication. **Hence, statement 1 is not correct.**
- The FSRs are periodic exercises for reviewing the nature, magnitude and implications of risks that may have a bearing on the macroeconomic environment, financial institutions, markets and infrastructure.
- These reports also assess the resilience of the financial sector through stress tests. **Hence, statement 2 is correct.**
 - **Stress tests are used to gauge how certain unfavorable economic scenarios**, such as a deep recession or financial crisis will affect a company, industry or specific portfolio. Stress tests are usually computer-generated simulation models that test hypothetical scenarios.
- It reflects the collective assessment of the Sub-Committee of the Financial Stability and Development Council (FSDC) on risks to the financial stability of the country, as also the resilience of the financial system.

QUESTION 94:

Consider the following statements:

1. An elected member of the house voluntarily gives up the membership of the political party, on whose ticket he is elected.
2. Voting against or abstaining from voting contrary to the whip issued.
3. An elected member goes out of his party as a result of a merger of the one-third of the elected members of the party with another party.

Which of the above statement(s) is/are correct are conditions for disqualification under the Tenth Schedule?

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

Answer: (b)

Explanation

- The **Anti-Defection Law** was passed in 1985 through the 52nd amendment to the Constitution. It provides for disqualification of elected members to the legislature, on the grounds of defection. Following are the grounds for disqualification for an elected member, if:
 - He/she voluntarily gives up his membership of such a political party. **Hence, statement 1 is correct.**
 - He/she votes or abstains from voting in such House contrary to any direction issued by his political party without obtaining prior permission of such party and such act has not been condoned by the party within 15 days. **Hence, statement 2 is correct.**
- 91st amendment provided for **exceptions to the disqualification on the Ground of Defection**, i.e. if a member goes out of his party as a result of a merger of the party with another party.
 - However, such a merger takes place when **two-thirds of the members** of the party have agreed to such a merger.
 - **Hence, statement 3 is not correct.**

QUESTION 95:

With reference to 'Panchayat Enterprise Suite (PES)', consider the following statements:

1. It is a suite of some Core Common Applications that addresses nearly the entire spectrum of Panchayats' functioning.
2. 'AuditOnline' is one of the applications developed under PES.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- The Ministry of Panchayati Raj (MoPR) has undertaken **e-Panchayat Mission Mode Project (e-Panchayat MMP)** with a view to introduce and strengthen e-Governance in Panchayati Raj Institutions (PRIs) across the country.
- Under e-Panchayat MMP, **Panchayat Enterprise Suite (PES)** which comprises **11 Core Common Applications has been deployed** that address nearly the entire spectrum of Panchayats' functioning viz. from internal core functions such as Planning, Monitoring, Budgeting, Accounting, Social Audit etc. to citizen service delivery operations like issue of certificates, licenses etc. **Hence, statement 1 is correct.**
- '**AuditOnline**' is an application developed as a part of Panchayat Enterprise Suite (PES) under **e-panchayat Mission Mode Project (MMP)** initiated by the Ministry of Panchayati Raj (MoPR). **Hence, statement 2 is correct.**

- It facilitates the financial audit of accounts at all the three levels of Panchayats viz District, Block and Village Panchayats, Urban Local Bodies (ULB) and Line department by Auditors.
- It not only facilitates the online and offline audit of accounts but also serves the purpose of maintaining the past audit records of the auditee with associated list of the auditors and audit team involved in the audit.

QUESTION 96:

With reference to Seismic Zones in India, consider the following statements:

1. According to the Bureau of Indian Standards there are five seismic zones in India.
2. The Seismic Zone V are seismically the most active regions.

