

## ALL INDIA MOCK TEST -2

Q1. In the context of Indian history, which among the following events took place during the viceroyship of Lord Ripon?

1. Establishment of Indian National Congress
2. Passage of Vernacular Press Act
3. Passage of the first Factory Act
4. A resolution on local-self government
5. Appointment of William Hunter commission

Select the correct answer using the code given below.

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

Answer: c

Explanation:

- Lord Ripon was viceroy of India from 1880 to 1884. He made remarkable contribution to the development of local government.
- The Indian National Congress was set up on 28th December, 1885 during the viceroyship of Lord Dufferin (1884-1888). So, point 1 is not correct.
- The Vernacular Press act (1878) was passed during the period of Lord Lytton (1876-1880). So, point 2 is not correct.
- The First factory act (1881) to improve the labour conditions was passed during viceroyship of Lord Ripon (1880-1884). So, point 3 is correct.
- Lord Ripon is considered as the father of local self-government in India. He passed a resolution on local self-government (1882) which provided for development of local bodies to improve administration and as an instrument of popular education. So, point 4 is correct.
- Lord Ripon appointed William Hunter commission (1882-83) to review the progress of education in India since the Wood's Despatch of 1854. So, point 5 is correct.

Therefore, option (c) is the correct answer.

Subject: History | Governor Generals and Viceroys of India

Tag: Factual

Q2. Which of the following groups of agricultural crops/products were introduced by the Portuguese in India?

- a) Cashewnut, Tobacco, Papaya, Pineapple
- b) Opium, Coffee, Tobacco, Betel leaf
- c) Papaya, Chillies, Opium, Pineapple
- d) Betel leaf, Papaya, Chillies, Tobacco

Answer: a

Explanation:

- The Portuguese introduced Cashew Nuts towards the end of the 15th century in India in the regions of Goa and the Province of North. Tobacco cultivation in India was introduced by the Portuguese in 1605. They promoted agricultural expansion in Travancore and introduced new agricultural products such as pineapple, papaya etc. They also introduced better varieties of coconuts. So, option a is correct.

- Britain grew opium in India and exported it to China. Coffee was introduced in India by Baba Budan. Betel leaf was introduced to India by traders from South East Asia.

Therefore, option (a) is the correct answer.

Subject: History | Advent of Europeans in India

Tag: Factual

Q3. With reference to the Government of India Act, 1858, consider the following statements:

1. It abolished the doctrine of Lapse introduced by Lord Dalhousie.
2. It ended the system of double government introduced by the Pitts India Act.
3. It provided for the Secretary of State to present a periodic report to the British Parliament.
4. It gave recognition to the portfolio system introduced by Lord Canning.

Which of the statements given above are correct?

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

Answer: c

Explanation

- The Government of India act, 1858 known as 'Act for Good Government of India' abolished the East India company and transferred powers of government, territories and revenues to the British Crown. It abolished the Doctrine of Lapse introduced by Lord Dalhousie. So, statement 1 is correct.
- The Act ended the system of double government introduced by Pitts India Act, 1784, by abolishing the Board of Control and Court of Directors. So, statement 2 is correct.
- The Secretary of State was given the power of sending and receiving secret messages from the Governor-General without the necessity of communicating to the Indian Council. He was to present to the House of Commons a periodic report on the moral and material progress of India. So, statement 3 is correct.
- Indian Councils Act of 1861 gave recognition to the portfolio system introduced by Lord Canning in 1859. So, statement 4 is not correct.

Therefore, option (c) is the correct answer.

Subject: History | The British administrative reforms

Tag: Factual, Analytical

Q4. With reference to Peasant movements in India, consider the following statements:

1. The All-India Kisan Congress was founded in Delhi with N.G Ranga as its first president.
2. Karshak Sanghams were organised for farmers' mobilization in the Malabar region.
3. Bardoli Satyagraha resulted in the abolition of land revenue by the British government.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

- The All-India Kisan congress was established at Lucknow in 1936. Swami Sahjanand was the first president and N.G Ranga was the general secretary of the Kisan congress. The other participants included Ram Manohar Lohia, Indulal Yagnik, Jayaprakash Narayan, Mohanlal Gautam etc. So, statement 1 is not correct.

- The peasants were mobilized in the Malabar region by Karshak Sanghams (peasant organizations). The most popular method was marching of peasants groups to landlords to get their demands accepted. So, statement 2 is correct.
- The Bardoli movement sparked off in 1926 when British authorities decided to increase the land revenue by 30%. Vallabhbhai Patel was called to lead the movement. After Gandhi's entry into the movement, the government looked for graceful withdrawal. It formed a committee to look into the whole affair and it recommended 6.03% of land revenue instead of 30%. So, statement 3 is not correct.

Therefore, option (b) is the correct answer.

Subject: History | Peasant Movements

Tag: Factual, Analytical

Q5. Consider the following statements:

1. Both the Cripps mission and Cabinet mission proposed a fully elected constituent assembly.
2. Cripps mission proposed that the defense of India would remain in British hands until the acceptance of the new constitution.
3. Cabinet mission proposed that the provinces were to have full autonomy and residual powers.
4. Proposals of the Cripps mission and Cabinet mission were rejected by both Muslim League and Congress.

Which of the statements given above are correct?

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

Answer: b

Explanation:

- Cripps Mission (March 1942) proposed an Indian Union with a dominion status would be set up; it would be free to decide its relations with the Commonwealth and free to participate in the United Nations and other international bodies.
- Cripps Mission proposed that after the end of the war, a constituent assembly would be convened to frame a new constitution. Members of this assembly would be partly elected by the provincial assemblies through proportional representation and partly nominated by the princes. Whereas Cabinet Mission (March 24, 1946) proposed that the constituent assembly was to be elected by provincial assemblies by proportional representation. So, statement 1 is not correct.

- Cripps mission proposed that the British government would accept the new constitution subject to a few conditions. In the meantime, the defense of India would remain in British hands and the governor-general's powers would remain intact. So, statement 2 is correct.
- The Cabinet mission provided that the provinces were to have full autonomy and residual powers. So, statement 3 is correct.
- Both Congress and the Muslim league objected to various provisions of the Cripps mission. Whereas The Muslim League on June 6 and the Congress on June 24, 1946, accepted the long-term plan put forward by the Cabinet mission. So, statement 4 is not correct.

Therefore, option (b) is the correct answer.

Subject: History | Indian freedom Struggle

Tag: Factual, Analytical

Q6. With reference to the British rule in India, consider the following statements:

1. Permanent settlement made zamindars owners of the land.
2. Permanent settlement caused zamindars to lose their power to organize local justice.
3. Jotedars controlled local trade as well as moneylending.
4. Within the villages, the power of jotedars was more effective than that of zamindars.

Which of the statements given above are correct?

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

Answer: d

Explanation:

Zamindars:

- After a prolonged debate amongst Company officials, the Permanent Settlement was made with the rajas and taluqdars of Bengal. They were now classified as zamindars, and they had to pay the revenue demand that was fixed in perpetuity. In terms of this definition, the zamindar was not a landowner in the village, but a revenue Collector of the state. So, statement 1 is not correct.
- The Permanent Settlement initially limited the power of the zamindar to collect rent from the ryot and manage his zamindari. The zamindars' troops were disbanded, customs duties abolished, and their courts brought under the supervision of a Collector appointed by the Company. Zamindars lost their power to organize local justice and the local police. So, statement 2 is correct.

Jotedars:

- By the early nineteenth century, jotedars had acquired vast areas of land. They controlled local trade as well as moneylending, exercising immense power over the poorer cultivators of the region. So, statement 3 is correct.
- Within the villages, the power of jotedars was more effective than that of zamindars. Unlike zamindars who often lived in urban areas, jotedars were located in the villages and exercised direct control over a considerable section of poor villagers. So, statement 4 is correct.

Therefore, option (d) is the correct answer.

Subject: History | Economic policies and their impact

Tag: Conceptual, Analytical

Q7. Consider the following statements with reference to Mahatma Gandhi:

1. He set up the All-India Anti-Untouchability League in 1932.
2. 'The New Economic Menace of India' was written by him in 1922.
3. He supported the Vaikom satyagraha to secure the rights of untouchables.
4. He reposed his faith on constitutional and legal methods to solve the problem of untouchability.

Which of the statements given above are correct?

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

Answer: a

Explanation:

- Mahatma Gandhi set up the All-India Anti-Untouchability league in September 1932. It was later renamed as Harijan Sevak Sangh. So, statement 1 is correct.
- The New Economic Menace of India was written by Bipin Chandra Pal in 1920. So, statement 2 is not correct.
- In 1924, Gandhi supported the Vaikom Satyagraha movement organized by the Kerala Congress Committee to secure the rights of untouchables for using the forbidden roads to the temple. So, statement 3 is correct.
- Gandhi treated untouchability as a moral stigma and wanted to solve the problem by acts of atonement. He had little use of legal or constitutional methods. So, statement 4 is not correct.

Therefore, option (a) is the correct answer.

Subject: History | Mahatma Gandhi

Tag: Factual, Analytical

Q8. Consider the following pairs:

Sl. No.	Organization	Associated Leader
1.	Widow Remarriage Association :	Vishnu Shastri Pandit
2.	Arya Mahila Samaj :	Pandita Ramabai
3.	Bharat Stree Mahamandal :	Sarala Devi Chaudhurani
4.	Ladies Social Conference :	Margaret Cousins

Which of the pairs given above are correctly matched?

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

Answer: c

Explanation:

- The Widow Marriage Association was established by Vishnu Shastri Pandit and M. G. Ranade in 1861 at Bombay. It campaigned for widow remarriages and against child marriages. So, pair 1 is correctly matched.
- Arya Mahila Samaj was founded by Pandita Ramabai Saraswati to serve the cause of women. It aimed to create a support network for newly educated women. So, pair 2 is correctly matched.
- Bharat Stree Mahamandal was founded at Allahabad in 1910. It was considered as the first major Indian women's organization set up by a woman. Sarala Devi Chaudhurani convened the first meeting. Its objectives included promotion of education among women and abolition of the purdah system. So, pair 3 is correctly matched.
- Ladies Social Conference was founded by Ramabai Ranade under National Social conference at Bombay in 1904. So, pair 4 is not correctly matched.

Therefore, option (c) is the correct answer.

Subject: History | Indian Renaissance and Reform Movements

Tag: Factual

Q9. Consider the following statements with reference to the 'Delhi Proposals' of Muslim League:

1. They demanded joint electorates in place of separate electorates.
2. They demanded the formation of three new Muslim majority provinces - Sindh, Baluchistan and Northwest Frontier province.
3. They were accepted by the Indian National Congress in its Calcutta session of 1930.

Which of the statements given above is/are correct?

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

Answer: a

Explanation:

- In December 1927, a large number of Muslim leaders had met at Delhi at the Muslim League session and evolved four proposals for their demands to be incorporated into the draft constitution. These proposals came to be known as the 'Delhi Proposals'.
- Its demands included joint electorates in place of separate electorates with reserved seats for Muslims. So, statement 1 is correct.
- The other demands were formation of three new Muslim majority provinces- Sindh, Baluchistan and North-West Frontier province, 1/3rd representation to Muslims in Central legislative assembly and representation to Muslims in Punjab and Bengal in proportion to their population. So, statement 2 is correct.
- These proposals were accepted by the Indian National Congress in the Madras session of December 1927. So, statement 3 is not correct.

Therefore, option (a) is the correct answer.

Subject: History | communalism



Tag: Analytical, Factual

Q10. He did his schooling from England and had a brilliant academic career at Kings College, Cambridge. He authored the famous work 'the life divine'. Rabindranath Tagore poetically described him as the 'O voice incarnate, free, Of India's soul'. He published a series of articles in the journal 'Indu Prakash'. He was

- a) Surendranath Banerjee
- b) Bipin Chandra pal
- c) Aurobindo Ghosh
- d) Chittaranjan Das

Answer: c

Explanation:

- Born in 1872, Sri Aurobindo was sent to England at the age of seven, where he did his schooling and went on to a brilliant academic career at Kings College, Cambridge, before returning to India with Maharaja Sayajirao Gaekwad of Baroda in 1893. Sri Aurobindo returned as a strong nationalist and almost immediately began writing on the political situation. His first series of articles in the journal 'Indu Prakash', published in 1894, was so radical that the editor had to discontinue them after the first two were published.
- During the partition of Bengal, his passionate editorials in the 'Bande Mataram' and the 'Karmayogin' became the inspiration for a whole generation of revolutionaries.
- Along with the political goal of complete independence, Sri Aurobindo also developed a parallel program of constructive action. His writings combined erudition with patriotism and created a tremendous stir among the intelligentsia and youth. As Rabindranath Tagore put it, he was the "O voice incarnate, free, Of India's soul".
- The Life Divine: It first appeared serially in the monthly review 'Arya' between August 1914 and January 1919. Each installment was written immediately before its publication. In 1939 and 1940 Sri Aurobindo revised The Life Divine for book publication.

Therefore, option (c) is the correct answer.

Subject: History | Important Personalities

Tag: Factual

Q11. With reference to vegetation in India, Magnolia, Laurel and Cinchona are mainly found in

- a) Southern mountain forests
- b) Tropical evergreen forests

- c) Dry deciduous forests
- d) Swamp forests

Answer: a

Explanation:

- The southern mountain forests include the forests found in three distinct areas of Peninsular India viz; the Western Ghats, the Vindhyas and the Nilgiris. As they are closer to the tropics, and only 1,500 m above the sea level, vegetation is temperate in the higher regions, and subtropical on the lower regions of the Western Ghats, especially in Kerala, Tamil Nadu and Karnataka. The temperate forests are called Sholas in the Nilgiris, Anaimalai and Palani hills. Some of the trees of this forest of economic significance include, magnolia, laurel, cinchona and wattle. Such forests are also found in the Satpura and the Maikal ranges.

Therefore, option (a) is the correct answer.

Subject: Geography | Natural Vegetation and Wildlife

Tag: Factual

Q12. Most of the deserts on earth are found on the western margins of continents. Which of the following factors are responsible for such a phenomenon?

1. Offshore trade winds
2. Ascending air
3. Subtropical anticyclones
4. Warm Ocean currents
5. Rain shadow area

Select the correct answer using the code given below.

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

Answer: d

Explanation:

- There is a certain definite pattern to the location of the world's deserts. Almost all the deserts are confined within the 15° to 30° parallels of latitude north and south of the equator. They

include the great Sahara Desert: Arabian, Iranian and Thar Deserts; Kalahari, Namib, and Atacama Deserts; the Great Australian Desert and the deserts of south-west U.S.A. and northern Mexico.

- They lie in the trade wind belt on the western parts of the continents where Trade Winds are off-shore. They are bathed by cold currents which produce a 'desiccating effect' so that moisture is not easily condensed into precipitation. Such dry and arid deserts are tropical hot deserts or 'Trade Wind deserts'. So, point 1 is correct.
- Most of the nonpolar deserts lie within the two trade winds belts. Around 30° N. and S., the poleward flowing air begins to descend toward the surface in subtropical high-pressure belts. The sinking air is relatively dry because its moisture has already been released near the Equator above the tropical rainforests and thus, results in very low rainfall. So, pair 2 is not correct.
- The subtropical anticyclones cover 40% of the earth's surface. In the regions with these systems evaporation exceeds precipitation by up to 5 mm/day. Therefore, the subtropical anticyclones are responsible for the formation of the subtropical deserts and also have great influence on monsoons. So, point 3 is correct.
- Cold ocean currents contribute to the formation of coastal deserts. Air blowing toward shore, chilled by contact with cold water, produces a layer of fog. This heavy fog drifts onto land. Although humidity is high, the atmospheric changes that normally cause rainfall are not present. So, point 4 is not correct.
- A rain shadow is a patch of land that has been forced to become a desert because mountain ranges blocked all plant-growing, rainy weather. On one side of the mountain, wet weather systems drop rain and snow. On the other side of the mountain—the rain shadow side—all that precipitation is blocked. Many deserts on the western margins of the continents fall in the rain shadow region. So, point 5 is correct.

Therefore, option (d) is the correct answer.

Subject: Geography | World Climatic Regions

Tag: Conceptual

Q13. Consider the following pairs:

Sl. No.	Crop	Ideal Climate
1.	Jute	: 50-75 cm rainfall and cool growing season
2.	Maize	: 21°C-27°C and old alluvium soil

3. Wheat : Well-drained soil and High temperature
4. Sugarcane : Hot and humid growing season with 75-100cm rain

Which of the pairs given above are correctly matched?

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

Answer: c

Explanation:

- Jute is known as the golden fibre. Jute grows well on well-drained fertile soils in the flood plains where soils are renewed every year. A high temperature is required during the time of growth. A rainfall of about 125 to 150 mm per month distributed well is required during the growth period. West Bengal, Bihar, Assam, Odisha and Meghalaya are the major jute producing states. So, pair 1 is not correctly matched.
- Maize is used both as food and fodder. It is a Kharif crop that requires a temperature between 21°C to 27°C and grows well in old alluvial soil. In some states like Bihar maize is grown in the rabi season also. So, pair 2 is correctly matched.
- Wheat crop requires a cool growing season and bright sunshine at the time of ripening. It requires 50 to 75 cm of annual rainfall evenly distributed over the growing season. There are two important wheat-growing zones in the country – the Ganga-Satluj plains in the northwest and the black soil region of the Deccan. So, pair 3 is not correctly matched.
- Sugarcane is a tropical as well as a subtropical crop. It grows well in hot and humid climates with a temperature of 21°C to 27°C and an annual rainfall of 75cm to 100cm. Irrigation is required in regions of low rainfall. So, pair 4 is correctly matched.

Therefore, option (c) is the correct answer.

Subject: Geography | Agriculture and Allied Sectors

Tag: Factual

Q14. With reference to Hydroponic Farming, consider the following statements:

1. In this method, plant roots are exposed to capture oxygen for its growth.
2. It facilitates farming in cold climates with chilly winter temperatures as well.
3. Nutrient minerals and solutions are added to the soil for better yields.
4. Hydroponic plants are immune to diseases as they operate in closed environments.

Which of the statements given above are correct?

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

Answer: a

Explanation:

- Hydroponics is a contemporary way of gardening and farming, combined, using freshwater with an optimum pH level of around 6 – 6.5, along with an airstone or an air pump to supply required oxygen, root support, required nutrients and at last the desired amount of light.
- Hydroponic plants are exposed to light to allow for the process of photosynthesis, and plant roots are exposed to air allowing the roots to capture oxygen that they need to grow. Nutrients mixed into water include: Phosphorus, Nitrogen, Calcium. So, statement 1 is correct.
- Cold climates with chilly winter temperatures and shorter day lengths prohibit plant growth. But with a hydroponics system, plants can be grown hydroponically year-round because the grower controls the temperature, light, and nutrient-supply. So, statement 2 is correct.
- Hydroponics is a method of growing plants indoors without using any soil. Instead of pulling mineral nutrients needed for growth from the ground, plants get all of their nutrition through a nutrient solution supplied to their roots. So, statement 3 is not correct.
- Hydroponic plants are not immune to disease and because most systems are closed systems (meaning the water recirculates), bacteria or micro-organisms that get into the water source can affect every plant in the hydroponic system. So, statement 4 is not correct.

Therefore, option (a) is the correct answer.

Subject: Geography | Agriculture and Allied Sector

Tag: Factual, Conceptual

Q15. Consider the following statements:

Statement 1: The thickness of the troposphere is greatest at the equator.

Statement 2: The Coriolis force is zero at the Equator.

Which one of the following is correct in respect of the above statements?

- a) Both statements 1 and 2 are correct and statement 2 is the correct explanation of statement 1
- b) Both statements 1 and 2 are correct but statement 2 is not the correct explanation of statement 1

- c) Statement 1 is correct but statement 2 is not correct  
d) Statement 1 is not correct but statement 2 is correct

Answer: b

Explanation:

- The troposphere is the lowermost layer of the atmosphere. Its average height is 13 km and extends roughly to a height of 8 km near the poles and about 18 km at the equator. The thickness of the troposphere is greatest at the equator because heat is transported to great heights by strong convection currents. So, statement 1 is correct.
- The Coriolis force is zero at the Equator. Though the Coriolis force is useful in mathematical equations, there is actually no physical force involved. Instead, it is just the ground moving at a different speed than an object in the air. Because there is no turning of the surface of the Earth (sense of rotation) underneath a horizontally and freely moving object at the equator, there is no curving of the object's path as measured relative to Earth's surface. The object's path is straight, that is, there is no Coriolis effect. So, statement 2 is correct but it is not the correct explanation of statement 1.

Therefore, option (b) is the correct answer.

Subject: Geography | Composition of Atmosphere

Tag: Conceptual

Q16. 'Amelioration Techniques', sometimes seen in the news, are used for

- a) waste to energy conversion  
b) soil quality improvement  
c) generation of ethanol  
d) geoengineering method to deal with climate change

Answer: b

Explanation:

- Soil amelioration is a term used to describe an improvement in soil structure through mechanical inputs with the primary aim of improving air and water balance within the soil. Its approaches typically involve either the strategic application of soil amendments, such as lime, dolomite, gypsum, organic matter or clay-rich subsoil, or the use of deep tillage or, often, a combination of the two. Amelioration techniques mainly help to reduce the quantity of soluble salts from saline soil.

Therefore, option (b) is the correct answer.

Subject: Geography | Soils

Tag: Factual

Q17. 'This climate type exists in the higher latitudes of the Northern hemisphere. They support tall, softwood evergreen trees. Chir, pine, cedar are the important varieties of trees found in these biomes. Silver foxes, mink, and polar bears are the common animals found here.' It is the most likely description of

- a) Taiga climate
- b) Tundra Climate
- c) Subtropical steppe climate
- d) Tropical climate

Answer: a

Explanation:

- Taiga: In the higher latitudes ( $50^{\circ} - 70^{\circ}$ ) of the Northern hemisphere the spectacular Coniferous forests are found (Fig. 6.13 a and b). These are also called as Boreal Forests. These forests are also seen in the higher altitudes. They are found in abundance in Himalayas. They are tall, softwood evergreen trees. The woods of these trees are very useful for making pulp, which is used for manufacturing paper and newsprint. Match boxes and packing boxes are also made from softwood. Chir, pine, cedar are the important variety of trees in these forests. Silver fox, mink, polar bear are the common animals found here

Therefore, option (a) is the correct answer.

Subject: Geography

Q18. Which of the following are types of depositional landforms in glaciated mountains?

1. Cirque
2. Moraines
3. Eskers
4. Drumlins

Select the correct answer using the code given below.