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

- There are **four seismic zones** (II, III, IV, and V) in India based on scientific inputs relating to seismicity, earthquakes occurred in the past and tectonic setup of the region.
 - Previously, earthquake zones were divided into five zones with respect to the severity of the earthquakes but the **Bureau of Indian Standards (BIS)** grouped the country into **four seismic zones** by unifying the first two zones. **Hence, statement 1 is not correct.**
 - BIS is the official agency for publishing the seismic hazard maps and codes.
- Seismic Zone II:
 - Area with minor damage earthquakes corresponding to intensities V to VI of MM scale (MM-Modified Mercalli Intensity scale).
- Seismic Zone III:
 - Moderate damage corresponding to intensity VII of MM scale.
- Seismic Zone IV:
 - Major damage corresponding to intensity VII and higher of MM scale.
- Seismic Zone V:
 - Area determined by pro seismically of certain major fault systems and is **seismically the most active region.**
 - **Earthquakes with magnitudes in excess of 7.0 have occurred** in these areas, and have had intensities higher than IX. **Hence, statement 2 is correct.**

QUESTION 97:

With reference to Tuting-Tidding Suture Zone (TTSZ), consider the following statements:

1. In this zone the Himalaya takes a sharp southward bend and connects with the Indo-Burma Range.
2. The area is generating minor earthquakes at two different crustal depths.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- The **Tuting-Tidding Suture Zone (TTSZ)** is a major part of the Eastern Himalaya, where the Himalaya takes a sharp southward bend and connects with the Indo-Burma Range. **Hence, statement 1 is correct.**
 - This part of the Arunachal Himalaya has gained significant importance in recent times due to the growing need of constructing roads and hydropower projects, making the need for understanding the pattern of seismicity in this region critical.
- The study by the Wadia Institute of Himalayan Geology (WIHG), pertaining to the exploration of the elastic properties of rocks and seismicity in Arunachal Himalaya, has revealed that the area is **generating moderate earthquakes at two different crustal depths.**
 - The region has been placed into **Seismic Zone V**, thus most vulnerable to earthquakes. **Hence, statement 2 is not correct.**

QUESTION 98:

Which of the following countries have a presidential form of government?

1. United states Of America
2. South Korea
3. Canada
4. Afghanistan

Select the correct answer using the code given below:

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

Answer: (a)

Explanation

Presidential System of Government:

- In this system, the President is both head of state and government, e.g. USA, South Korea, Afghanistan. **(Canada is a parliamentary democracy). Hence, option A is correct.**
- The executive is not responsible to the legislature for its policies and acts, and is constitutionally independent of the legislature in respect of its term of office.

QUESTION 99:

With reference to Contempt of Court, consider the following statements:

1. Civil contempt of court is not an offence in India.
2. The Supreme court can punish in regard to contempt of all courts in India.

Which of the above statement(s) is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 and 2

Answer: (b)

Explanation

- The Contempt of Courts Act 1971, contempt refers to the offence of showing disrespect to the dignity or authority of a court. The Act divides contempt into civil and criminal contempt. **Hence, statement 1 is not correct.**
 - **Civil contempt:** It is willful disobedience to any judgment, decree, direction, order, writ or other processes of a court or wilful breach of an undertaking given to the court.
 - **Criminal contempt:** It is any act which may result in:
 - ◆ Scandalising the court by lowering its authority.
 - ◆ Interference in the due course of a judicial proceeding.
 - ◆ An obstruction in the administration of justice.
- In 1991, the Supreme Court ruled that it has the power to punish for contempt not only of itself but also of high courts, subordinate courts and tribunals functioning in the entire country. **Hence, statement 2 is correct.**
 - Also, High Courts have been given special powers to punish contempt of subordinate courts, as per Section 10 of the Contempt of Courts Act of 1971.

QUESTION 100:

Consider the following statements regarding 'Special Leave Petition (SLP)':

1. It gives power to the Supreme Court to grant special permission to an aggrieved party to appeal against an order passed in lower courts.
2. Once SLP is filed, the Supreme Court has to hear the matter.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- **Special leave petition (SLP)** is a power of the Supreme Court of India granted by Constitution Article 136. It gives power to the Supreme Court to grant special permission or leave to an aggrieved party to appeal against an order passed in any of the lower courts or tribunals in India. **Hence, statement 1 is correct.**
- It is **not an appeal but a petition filed for an appeal**. So after an SLP is filed, the **Supreme Court may hear the matter and if it deems fit**, it may grant the 'leave' and convert that petition into an 'appeal'. SLP shall then become an Appeal and the Court will hear the matter and pass a judgment. **Hence, statement 2 is not correct.**