- a) 1 and 2 only
- b) 3 and 4 only

c) 2, 3 and 4 only

d) 1, 2, 3 and 4

Answer: c

Explanation:

- Cirques are the most common of erosional landforms in glaciated mountains. The cirques quite often are found at the heads of glacial valleys. The accumulated ice cuts these cirques while moving down the mountain tops. They are deep, long and wide troughs or basins with very steep concave to vertically dropping high walls at its head as well as sides. So, point 1 is not correct.
- Moraines are long ridges of deposits of glacial till. Terminal moraines are long ridges of debris deposited at the end (toe) of the glaciers. Lateral moraines form along the sides parallel to the glacial valleys. The lateral moraines may join a terminal moraine forming a horse-shoe shaped ridge. Many valley glaciers retreating rapidly leave an irregular sheet of till over their valley floors. Such deposits varying greatly in thickness and in surface topography are called ground moraines. So, point 2 is correct.
- When glaciers melt in summer, the water flows on the surface of the ice or seeps down along the margins or even moves through holes in the ice. Such streams flow over the ground (not in a valley cut in the ground) with ice forming its banks. Very coarse materials like boulders and blocks carried into this stream deposit in the valley of ice beneath the glacier and after the ice melts can be found as a sinuous ridge called esker. So, point 3 is correct.
- Drumlins are smooth oval-shaped ridge-like features composed mainly of glacial till with some masses of gravel and sand. The long axes of drumlins are parallel to the direction of ice movement. The drumlins form due to dumping of rock debris beneath heavily loaded ice through fissures in the glacier. So, point 4 is correct.

Therefore, option (c) is the correct answer.

Subject: Geography | Landforms

Tag: Conceptual, Analytical

Q19. With reference to river systems in India, which one of the following rivers is not a tributary of the Brahmaputra?

a) Lohit

b) Barak

c) Dibang

d) Dhansiri

Answer: b

Explanation:



- The Brahmaputra, one of the largest rivers of the world, has its origin in the Chemayungdung glacier of the Kailash range near the Mansarovar lake.
- The Brahmaputra receives numerous tributaries in its 750 km long journey through the Assam valley. Its major left bank tributaries are the Burhi Dihing and Dhansari (South) whereas the important right bank tributaries are the Subansiri, Kameng, Manas and Sankosh. The Subansiri which has its origin in Tibet, is an antecedent river. Lohit and Dibang are also important tributaries of Brahmaputra.
- Barak rises in the Manipur hills and enters the plains near Lakhimpur. The river enters Bangladesh as Surma and Kushiara. Later, the river is called the Meghna and receives the combined flow of the Ganga and Brahmaputra. The principal tributaries of Barak are the Jiri, the Dhaleswari, the Singla, the Longai, the Sonai and the Katakhal. It is not a tributary of Brahmaputra.

Therefore, option (b) is the answer.

Subject: Geography | Rivers

Tag: Conceptual, Analytical

Q20. In which of the following situations an airplane may encounter turbulence in a journey?

1. Formation of eddies due to friction between the air and the ground
2. Friction between the two opposing air masses
3. Convective currents due to uneven heating of earth's surface
4. Formation of local winds like Kal Baisakhi

Select the correct answer using the code given below.

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

Answer: d

Explanation:

- Turbulence is one of the most unpredictable of all the weather phenomena that are of significance to pilots. Turbulence is an irregular motion of the air resulting from eddies and vertical currents. It may be as insignificant as a few annoying bumps or severe enough to momentarily throw an airplane out of control or to cause structural damage.
- Friction between the air and the ground, especially irregular terrain and man-made obstacles, causes eddies and therefore turbulence in the lower levels. The intensity of this eddy motion depends on the strength of the surface wind, the nature of the surface and the stability of the air. So, point 1 is correct.

- The lifting of the warm air by the sloping frontal surface and friction between the two opposing air masses produce turbulence in the frontal zone. This turbulence is most marked when the warm air is moist and unstable and will be extremely severe if thunderstorms develop. So, point 2 is correct.
- Turbulence can also be expected on warm summer days when the sun heats the earth's surface unevenly. Isolated convective currents are therefore set in motion with warm air rising and cooler air descending, which are responsible for bumpy conditions as an airplane flies in and out of them. So, point 3 is correct.
- A plane also faces turbulence when it encounters a local wind such as Kal Baisakhi, which is a violent thunderstorm that develops over the Gangetic plains. Also known as Norwesters, these storms lead to the formation of strong winds and torrential rains. So, point 4 is correct.

Therefore, option (d) is the correct answer.

Subject: Geography | Miscellaneous

Tags: Conceptual

Q21. The laterite soil of India has been formed as a result of

- intense leaching due to tropical rains
- wide diffusion of iron in crystalline and metamorphic rocks
- transportation and deposition by rivers and streams
- dry climate, high temperature and accelerated evaporation

Answer: a

Explanation:

- The laterite soils develop in areas with high temperature and high rainfall. These are the result of intense leaching due to tropical rains. With rain, lime and silica are leached away, and soils rich in iron oxide and aluminium compound are left behind. Humus content of the soil is removed fast by bacteria that thrives well in high temperature. These soils are poor in organic matter, nitrogen, phosphate and calcium, while iron oxide and potash are in excess. Hence, laterites are not suitable for cultivation; however, application of manures and fertilisers are required for making the soils fertile for cultivation.
- Red laterite soils in Tamil Nadu, Andhra Pradesh and Kerala are more suitable for tree crops like cashewnut. Laterite soils are widely cut as bricks for use in house construction. These soils have mainly developed in the higher areas of the Peninsular plateau. The laterite soils are commonly found in Karnataka, Kerala, Tamil Nadu, Madhya Pradesh and the hilly areas of Odisha and Assam.

Therefore, option (a) is the correct answer.

Subject: Geography | Soils

Tags: Conceptual

Q22. Consider the following pairs:

Sl. No.	Type of Rainfall	City
1.	Convectional	Delhi
2.	Orographic	Mahabaleshwar
3.	Frontal	Puri

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

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

Answer: d

Explanation:

- **Convectional Rainfall:** This type of rainfall is very common in summer in tropical or equatorial regions where it is very hot, and the ground is heated by the sun. The preconditions for this kind of rainfall are intense heating of the ground surface by incoming shortwave electromagnetic solar radiation and ample supply of moisture caused by evaporation to the air to result in high relative humidity.
  - o Such rain is common in the summer or in the hotter part of the day. It is very common in the equatorial regions and interior parts of the continents, particularly in the northern hemisphere. Delhi often witnesses this type of rainfall. So, pair 1 is correctly matched.
- **Orographic Rainfall:** Relief rainfall occurs very frequently near mountains beside the sea because of the ascent of air forced by the mountain barrier. The preconditions are that there must be sufficient moisture in the air. The height of the mountain should be enough to block the moist incoming air, and this barrier should be across the wind direction that the moist air is forced by obstruction to rise upward. The Western Ghats (WG) of India experience this type of rainfall during monsoons. Mahabaleshwar is one of the hill stations in the Western Ghats. So, pair 2 is correctly matched.
- **Cyclonic/Frontal Rainfall:** This occurs due to the convergence of different air masses with different temperatures, density, and humidity. The turbulent conditions are produced, and cyclonic rain occurs along the fronts of the cyclone. The layer separating them is known as a front. The front has two parts – the warm front and the cold front. This type of rainfall frequently occurs in coastal areas of India. Puri in Odisha witnesses this type of rainfall during cyclones. So, pair 3 is correctly matched.

Therefore, option (d) is the correct answer.

Subject: Geography | Distribution and variability of Rainfall

Tag: Factual, Conceptual

Q23. With reference to the Antarctic Treaty, consider the following statements:

1. It was signed by the United Nations during the Earth Summit in 1992.
2. It does not accept any territorial claims of member countries in Antarctica.
3. It prohibits all activities relating to Antarctic mineral resources, except for scientific research.

Which of the statements given above is/are correct?

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

Answer: c

Explanation:

- The Antarctic Treaty was signed in Washington on 1 December 1959 by the twelve countries whose scientists had been active in and around Antarctica during the International Geophysical Year (IGY) of 1957-58. It entered into force in 1961 and has since been acceded to by many other nations. The total number of Parties to the Treaty is now 54. So, statement 1 is not correct.
- Among the signatories of the Treaty were seven countries - Argentina, Australia, Chile, France, New Zealand, Norway and the United Kingdom - with territorial claims, sometimes overlapping. Other countries do not recognize any claims. The US and Russia maintain a "basis of claim". All positions are explicitly protected in Article IV of the treaty, which preserves the status quo. So, statement 2 is not correct.
- The Protocol on Environmental Protection to the Antarctic Treaty was signed in Madrid on October 4, 1991, and entered into force in 1998. It designates Antarctica as a "natural reserve, devoted to peace and science" (Art. 2). Article 3 of the Environment Protocol sets forth basic principles applicable to human activities in Antarctica and Article 7 prohibits all activities relating to Antarctic mineral resources, except for scientific research. So, statement 3 is correct.

Therefore, option (c) is the correct answer.

Relevance: The Indian Antarctic Bill, 2022 was introduced in Lok Sabha on April 1, 2022. The Bill seeks to give effect to the Antarctic Treaty, the Convention on the Conservation of Antarctic Marine Living Resources, and the Protocol on Environmental Protection to the Antarctic Treaty.

Subject: Geography | Miscellaneous

Tag: Factual, Analytical

Q24. Which of the following best describes the term 'fiscal neutrality'?

- a) It is a policy action of the government to increase off-budget borrowing.
- b) It is the government's effort to ensure minimal tax to promote greater equality.
- c) It is a situation where the government brings policy changes for better financial inclusion.
- d) It is a situation where neither the government's public expenditure nor the tax policy affects the demand in an economy.

Answer: d

Explanation:

- Fiscal neutrality refers to a principle or goal of public finance that fiscal decisions (taxing, spending, or borrowing) of a government can or should avoid distorting economic decisions by businesses, workers, and consumers. A policy change can be considered to be neutral to the economy in either a macro- or microeconomic sense (or both).
- It is a situation where neither the government's public expenditure nor the tax policy affects the demand in an economy. Consumer demand is not influenced by the tax laws or the government's welfare programs.

Therefore, option (d) is the correct answer.

Subject: Economy | Public Finance

Tag: Conceptual

Q25. With reference to 'Aggregate Demand', consider the following statements:

1. It measures the total amount of demand for all finished goods and services produced in an economy.
2. It does not take into account imports and exports of the country.
3. It is mainly used to represent the standard of living in a society.
4. It is inversely related to higher interest rates.

Which of the statements given above are correct?

- a) 1 and 4 only

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

Answer: a

Explanation:

- Aggregate demand is a measurement of the total amount of demand for all finished goods and services produced in an economy. Aggregate demand is expressed as the total amount of money exchanged for those goods and services at a specific price level and point in time. So, statement 1 is correct.
- Aggregate demand consists of all consumer goods, capital goods (factories and equipment), exports, imports, and government spending. So, statement 2 is not correct.
- While aggregate demand is helpful in determining the overall strength of consumers and businesses in an economy, it does have limits. Since aggregate demand is measured by market values, it only represents total output at a given price level and does not necessarily represent the quality of life or standard of living in a society. So, statement 3 is not correct.
- Whether interest rates are rising or falling will affect decisions made by consumers and businesses. Lower interest rates will lower the borrowing costs for big-ticket items such as appliances, vehicles, and homes. Also, companies will be able to borrow at lower rates, which tends to lead to capital spending increases. Conversely, higher interest rates increase the cost of borrowing for consumers and companies. As a result, spending tends to decline or grow at a slower pace, depending on the extent of the increase in rates. So, statement 4 is correct.

Therefore, option (a) is the correct answer.

Subject: Economy | Fundamentals of Economy

Tag: Conceptual

Q26. Which one of the following is the most likely effect of a dollar-rupee swap auction by the Reserve Bank of India?

- a) Reduction in inflation pressure and strengthening of rupee
- b) Reduction in Cash Reserve Ratio in the banks
- c) Increase in liquidity in the Indian stocks
- d) Increase of Bond yield in future

Answer: a

Explanation:

- The Reserve Bank of India (RBI) has recently conducted a \$ 5 billion dollar-rupee swap auction as part of its liquidity management initiative, leading to an infusion of dollars and sucking out of the rupee from the financial system. The central bank's move will reduce the inflation pressure and strengthen the rupee.
- The RBI sold \$5.135 billion to banks and simultaneously agreed to buy back the dollars at the end of the swap settlement period. When the central bank sells dollars, it sucks out an equivalent amount in rupees, thus reducing the rupee liquidity in the system. Dollar inflow into the market will strengthen the rupee against the US dollar.
- For the bond market, the exercise may have a pronounced impact. Bond yields are already on an incline. Liquidity intervention through swaps indicates the RBI's plan to use a different toolkit rather than the traditional ones, and this leaves room for the central bank to buy bonds when needed. Consequently, the strategy will contain bond yields.

Therefore, option (a) is the correct answer.

Relevance: The Reserve Bank of India (RBI) has recently conducted a \$ 5 billion dollar-rupee swap auction as part of its liquidity management initiative

Subject: Economy | Balance of Payment

Tag: Conceptual

Q27. With reference to an Initial Public Offering (IPO), consider the following statements:

1. It is the only way a company can raise capital in the primary market.
2. Any company registered under the Companies Act, 2013, can issue it.
3. The per-share price of the public issue is fixed by the issuer of an IPO.

Which of the statements given above is/are correct?

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

Answer: c

Explanation:

- An IPO or initial public offering is the process by which a privately held company, or a company owned by the government such as LIC, raises funds by offering shares to the public or to new investors. Following the IPO, the company is listed on the stock exchange. A company may raise capital in the primary market by way of an initial public offer, rights issue or private placement. Thus,

an IPO is not the only instrument to raise capital in the primary market. So, statement 1 is not correct.

- In order to protect investors, the Securities and Exchange Board of India (SEBI) has laid down rules that require companies to meet certain criteria before they can go to the public to raise funds. Among other conditions, the company must have net tangible assets of at least Rs 3 crore, and net worth of Rs 1 crore in each of the preceding three full years, and it must have a minimum average pre-tax profit of Rs 15 crore in at least three of the immediately preceding five years. So, statement 2 is not correct.

- The per-share price of the public issue is fixed by the issuer in consultation with the merchant banker. They arrive at the total valuation of the company based on parameters such as assets, revenues, profits, and future cash flow projections, and the total value of the company is then divided by the post-offer shares outstanding to arrive at the price of each share. The regulator, the Securities and Exchange Board of India (SEBI) does not play a role in price fixation. So, statement 3 is correct.

Therefore, option (c) is the correct answer.

Relevance: Life Insurance Corporation of India (LIC) has issued an IPO in May 2022 to raise funds from the market.

Subject: Economy | Financial Sectors and Capital Market

Tags: Conceptual, Factual

Q28. With reference to the 'Post Devolution Revenue Deficit (PDRD) Grant' in India, consider the following statements:

1. It is released to the States/UTs as per the recommendations of the GST Council.
2. All States and Union Territories in India are eligible to receive these grants.

Which 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:

- While the total revenue collected by the Center is directly transferred to states as their share in the divisible tax pool, the Finance Commission also provides a mechanism for compensation of any loss of revenue incurred by states. These are called post-devolution revenue deficit grants. The Post Devolution Revenue Deficit Grants are provided to the States under Article 275 of the Constitution. Recently, the grants were released to the States as per the recommendations of the



Fifteenth Finance Commission to meet the gap in the Revenue Accounts of the States post-devolution. So, statement 1 is not correct.

- All States and Union Territories are not eligible to receive these grants. The eligibility of States to receive this grant and the quantum of the grant were decided by the Commission based on the gap between the assessment of revenue and expenditure of the State after taking into account the assessed devolution for the financial year 2021-22. So, statement 2 is not correct.

Therefore, option (d) is the correct answer.

Subject: Economy | Public Finance

Tag: Conceptual, Factual

Q29. The National Payments Corporation of India (NPCI) has been authorized to operate which of the following Payment Systems in India?

1. Immediate Payment System (IMPS)
2. Affiliation of RuPay Cards issued by banks
3. Securities segment covering Government Securities
4. National Electronic Toll Collection (NETC)
5. Aadhaar Enabled Payments System (AEPS)
6. Forex Settlement Segment

Select the correct answer using the code given below.

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

Answer: b

Explanation:

- National Payments Corporation of India (NPCI) is an umbrella organization for operating retail payments and settlement systems in India. It is an initiative of Reserve Bank of India (RBI) and Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India.
- NPCI has been authorised by Reserve Bank of India under the PSS Act, 2007 to operate the following Payment Systems:
  - o National Financial Switch (NFS)
  - o Immediate Payment System (IMPS)

- o Affiliation of RuPay Cards (debit cards/ prepaid cards) issued by banks and co-branded credit cards issued by non-banking financial companies (NBFCs) or any other entity approved by the RBI.
- o National Automatic Clearing House (ACH)
- o Aadhaar Enabled Payments System (AEPS)
- o Operation of Cheque Truncation System
- o National Electronic Toll Collection (NETC)
- Securities segment covering Government Securities and Forex Settlement Segment are operated by the Clearing Corporation of India Ltd.

Therefore, option (b) is the correct answer.

Subject: Economy | Money and Banking

Tags: Factual

Q30. Which of the following developments are most likely to reduce the Current Account Deficit of India?

1. Pakistan lifts its ban imposed on imports of cotton and sugar from India
2. An Indian national gets heart transplant surgery in the United States
3. Reserve Bank of India adopts a tight monetary policy for a year
4. Increase in the tax burden on the disposable income of Indians
5. ONGC makes new investments in gas fields in Saudi Arabia

Select the correct answer using the code given below.

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

Answer: c

Explanation:

- A current account deficit occurs when the value of imports (of goods/services/invisible incomes) is greater than the value of exports. Current account surpluses refer to positive current account balances, meaning that a country has more exports than imports of goods and services.
- Lifting of a ban imposed on import of Indian goods/services by other countries will lead to an increase in exports from India, which in turn leads to a reduction in current account deficit. So, point 1 is correct.

- An Indian national getting heart transplant surgery in a hospital abroad constitutes an import of services under the category of trade in invisibles. Hence it leads to a widening current account deficit. So, point 2 is not correct.
- Adopting tight monetary policy by increasing interest rates will tend to cause hot money flows and therefore an appreciation in the exchange rate. This appreciation makes exports less competitive, and imports more attractive, which worsens the current account, leading to a widening current account deficit. So, point 3 is not correct.
- Increasing the tax rates leads to an increase in tax collection and a decrease in disposable income for the consumers. This in turn would reduce consumer discretionary spending on imports, thereby reducing the current account deficit. So, point 4 is correct.
- The ONGC making new investments abroad constitutes a part of the capital account in the Balance of Payments. Hence it is not included in India's current account balance. So, point 5 is not correct.

Therefore, option (c) is the correct answer.

Relevance: India's current account deficit (CAD) has widened, forming 2.7 percent of the country's gross domestic product (GDP) and reflecting a rise in overseas trade.

Subject: Economy | Current Account Deficit

Tag: Analytical, Conceptual

Q31. Which among the following steps is most likely to be taken if there is economic stagflation in India?

- Increase in government spending
- Increase in the interest rates of the banks
- Increase in the wages of industry labourers
- Reduction in taxes and the policy of monetary restraint

Answer: d

Explanation:

- Stagflation is an economic phenomenon marked by a combination of recession and high inflation with high unemployment. An economy is said to be in stagflation when the country's GDP (Gross Domestic Product) is growing at a slow rate, even as inflation is rising. Increased government spending is good for the economy, but it can lead to scarcity in some goods and inflation will follow. So, option a is not correct.
- If the central bank increases interest rates in a bid to tame inflation, then it could increase the cost of borrowings and reduce the aggregate demand, worsening the slowdown. On the other hand, if it cuts interest rates to induce growth, this could make inflation worse. Stagflation therefore calls for solutions beyond the conventional monetary or fiscal policy tools. So, option b is not correct.

- Cost-push inflation (also known as wage-push inflation) occurs when overall prices increase (inflation) due to increases in the cost of wages and raw materials. Higher costs of production can decrease the aggregate supply (the amount of total production) in the economy. Since the demand for goods hasn't changed, the price increases from production are passed onto consumers creating cost-push inflation. Therefore, a wage control strategy should be implemented with government intervention to contain stagflation. So, option c is not correct.
- The correct policy mix to deal with stagflation is based on fiscal ease to get more production out of the economy, in combination with monetary restraint to stop inflation. The increased momentum provided by the tax cut will cause sufficient demand for [money] to permit real monetary expansion at higher rates. The noninflationary boom commences right away and stagflation can be dealt with. So, option d is correct.

Therefore, option (d) is the correct answer.

Subject: Economy | Inflation

Tag: Conceptual, Analytical

Q32. With reference to Standing Deposit Facility (SDF), consider the following statements:

1. It is introduced by the Reserve Bank of India for absorbing liquidity without any collateral.
2. It will replace the fixed rate reverse repo (FRRR) as the floor of the liquidity adjustment facility corridor.
3. Under it, the eligible entities can place deposits with the Reserve Bank of India on an overnight basis.

Which of the statements given above are correct?

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

Answer: d

Explanation:

- Recently, the Reserve Bank of India (RBI) introduced the Standing Deposit Facility (SDF) as an additional tool for absorbing liquidity without any collateral. The main purpose of SDF is to reduce the excess liquidity of Rs 8.5 lakh crore in the system, and control inflation. Currently, the SDF rate will be 25 basis points (bps) below the policy repo rate, i.e., at 3.75 percent. So, statement 1 is correct.
- All liquidity adjustment facility (LAF) participants will be eligible to participate in the SDF scheme. The SDF would replace the Fixed Rate Reverse Repo (FRRR) as the floor of the LAF corridor. The fixed rate reverse repo (FRRR) rate will remain part of the RBI's toolkit. The FRRR along with the SDF will impart flexibility to the RBI's liquidity management framework. So, statement 2 is correct.
- Under the SDF, the eligible entities can place deposits with the RBI on an overnight basis. Both SDF and reverse repo rate are used by the central bank to absorb liquidity in the system. The difference is that through reverse repo operations, the RBI needs to deposit collateral or government securities to borrow from commercial banks; while SDF does not require any such collateral. By removing the binding collateral constraint on the RBI, the SDF strengthens the operating framework of monetary policy. So, statement 3 is correct.

Therefore, option (d) is the correct answer.

Relevance: Recently, the Reserve Bank of India (RBI) introduced the Standing Deposit Facility (SDF), an additional tool for absorbing liquidity.

Subject: Economy | Money and Banking

Tag: Factual, Analytical

Q33. Which of the following factors are responsible for the recent fuel price rise in India?

1. Rising crude oil prices
2. Declining purchases by fuel dealers
3. Price revisions by oil marketing companies
4. Narrowing gap between the retail and industrial price of diesel
5. Concerns about the Russia-Ukraine conflict in the global market

Select the correct answer using the code given below.

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

Answer: b

Explanation:

- The prices of petrol and diesel have been hiked over the last few months, they are expected to rise further as oil marketing companies (OMCs) revise prices in line with rising crude oil prices. Ordinarily, the prices of petrol and diesel are revised daily, in line with a 15-day rolling average of benchmark international prices of petroleum products. So, point 1 is correct.
- There is a heavy lifting of fuel by dealers and both B2B and B2C customers, who have advanced their purchases, to top up their tanks and capacities in anticipation of price increase. So, point 2 is not correct.
- The oil marketing companies (OMCs) had held the prices of petrol and diesel constant for a period of 137 days starting November 4, 2021, after the Centre announced an excise duty cut of Rs 5 per liter on petrol and a cut of Rs 10 per liter on diesel. The entire impact of the rise in international crude prices is being passed on to consumers now, as OMCs have restarted price revisions. So, point 3 is correct.
- Bulk buyers are those entities that directly source oil tankers from OMCs such as factories, airports, bus fleets, transport fleets, malls, railways etc. There is a massive surge of demand at fuel stations (retail outlets) due to increased delta of around Rs 25 per liter between retail and industrial price of diesel, leading to heavy diversion of bulk HSD (direct customers) to retail outlets. This led to widening losses of oil companies and prompted them to revise the prices. So, point 4 is not correct.
- The Russia-Ukraine conflict and attacks on oil and gas infrastructure in Saudi Arabia have led to further concerns about potential disruptions in crude oil supplies which have pushed up crude oil prices. So, point 5 is correct.

Therefore, option (b) is the correct answer.

Relevance: The prices of petrol and diesel are at an all-time high in 2022.

Subject: Economy | Petroleum Industry

Tag: Conceptual, Analytical

Q34. Which one of the following statements is not correct with reference to 'Green Bonds'?

- a) They are issued to exclusively fund projects having positive environmental impacts.
- b) The World Bank is an issuer of green bonds in the international market.
- c) Green bonds with lower yields are more attractive to foreign investors.
- d) In India, they are issued only by the government and not private parties.

Answer: d

Explanation:

- Green bonds are issued by companies, countries and multilateral organisations to exclusively fund projects that have positive environmental or climate benefits and provide investors with fixed income payments. The projects can include renewable energy, clean transportation and green buildings, among others.
- A green bond is a type of fixed-income instrument that is specifically earmarked to raise money for climate and environmental projects. The World Bank is a major issuer of green bonds. It has issued 164 such bonds since 2008, worth a combined \$14.4 billion.
- These bonds can be marketed toward Environmental, Social and Governance (ESG) focused funds. The green bond market has seen cumulative issuance worth more than \$1 trillion since market inception in 2007. If the bond carries a lower yield, it could be more attractive for foreign investors given their enhanced appetite for this category of bonds, compared to local money managers.
- In India, green bonds are issued by private parties since 2015. Green Bonds constituted only 0.7 percent of all the bonds issued in India since 2018. As a part of the government of India's overall market borrowings in 2022-23, sovereign Green Bonds will also be issued for mobilizing resources for green infrastructure. The proceeds will be deployed in public sector projects which help in reducing the carbon intensity of the economy.

Therefore, option (d) is the answer.

Relevance: India will issue at least Rs 24,000 crore rupees (\$3.3 billion) in sovereign green bonds as the country marks a shift towards a low-carbon economy.

Subject: Economy | Bonds

Tag: Factual, Analytical

Q35. With reference to Cryptocurrencies, consider the following statements:

1. They enable digital payments without the need for a bank or payment processor.
2. In India, a flat 30% tax is levied on the transfer of virtual digital assets.
3. Reserve Bank of India (RBI) has made trading in cryptocurrencies legal in India.

Which of the statements given above is/are correct?

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

Answer: c

Explanation

- A cryptocurrency is a digital currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend. Many cryptocurrencies are decentralized networks based on blockchain technology. A defining feature of cryptocurrencies is that they are generally not issued by any central authority, rendering them theoretically immune to government interference or manipulation. Crypto makes it possible to transfer value online without the need for a middleman like a bank or payment processor. So, statement 1 is correct.
- The Union Budget of 2022 provided that a flat 30% tax will be levied on the transfer of virtual digital assets (VDAs) or crypto assets. Along with this, a 1% tax deducted at source (TDS) will be applicable on each transfer of such assets. So, statement 2 is correct.
- The Reserve Bank of India (RBI) and the union government have not given any sort of recognition to cryptocurrencies and, therefore, they are not legal in the country right now. The Cryptocurrency and Regulation of Official Digital Currency Bill, 2021 seeks to prohibit all private cryptocurrencies in India while allowing for certain exceptions that promote the technology of cryptocurrency. Thus, currently, there is no such regulation. So, statement 3 is not correct.

Therefore, option (c) is the correct answer.

Relevance: Finance Minister's proposal in Budget 2022 to tax virtual assets has sparked a debate over the legality of cryptocurrencies in India.

Subject: Economy | Taxation

Tag: Analytical

Q36. Mr. Raj is a salaried employee. In the month of January 2018, he purchased equity shares of SBI Ltd. listed on the Bombay Stock Exchange and sold the same in April 2021, after holding them for a period of more than 36 months. The profit earned by Mr. Raj through this will be taxed under

- Income tax
- Goods and Services Tax
- Capital gains tax
- Corporate tax

Answer: c

Explanation:

- Profits or gains arising on transfer of the capital asset is charged to tax under the head "Capital Gains". Income from capital gains is classified as "Short Term Capital Gains" and "Long Term Capital Gains".
- Any capital asset held by the taxpayer for a period of more than 36 months immediately preceding the date of its transfer will be treated as long-term capital asset. Mr. Raj purchased shares in January 2018, and sold them in April 2021, i.e., after holding them for a period of more than 36 months. Hence, shares will be treated as Long Term Capital Assets.

Therefore, option (c) is the correct answer.



Subject: Economy | Financial Sectors and Capital Market

Tag: Conceptual

Q37. 'Balance Sheet Reduction' by the Central Bank of a country is most likely to result in

- a) increase in the central bank's credit to the government
- b) sale of the foreign exchange assets
- c) infusion of money supply in the market
- d) increased investments in government securities

Answer: b

Explanation:

- A central bank's balance sheet is not merely a statement of accounts; it is central to the money supply process. The money supply determination process could be viewed in terms of a simple equation that links broad money (M3) to reserve money (RM), viz.,  $M3 = m * RM$ , where m is the money multiplier. The components of reserve money are mainly currency with the public, cash reserves with banks, balances of banks held with the central bank. The sources of reserve money could be viewed as net domestic assets (NDA) (comprising central bank's credit to government, commercial sector and banks) and net foreign exchange assets (NFA).
- When net domestic assets increase due to an increase in net RBI credit to the Government or commercial sector, or on account of refinance availed by banks, new money or created money is infused into the system.
- Likewise, the net foreign exchange assets of the RBI would increase as and when the RBI actually buys foreign currency, say, U.S. dollars by paying in rupees, thereby infusing fresh money into the system.
- Changes in the liabilities and assets of the central bank, thus, lead to changes in money supply (M3). Therefore, any reduction in the balance sheet will result in -
  - o Reduction in the central bank's credit to the government. So, option a is not correct.
  - o The sale of the foreign exchange assets. So, option b is correct.
  - o Decrease in money supply in the market. So, option c is not correct.
  - o Declining investments in government securities. So, option d is not correct.

Therefore, option (b) is the correct answer.

Relevance: The RBI's balance-sheet increased by Rs 4.7 lakh crore in FY22, registering a growth of 8.3% over FY21.

Subject: Economy | Money and Banking

Tag: Conceptual

Q38. Consider the following statements with reference to gig workers in India:

1. The Code on Social Security, 2020, has explicitly defined gig workers.
2. They are statutorily recognised as unorganised workers in India.
3. They are provided with universal minimum wage and floor wage in India.

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: c

Explanation:

- The gig economy involves the exchange of labour for money between individuals or companies via digital platforms that actively facilitate matching between providers and customers, on a short-term and payment-by-task basis. The Code on Social Security, 2020, recognises gig workers as a new occupational category and where there is no traditional employee and employer relationship. A gig worker means a person who performs work or participates in a work arrangement and earns from such activities outside of the traditional employer-employee relationship. Whereas home-based worker means a person engaged in, the production of goods or services for an employer in his home or other premises of his choice other than the workplace of the employer, for remuneration, irrespective of whether or not the employer provides the equipment, materials or other inputs. So, statement 1 is correct.
- Gig workers are not recognised as unorganised workers as per the Unorganised Workers' Social Welfare Security Act of 2008. However, the government has extended many programmes to gig workers. Accordingly, the Ministry of Labour & Employment has developed an e-SHRAM portal for creating a National Database of Unorganised Workers (NUW), which will be seeded with Aadhaar. It is the first-ever national database of unorganised workers including migrant workers, construction workers, gig and platform workers, etc. So, statement 2 is not correct.
- The Code on Wages, 2019, provides for universal minimum wage and floor wage across organised and unorganised sectors, including gig workers. The Code on Social Security, 2020, recognises gig workers as a new occupational category. So, statement 3 is correct.

Therefore, option (c) is the correct answer.

Relevance: Recently Boston consulting group reported that the Gig economy can raise India's GDP by 1.25%

Subject: Economy | Employment

Tag: Factual

Q39. Consider the following statements:

1. Earth is currently witnessing the first mass extinction of species.
2. Endemism makes a species particularly vulnerable to global extinction.
3. Large animals are at decreased risk of extinction as compared to small animals.
4. Inbreeding in small population sizes may cause the population to go extinct.
5. Coral Reefs are at the greatest risk of extinction among all species of flora and fauna.

Which of the statements given above are correct?

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

Answer: b

Explanation:

Mass extinction:

- A mass extinction event is when species vanish much faster than they are replaced. This is usually defined as about 75% of the world's species being lost in a 'short' amount of geological time - less than 2.8 million years. Planet Earth has witnessed five mass extinctions in the past, with the last one about 65 million years wiping out the dinosaurs. Many experts have warned in the recent past that a Sixth Mass Extinction crisis is underway. So, statement 1 is not correct.
- Unlike previous extinction events caused by natural phenomena, the sixth mass extinction is driven by human activity, primarily (though not limited to) the unsustainable use of land, water and energy use, and climate change.

Vulnerability to extinction:

- A small geographic range makes a species particularly vulnerable to global extinction. Many of the threats to species are geographically restricted, so species with large ranges will survive somewhere even if they are locally extirpated. Combined endemism and rarity are the factors that confer the greatest risk of extinction. So, statement 2 is correct.
- Generally, the larger the body size of an animal, the longer it lives and the fewer offspring it produces each year. Relatively large animals also tend to have relatively low population densities. So, by virtue of their low population densities, they are at increased risk of extinction. So, statement 3 is not correct.
- Small populations suffer from inbreeding, an inevitable tendency of mating individuals in a small isolated population to be more closely related than they would be in a larger one. When the

population size is severely reduced, inbreeding may be the final insult that will cause the remaining population to go extinct. So, statement 4 is correct.

- The most at-risk species were amphibians, of which 41% are considered at risk, followed by sharks at 37%, conifers at 34%, Coral reefs at 33% and mammals at 26%. So, statement 5 is not correct.

Therefore, option (b) is the correct answer.

Subject: Environment | Ecology

Tag: Conceptual, Factual, Analytical

Q40. Which among the following statements best describes the term 'Deep Ecology'?

- a) It is a practice where natural resources are accounted for in terms of economic profits.
- b) It deals with the study of ecosystems of Deep-ocean basins.
- c) It is an environmental philosophy that recognizes the inherent value of nature.
- d) It is the study of the environment in extreme temperature regions of the world.

Answer: c

Explanation:

Deep ecology:

- Deep ecology is an environmental philosophy and social movement based on the belief that humans must radically change their relationship with nature from one that values nature solely for its usefulness to human beings to one that recognizes that nature has an inherent value.
- It regards human life as just one of many equal components of a global ecosystem. Sometimes called an "ecosophy," deep ecology offers a definition of the self that differs from traditional notions and is a social movement that sometimes has religious and mystical undertones.
- The phrase originated in 1972 with Norwegian philosopher Arne Naess, who, along with American environmentalist George Sessions, developed a platform of eight organizing principles for the deep ecology social movement.
- Deep ecology distinguishes itself from other types of environmentalism by making broader and more basic philosophical claims about metaphysics, epistemology, and social justice.

Therefore, option (c) is the correct answer.

Subject: Environment | Ecology

Tag: Conceptual

Q41. Which of the following Ozone-depleting substances are regulated under the Montreal protocol?

1. Halons
2. Carbon tetrachloride
3. Benzene
4. Methyl bromide
5. Persistent organic pollutants

Select the correct answer using the code given below.

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

Answer: c

Explanation:

Montreal Protocol:

- The Montreal Protocol on Substances that Deplete the Ozone Layer is a global agreement to protect the Earth's ozone layer by phasing out the chemicals that deplete it. This phase-out plan includes both the production and consumption of ozone-depleting substances. The landmark agreement was signed in 1987 and entered into force in 1989.
- The substances controlled by the treaty are listed in Annexes A (CFCs, halons), B (other fully halogenated CFCs, carbon tetrachloride, methyl chloroform), C (HCFCs), E (methyl bromide) and F (HFCs). So, points 1, 2 and 4 are correct.
- Benzene and Persistent organic pollutants are not controlled under the Montreal protocol. So, points 3 and 5 are not correct.

Therefore, option (c) is the correct answer.

Subject: Environment | International initiatives

Tag: Factual

Q42. With reference to stubble burning in India, consider the following statements:

1. It emits carcinogenic polycyclic aromatic hydrocarbons and volatile organic compounds.
2. It adds nutrients to the soil and improves its fertility.
3. It leads to rise in soil temperature which increases bacterial and fungal growth.
4. It can make crops more prone to diseases.

Which of the statements given above are correct?

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

Answer: c

Explanation:

- Stubble (parali) burning is a method of removing paddy crop residues from the field to sow wheat from the last week of September to November. Stubble burning is a process of setting on fire the straw stubble, left after the harvesting of grains, like paddy, wheat, etc. It is usually required in areas that use the combined harvesting method which leaves crop residue behind.
- Pollution: Stubble burning emits toxic pollutants in the atmosphere containing harmful gases like Carbon Monoxide (CO), methane (CH<sub>4</sub>), carcinogenic polycyclic aromatic hydrocarbons, and volatile organic compounds (VOC). So, statement 1 is correct.
- Soil fertility: Soil becomes less fertile and its nutrients are destroyed when the husk is burned on the ground. So, statement 2 is not correct.
- Heat penetration: Stubble burning generates heat that penetrates into the soil, causing an increase in erosion, loss of useful microbes and moisture. The heat from burning paddy straw penetrates 1 centimetre into the soil, elevating the temperature to 33.8 to 42.2 degrees Celsius. This kills the bacterial and fungal populations critical for fertile soil. So, statement 3 is not correct.
- Burning of crop residue causes damage to other micro-organisms present in the upper layer of the soil as well as its organic quality. Due to the loss of 'friendly' pests, the wrath of 'enemy' pests increases and as a result, crops become more prone to disease. The solubility capacity of the upper layers of soil is also reduced. So, statement 4 is correct.

Therefore, option (c) is the correct answer.

Subject: Environment | Pollution

Tag: Conceptual, Factual

Q43. Consider the following statements:

1. Trophic state is the total weight of the biomass in a water body at a specific location and time.
2. Oligotrophic lakes have low dissolved oxygen content and less species diversity.
3. Mesotrophic lakes have higher primary productivity than eutrophic lakes.

Which of the statements given above are correct?

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

d) 2 and 3 only

Answer: a

Explanation:

- Trophic state is defined as the total weight of the biomass in a water body at a specific location and time. The trophic state is the biological response to nutrient additions to the water bodies. So, statement 1 is correct.

Oligotrophic lakes:

- These lakes are poor in nutrients, particularly nitrogen, phosphorus and organic matter. Primary productivity in these lakes is low. Oxygen content in such lakes is high and extends to the bottom. The number of organisms in oligotrophic lakes is low, though their species diversity is high. So, statement 2 is not correct.

Mesotrophic lakes:

- Lakes with an intermediate level of productivity are called mesotrophic lakes. They are mildly eutrophic and have characteristic features intermediate between the Oligotrophic and eutrophic lakes. These lakes have medium-level nutrients and are usually clear water with submerged aquatic plants. So, statement 3 is not correct.

Therefore, option (a) is the correct answer.

Subject: Environment | Ecology and Ecosystem

Tag: Factual, Conceptual, Analytical

Q44. With reference to Swamp deer, which one of the following statements is correct?

- a) It is mainly found in dense forests and hilly areas.
- b) It is categorized as Critically Endangered on the IUCN Red List.
- c) The Eastern swamp deer is endemic to the Eastern Ghats of India.
- d) Hard ground swamp deer is endemic to Kanha National Park and Tiger Reserve.

Answer: d

Explanation:

Swamp deer:

- Barasingha, also called swamp deer, graceful deer, belonging to the family Cervidae (order Artiodactyla), found in open forests and grasslands of India and Nepal. The swamp deer has three sub-species - northern swamp deer, central swamp deer or the hard ground barasingha and the eastern swamp deer. So, option a is not correct.

- The species is listed on the IUCN Red List as Vulnerable and the population is noted to be decreasing. So, option b is not correct.

Eastern swamp deer:

- The eastern swamp deer is endemic to Kaziranga.
- Recently, the population of the vulnerable eastern swamp deer, extinct elsewhere in South Asia, has dipped in the Kaziranga National Park and Tiger Reserve. So, option c is not correct.

Hard ground swamp deer:

- It is endemic to Kanha National Park and Tiger Reserve (KNPTR). KNPTR is on the Maikal range of the Satpura hills and is spread between the Mandla and Balaghat districts of Madhya Pradesh. So, option d is correct.

Therefore, option (d) is the correct answer.

Relevance: Recently, the population of the vulnerable eastern swamp deer has dipped in the Kaziranga National Park and Tiger Reserve.

Subject: Environment | Wildlife

Tag: Factual

Q45. Consider the following pairs:

Sl. No.	Ramsar site	Associated river
1.	Thol lake	: Satluj
2.	Haiderpur Wetland	: Ganga
3.	Asan Conservation Reserve	: Yamuna
4.	Bakhira Wildlife Sanctuary	: Narmada

Which of the pairs given above are correctly matched?

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

Answer: c

Explanation:



- **Thol Lake Wildlife Sanctuary:** This shallow reservoir was originally constructed for irrigation in 1912. In 1988, it was declared as a wildlife sanctuary to protect the birdlife found there: it is on the Central Asian Flyway and more than 320 bird species can be found, making up some 57% of all the bird species of Gujarat. Thol Lake Wildlife Sanctuary is located in Gujarat, whereas the Satluj river flows in the northern part of India. So, pair 1 is not correctly matched.
- **Haiderpur Wetland:** This human-made wetland was formed in 1984 by the construction of the Madhya Ganga Barrage on a floodplain of the river Ganga. It is located within the boundaries of Hastinapur Wildlife Sanctuary. So, pair 2 is correctly matched.
- **Asan Conservation Reserve:** It is a 444-hectare stretch of the Asan River running down to its confluence with the Yamuna River in the Dehradun district of Uttarakhand. The damming of the River by the Asan Barrage in 1967 resulted in siltation above the dam wall, which helped to create some of the Site's bird-friendly habitats. So, pair 3 is correctly matched.
- **Bakhira Wildlife Sanctuary:** It is the largest natural floodplain wetland of eastern Uttar Pradesh. The Sanctuary was established in 1980 and is protected under the Wildlife Protection Act (1972); an "eco-sensitive zone" extends up to a kilometer around its boundary. The site is situated in Uttar Pradesh whereas the Narmada River flows in the states of Madhya Pradesh and Gujarat. So, pair 4 is not correctly matched.

Therefore, option (c) is the correct answer.

Subject: Environment | Protected areas

Tag: Factual

Q46. Blue hydrogen, recently seen in the news, is

- Hydrogen produced by using renewable energy sources
- Hydrogen produced from natural gas through a carbon neutral process
- Hydrogen made with electrolysis from the energy grid
- Hydrogen produced from methane pyrolysis

Answer: b

Explanation:

- **Blue hydrogen** is hydrogen produced from natural gas with a process of steam methane reforming, where natural gas is mixed with very hot steam and a catalyst. Hydrogen is labeled blue whenever the carbon generated from steam reforming is captured and stored underground through industrial carbon capture and storage (CSS). Blue hydrogen is, therefore, sometimes referred to as carbon neutral as the emissions are not dispersed in the atmosphere. So, option b is correct.
- **Green hydrogen** – also referred to as "clean hydrogen" – is produced by using clean energy from surplus renewable energy sources, such as solar or wind power, to split water into two hydrogen atoms and one oxygen atom through a process called electrolysis. So, option a is not correct.

- Yellow hydrogen is hydrogen made with electrolysis from the energy grid. The carbon emissions vary greatly depending on the sources powering the grid. So, option c is not correct.
- Turquoise hydrogen is hydrogen produced from methane pyrolysis, or splitting methane into hydrogen and solid carbon with heat in reactors or blast furnaces. So, option d is not correct.

Therefore, option (b) is the correct answer.

Subject: Environment | Clean energy

Tags: Conceptual, Factual

Q47. Consider the following statements:

1. Microplastics are tiny plastic particles up to 5mm in diameter.
2. 'Look for the zero' is an eco-label related to microplastics.
3. Microbeads are used in cosmetics and personal care products.
4. The Plastic Wastes Management Rules, 2022, aim to ban Microbeads in India by 2025.

Which of the statements given above are correct?

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

Answer: a

Explanation:

Microplastics:

- Microplastics are plastic particles smaller than 5 millimeters. They occur in the environment as a consequence of plastic pollution. Microplastics are present in a variety of products, from cosmetics to synthetic clothing to plastic bags and bottles. Many of these products readily enter the environment in waste. So, statement 1 is correct.
- The International Coalition, Beat the Microbead, presents a product list from 42 countries that mention if the product contains microbeads and in what amount. The initiative also offers its own eco-label, look for the zero, where products are 100 percent free of microplastics. So, statement 2 is correct.

Microbeads:

- Microbeads are small, solid, manufactured plastic particles that are less than 5mm in diameter and do not degrade or dissolve in water. They may be added to a range of products, including rinse-off cosmetics, personal care and cleaning products. Microbeads are a relatively cheap ingredient and are used in these products for a variety of purposes. This includes as an abrasive or

exfoliant, a bulking agent, to prolong shelf-life, or for the controlled release of active ingredients. So, statement 3 is correct.

- The Plastic Waste Management Rules, 2022, do not address the issue of Microplastics and Microbeads. So, statement 4 is not correct.

Ban on microbeads and Microplastics:

- On December 28, 2015, the President of the USA signed the Microbead-Free Waters Act of 2015, banning plastic microbeads in cosmetics and personal care products.
- The Netherlands was the first country to introduce a ban on microbeads in cosmetic products in 2014. Several countries, including Australia, Canada, Italy, Korea, New Zealand, Sweden, the UK, and the US have followed suit.

Therefore, option (a) is the correct answer.

Subject: Environment | Pollution

Tags: Factual, Analytical

Q48. Consider the following statements:

1. Seed varieties are not allowed to be patented in India.
2. Production and distribution of certified seeds is primarily the responsibility of the State Governments.
3. Seed Village Programme of the Central Government distributes free of cost indigenous seeds to poor farmers.

Which of the statements given above is/are correct?

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

Answer: a

Explanation:

- The Indian seed programme largely adheres to the limited generations' system for seed multiplication in a phased manner. The system recognizes three generations namely breeder, foundation and certified seeds and provides adequate safeguards for quality assurance in the seed multiplication chain to maintain the purity of the variety as it flows from the breeder to the farmer.
- Seed varieties cannot be patented in India. So, no one, Indian or foreign, can patent seeds and control our food supply. The Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act allows protection of plant varieties for some years if they are found to be distinct, uniform and stable. India is the only country that has provided for the farmers to use, multiply, share informally

or sell formally any protected variety, as long as they do not brand it and sell it. So, statement 1 is correct.

- Certified seed is the progeny of foundation seed and must meet the standards of seed certification prescribed in the Indian Minimum Seeds Certification Standards, 1988. The production and distribution of quality/certified seeds is primarily the responsibility of the State Governments. Certified seed production is organized through State Seed Corporation, Departmental Agricultural Farms, Cooperatives etc. So, statement 2 is correct.
- Govt. of India is implementing Seed Village Programme (Beej Gram Yojana) since 2014-15 to upgrade the quality of farmer's saved seeds. Under this program financial assistance for the distribution of foundation/certified seeds at 50% of seed cost for cereal crops and 60% for pulses, oilseeds, fodder, and green manure crops is available for up to one acre per farmer. So, statement 3 is not correct.

Therefore, option (a) is the correct answer.

Subject: Environment | Agriculture

Tag: Factual

Q49. 'The sanctuary has a mangrove forest, where river Godavari joins the backwaters of the Bay of Bengal. Between this area and the sea, 'Hope Island' blocks the direct confluence of the sea and Godavari. As a result, about 40% of the sanctuary is only sea-backwaters and the rest of the area is intermingled with creeks and gets inundated with tidal waters. It is also a breeding ground for Olive ridley turtles.' The sanctuary described above is

- a) Rollapadu Wildlife Sanctuary
- b) Nagzira Wildlife Sanctuary
- c) Coringa Wildlife Sanctuary
- d) Point Calimere Wildlife Sanctuary

Answer: c

Explanation:

Coringa Wildlife Sanctuary:

- It is located in the East Godavari district of Andhra Pradesh covering an area of 235.7 Sq. kms. Corangi or Coringa is a beautiful Mada or Mangrove Forest, where the river Godavari joins the backwaters of the Bay of Bengal. Between this area and the sea Hope Island blocks the direct confluence of the sea and Godavari. As a result, about 40% of the sanctuary is only sea-backwaters and the rest of the area is intermingled with creeks and gets inundated with tidal waters.
- Uniqueness The sea coast of the Coringa Wildlife Sanctuary is a breeding ground for Olive ridley turtles.

Flora and fauna:

- Mangrove plants like Rhizophora, Avicennia, Sonneratia, etc. grow here.
- The faunal diversity is wonderful with rare and endangered mammals like Smooth Indian otters, Fishing cats, Jackal, etc. Mangroves offer excellent habitat for birds like Black-capped kingfisher, Brahminy kite, Seagulls, Reef Heron, Sandpiper, etc. Reptilian fauna includes Estuarine crocodile, Olive Ridley sea-turtles, Common Cobra, Rat snake, etc.

Therefore, option (c) is the correct answer.

Subject: Environment | Biodiversity and Conservation

Tag: Factual, Analytical

Q50. Consider the following statements:

1. Unlike India, Canada is a constitutional monarchy having the Queen of the United Kingdom as the constitutional head.
2. In India, residuary legislative powers are vested with the Union Government, whereas in Canada, they are vested with the states.

Which of the statements given above is/are correct?

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

Answer: a

Explanation:

- Canada is a constitutional monarchy, in that its executive authority is vested formally in the Queen of the United Kingdom through the Constitution. Every act of government is carried out in the name of the Crown, but the authority for those acts flows from the Canadian people. On the other hand, India is a republic and has an elected head called the president. He is elected indirectly for a fixed period of five years. So, statement 1 is correct.
- In India, as well as in Canada, residuary legislative powers are vested with the Union government which indicates towards the strong centre hold over the Indian federal polity. In fact, the Indian constitution has borrowed this feature of a Strong centre with weak states from the Canadian Constitution. So, statement 2 is not correct.

Therefore, option (a) is the correct answer.

Subject: Polity | Comparison of constitution

Tags: Conceptual, Analytical

Q51. 'The device is used by a member of parliament when the proceedings of the House do not follow the normal rules of procedure. It relates to the interpretation or enforcement of the Rules of the House or such articles of the Constitution that regulate the business of the House. It is usually raised by an opposition member in order to control the government.'

The parliamentary procedure described here is

- a) Censure motion
- b) Calling attention motion
- c) Adjournment motion
- d) Point of order

Answer: d

Explanation:

- A member can raise a point of order when the proceedings of the House do not follow the normal rules of procedure. A point of order should relate to the interpretation or enforcement of the Rules of the House or such articles of the Constitution that regulate the business of the House and should raise a question that is within the cognizance of the Speaker. It is usually raised by an opposition member in order to control the government. It is an extraordinary device as it suspends the proceedings before the House. No debate is allowed on a point of order.

Therefore, option (d) is the correct answer.

Subject: Polity | Parliament

Tag: Factual, Analytical

Q52. Which one of the following best defines 'Socialism'?

- a) A system where all property is communally owned and the idea of private property doesn't exist.
- b) A society distinguished by equal distribution of goods and pay regardless of individual needs.
- c) A society where production, distribution, and consumption are determined by the market.
- d) A system in which private property and the distribution of income are subject to social control.

Answer: d

Explanation:

- Under communism, all property is communally owned; private property doesn't exist. Under socialism, individuals can still own private property. Also, Marx predicted that a violent worker uprising against the middle and upper classes would bring about the communist state, whereas socialists tend to seek change and reform without overthrowing the prevailing social and political structure. So, option a is not correct.
- Socialism is a populist economic and political system based on public ownership of the means of production. Those means include the machinery, tools, and factories used to produce goods that aim to directly satisfy human needs. Under socialism, the distribution of resources takes place based on the needs of each individual. It follows the rule of “from each according to ability, to each according to need.” So, option b is not correct.
- Socialism does not promote a market economy. Unlike socialism, market economies rely on the separate actions of self-determining individuals to determine production, distribution, and consumption. Decisions about what, when, and how to produce are made privately and coordinated through a spontaneously developed price system, and prices are determined by the laws of demand and supply. Proponents say that freely floating market prices direct resources towards their most efficient ends. Profits are encouraged and drive future production. So, option c is not correct.
- Socialism is an economic and political system based on public ownership of the means of production. All legal production and distribution decisions are made by the government in a socialist system. The government also determines all output and pricing levels and supplies its citizens with everything from food to healthcare. Proponents of socialism believe that it leads to a more equal distribution of goods and services and a more equitable society. So, option d is correct.

Therefore, option (d) is the correct answer.

Subject: Polity | Constitution

Tag: Conceptual

Q53. Consider the following pairs:

Sl. No.	Type of Petition	Provision
1.	Review Petition :	Only parties to a case can file a review petition
2.	Curative Petition :	Certification by a senior advocate is necessary to file it
3.	Mercy Petition :	The petitioner has no right to an oral hearing

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

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

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

Answer: b

Explanation:

- **Review Petition:** The Constitution under Article 137 gives the Supreme Court the power to review any of its judgments or orders. This is entertained under the grounds- the discovery of new and important matter or evidence which, after the exercise of due diligence, was not within the knowledge of the petitioner or could not be produced by him; mistake or error apparent on the face of the record; or any other sufficient reason. The petition must be filed within 30 days of the date of judgment or order. It is not necessary that only parties to a case can seek a review of the judgment on it. As per the Civil Procedure Code and the Supreme Court Rules, any person aggrieved by a ruling can seek a review. So, pair 1 is not correctly matched.
- **Curative petition:** A curative petition is a rare remedy devised by a Constitution Bench of the Supreme Court in its judgment in the Rupa Ashok Hurra case in 2002. A curative petition must be accompanied by certification by a senior advocate, pointing out substantial grounds for entertaining it. A curative petition, which follows the dismissal of a review petition, is the last legal avenue open for convicts in the Supreme Court. So, pair 2 is correctly matched.
- **Mercy petition:** Article 72 of the Constitution empowers the President to grant pardons to persons who have been tried and convicted of any offence in all cases where the: 1. Punishment or sentence is for an offence against a Union Law; 2. Punishment or sentence is by a court martial (military court); and 3. Sentence is a sentence of death. But, the President, while exercising this power, does not sit as a court of appeal. The petitioner for mercy has no right to an oral hearing by the President. So, pair 3 is correctly matched.

Therefore, option (b) is the correct answer.

Subject: Polity | Judiciary

Tags: Conceptual

Q54. In the context of polity, which one of the following would you accept as the most appropriate definition of 'a sovereign nation'?

- a) A member of the United Nations Organization
- b) A country with a constitutional government
- c) A supreme legal authority in both internal and external spheres
- d) A country recognized by a sufficient number of other countries

Answer: c

Explanation:



- Sovereign nation is a state which possesses the following qualifications: i) a permanent population; ii) a defined territory; iii) government; and iv) capacity to enter into relations with the other states. Sovereignty refers to supreme legal authority and unchallengeable political power. Therefore, a sovereign nation is a supreme legal authority in both internal and external spheres.
- It is not necessary that all those countries which are sovereign have membership in the United Nations. For example, Kosovo.

Therefore, option (c) is the correct answer.

Subject: Polity | Preamble

Tag: Conceptual

Q55. Which of the following changes were made by the 44th Constitutional Amendment Act of 1978?

1. 'Right to property' was made a constitutional right.
2. A new directive principle was added to promote social order.
3. Cabinet's recommendation was made necessary to declare a national emergency.
4. High Court's power to issue writs was restored.

Select the correct answer using the code given below.

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

Answer: d

Explanation:

- The Constitution's 44th Amendment changed the Constitution's right to property by declassifying it as a fundamental right and reclassifying it as a constitutional right. Article 300A, which corresponds to Article 31(1) solely, has been put under Part XII under a separate Chapter IV 'Right to Property,' while Article 19 (1) (f) and Article 31 of the Constitution of India have been eliminated. So, statement 1 is correct.
- In Article 38, a new directive principle has been added, stating that the State must maintain social order in order to promote the welfare of the people. So, statement 2 is correct.
- Cabinet's recommendation was made necessary to declare a national emergency. Now the President can only declare an emergency if the Prime Minister and their Cabinet affirm the crisis

situation in writing and deliver it to the President. The President can remit the written dossier for an Emergency declaration to the Prime Minister and Cabinet under Article 74. If the Cabinet resends it, however, the President must comply and declare an emergency. So, statement 3 is correct.

- The High Court's ability to issue writs for purposes other than the enforcement of fundamental rights was restored by amending Article 226. The High Court's authority of supervision over all courts and tribunals within its geographical jurisdiction was restored by amending Article 227. So, statement 4 is correct.

Therefore, option (d) is the correct answer.

Subject: Polity| Constitution

Tag: Factual, Analytical

Q56. 'Right to Access Internet' is protected under which of the following Articles of the Constitution of India?

1. Article 14
2. Article 19
3. Article 21
4. Article 21A

Select the correct answer using the code given below.

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

Answer: d

Explanation:

- Article 14 of the Constitution ensures to every person the right to equality before law & equal protection of the law. Right to access internet is not covered under Article 14. So, point 1 is not correct.
- In PUCL vs. Union of India, the Supreme court had observed that the Right to freedom of speech and expression is guaranteed under Article 19(1)(a) of the Constitution. Freedom here means the right to express one's opinions freely by word of mouth, writing, printing, picture, or in any other manner. The Internet aids the citizen to express their opinions on a global platform and therefore is covered under the ambit of Article 19(1)(a) of the Constitution. Freedom to practice any profession

or carry on any trade, business or occupation over the medium of internet enjoys Constitutional protection under Article 19(1)(a) and Article 19(1)(g). So, point 2 is correct.

- Internet Access has become a basic necessity for the students as the information has become more accessible to them. In *Faheema Shirin RK vs. State of Kerala and others*, the High Court stated that Right to access internet is a part of Right to education and Right to Privacy under Article 21A and Article 21 of the Constitution. Internet Access not only enhances the opportunities of students to acquire knowledge but also enhances the quality of education. So, points 3 and 4 are correct.

Therefore, option (d) is the correct answer.

Subject: Polity | Fundamental Rights

Tag: Conceptual

Q57. With reference to First Information Report (FIR) in India, consider the following statements:

1. The registration of FIR is mandatory in the case of a cognizable offence.
2. It is prepared by the police after verifying the facts of the complaint.
3. To file an FIR, a complainant must provide the information in writing only and not orally.

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: a

Explanation:

- The Supreme Court issued the following Guidelines regarding the registration of FIR in the *Lalita Kumari v. Government of U.P* case. According to it, registration of an FIR is mandatory under Section 154 of the Code of Criminal Procedure (CrPC), if the information discloses the commission of a cognizable offence. So, statement 1 is correct.
- An FIR is a document that has been prepared by the police after verifying the facts of the complaint. The FIR may contain details of the crime and the alleged criminal. So, statement 2 is correct.
- To file an FIR, information can be given by the complainant in writing or orally to the head of the police station. Thus, it is not mandatory to give it in writing only. An FIR must be written down by the officer and signed by the complainant, and its key points should be recorded in a daily diary. So, statement 3 is not correct.

Therefore, option (a) is the correct answer.

Subject: Polity | Miscellaneous

Tag: Analytical, Factual

Q58. With reference to India, the term 'Uniform Civil Code' means

- a) one civil and criminal law for all
- b) laws premised on equal treatment for equals
- c) one set of laws governing personal conduct irrespective of religion
- d) one set of civil laws in all states

Answer: c

Explanation:

- The Uniform Civil Code (UCC) calls for the formulation of one personal law for India, which would be applicable to all religious communities in matters such as marriage, divorce, inheritance and adoption. This seeks to codify uniform personal law as the criminal laws in India are uniform and applicable equally on all, no matter what their religious beliefs are, the civil laws are influenced by faith. The code comes under Article 44 of the Constitution, which lays down that the state shall endeavour to secure a Uniform Civil Code for the citizens throughout the territory of India.
- Personal laws are the laws that apply to a certain group of people based on their religion, caste, faith, and belief made after due consideration of customs and religious texts. The personal laws of Hindus and Muslims find their source and authority in their religious ancient texts.

Therefore, option (c) is the correct answer.

Subject: Polity | Directive Principles of State Policy

Tag: Conceptual

Q59. Consider the following statements with reference to the Model Code of Conduct (MCC):

1. The Election Commission of India (ECI) formally introduced it for the first time during the Kerala Assembly elections in 1960.
2. Its provisions do not apply to the content posted on social media websites.
3. It is enforced as soon as the election schedule is announced, and stays in force until the election process is completed.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

- The Model Code of Conduct (MCC) is a consensus document. In other words, political parties have themselves agreed to keep their conduct during elections in check, and to work within the Code. The philosophy behind the MCC is that parties and candidates should show respect for their opponents, criticise their policies and programmes constructively, and not resort to mudslinging and personal attacks.
- Kerala was the first state to adopt a code of conduct for elections in 1960, ahead of the Assembly elections. The experiment was successful, and the Election Commission decided to emulate Kerala's example and circulate the draft among all recognised parties and state governments for the Lok Sabha elections of 1962. It was only in 1974, just before the mid-term general elections, that the EC released a formal Model Code of Conduct. So, statement 1 is not correct.
- The provisions of MCC also apply to the content being posted on the internet, including social media websites, by candidates and political parties. Notably, the ECI in 2019 had decided to keep social media posts by the political parties and leaders under its vigil for detecting any MCC violation. So, statement 2 is not correct.
- The Code now kicks in as soon as the election schedule is announced, and stays in force until the election process is completed i.e. remains in force until the Commission notifies the list of elected representatives. So, statement 3 is correct.

Therefore, option (b) is the correct answer.

Subject: Polity | Elections

Tag: Conceptual, Factual

Q60. 'Avrata, Akratu and Krishnatvach' are terms associated with

- a) trade guilds in the Gupta period
- b) dasas during the early Vedic period
- c) village officials during the Sangam period
- d) jagirdars in charge of villages in the Mauryan Empire

Answer: b

Explanation

- The non-Aryans in the Early vedic period consisted of dasas, dasyus and panis. Dasas were called Avrata (not obeying the ordinance of God), Akratu (not following sacrifices), Anasah (snub nosed), Midravach (indistinct speech) and Krishnatvach (dark skinned). The dasas conquered by the Aryans were gradually transformed into sudras in later periods.

Therefore, option (b) is the correct answer.

Subject: History| Vedic period

Tag: Factual

Q61. Consider the following statements:

1. The earliest Punch-marked coins were issued by Chandragupta Maurya.
2. The Indo-Greeks were the first to issue gold coins in India.
3. Satamana was a gold ornament during the early Vedic period.
4. Kushans issued the largest number of copper coins in India.

Which of the statements given above are correct?

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

Answer: b

Explanation:

- Coins issued by Indian rulers and guilds are an important example of human art belonging to the ancient period which provides invaluable light on socio-economic conditions of the period. The earliest Punch-marked coins were issued by merchants and bankers and not by the State. So, statement 1 is not correct.
- Indo-Greeks were the first to issue gold coins in India. They issued moulded coins bearing images and inscriptions. So, statement 2 is correct.
- Nishka was a gold ornament and Satamana was a silver ornament during the early Vedic period. So, statement 3 is not correct.
- Kushana rulers issued the purest gold coins and the largest number of copper coins in India. So, statement 4 is correct.

Therefore, option (b) is the correct answer.

Subject: History | Numismatics

Tag: Factual

Q62. With reference to ancient India, which one of the following is the correct sequence in ascending order of the social/political units from smaller to larger?

- a) Kula, Jana, Vis, Grama
- b) Kula, Jana, Grama, Vis
- c) Vis, Kula, Grama, Jana
- d) Kula, Grama, Vis, Jana

Answer: d

Explanation

- The Early Vedic society was a tribal society based on kinship ties. The tribe was referred to as Jana. Many clans (vis) formed the tribe. The clans settled in villages called Grama. The basic social unit was Kula or family and Kulapa is the one who protects the family. Rashtra or state was a much later concept which did not exist in the early vedic period.
- Head of the family (Kulapa), Family (Kula), Village (Grama), Tribal Unit (Vis), Tribe (Jana). Thus, the correct order is Kula, Grama, Vis, Jana.

Therefore, option (d) is the correct answer.

Subject: Ancient India | Early vedic society

Tag: Analytical

Q63. Consider the following statements about the Harappan languages and scripts:

1. Harappan languages influenced the principal languages of Mesopotamia.
2. Fish is the most represented symbol in their pictographs.
3. Harappan script was written in right-to-left and left-to-right orientations in alternate lines.

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:

- A study has found that the Harappan languages influenced the principal languages of Mesopotamia civilization. For example, the words used for elephant (like, 'pīri', 'pīru') in Bronze Age Mesopotamia, the elephant-word used in the Hurrian part of an Amarna letter of ca. 1400 BC, and the ivory-word ('pīruš') recorded in certain sixth century BC Old Persian documents, were all originally borrowed from 'pīlu', a Proto-Dravidian elephant-word, which was prevalent in the Indus Valley civilization. So, statement 1 is correct.
- Harappan script is regarded as pictographic since its signs represent birds, fish and varieties of human form etc. The fish symbol is most represented in the pictographs. So, statement 2 is correct.
- The Harappan language was written in Boustrophedon style in which right-to-left and left-to-right orientations are followed in alternate lines. So, statement 3 is correct.

Therefore, option (d) is the correct answer.

Subject: History | Indus Valley Civilization

Tag: Factual, Analytical

Q64. Consider the following pairs:

Sl. No.	Embroidery	State
1.	1 Banjara :	Andhra Pradesh
2.	Kantha :	Uttar Pradesh
3.	Chikan :	West Bengal

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

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

Answer: a

Explanation:



- Banjara Embroidery is practiced by Lambada gypsy tribes of Andhra Pradesh. Craftsmen make a combination of applique work, mirror and beads. Colours used are yellow, black and bright red. So, pair 1 is correctly matched.
- Kantha Embroidery belongs to West Bengal. It usually involves motifs of flowers, birds and animals. So, pair 2 is not correctly matched.
- Chikan Embroidery originated in the regions of Lucknow in Uttar Pradesh introduced by Nur Jahan, queen of Jahangir. So, pair 3 is not correctly matched.

Therefore, option (a) is the correct answer.

Subject: History | Handicrafts

Tag: Factual

Q65. With reference to the traditional board games of India, consider the following statements:

1. Chaupar was introduced for the first time by Kushans in India.
2. The Harappans were aware of the game of chess.
3. The game of Snakes and ladders was invented in India by Kautilya.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

- Chaupar (Pachisi) originates before the Kushana rule. It is the game that most traditions attribute to the downfall of Yudhishthira in Mahabharata. It reached its high time during the Mughal period. So, statement 1 is not correct.
- The excavations at Lothal suggest that the Harappan people were aware of the game of chess. So, statement 2 is correct.
- The game of Snakes and ladders was invented in India by Saint Gyandev in the 13th century. It is popularly known as Moksha patam or Parama Padam. So, statement 3 is not correct.

Therefore, option (b) is the correct answer.

Subject: History | Art and Culture

Tag: Factual

Q66. 'Kolam, Kalamezuthu and Singhi Chham' are well-known for

- a) martial art forms
- b) storytelling traditions
- c) paintings of Eastern India
- d) types of Rod puppetry

Answer: b

Explanation:

- Storytelling is a way of preserving the culture and beliefs of a tribe or community and passing them down to the next generation. However, storytelling does not need to be limited to oral recitation. It can take form through drawings, paintings, dance or even puppet shows. Following are some of the storytelling traditions of India:
- Kolam is an ancient Tamil tradition of drawing designs on thresholds of homes. It is a rare combination of science and religion. The annual competitions were held in Puducherry. It is known as Muggu in Andhra Pradesh and Telangana, Aripam in Bihar and Rangoli in Maharashtra.
- Kalamezuthu is an ancient practice in Kerala where ritualistic drawings of deities will be made on the floor using coloured powder in five different shades. It flourished as a temple art between the 14th and 16th centuries.
- Singhi Chham refers to the 'dance of snow lions'. People from the Bhutia community of Sikkim dress up in snow lion costumes for this dance to appease the lord of snow, Khangchendzonga.

Therefore, option (b) is the correct answer.

Subject: History | Art and Culture

Tag: Factual

Q67. Consider the following statements about the Nagara temple architecture:

1. The Pradakshina path is covered around Garbhagraha.
2. The temples are characterized by high boundary walls and entrance gateways.
3. The entire temple structure is built on a raised platform known as Adhisthana.

Which of the statements given above is/are correct?

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

d) 1 and 3 only

Answer: b

Explanation:

- Nagara style of temple architecture came into existence during the 4th century AD during the period of Guptas in north India. There was no Pradakshina path (circumbulatory path) built in temples of Nagara style. But in Dravidian style, The Pradakshina path is covered around Garbhagraha (Sanctum Sanctorum) for devotees. So, statement 1 is not correct.
- Dravidian temples are surrounded by high entrance gateways known as gopurams and high boundary walls. So, statement 2 is not correct.
- The entire temple structure is built on a raised platform known as Jagati or Adhisthana in the Nagara style of temple architecture. So, statement 3 is correct.
- Temples of Nagara style are constructed using stones and bricks. Metal was not used in the construction of Nagara temples.

Therefore, option (b) is the correct answer.

Subject: History | Temple architecture

Tag: Analytical

Q68. Consider the following statements about Saint Jnaneshvara:

1. He belonged to the Varkari sect which centered around the worship of Vithoba.
2. He considered Bhakti as the only way to attain God.
3. He authored books named 'Changadeva Prashasti' and 'Bhavaratha Dipika.'

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:

- Jnaneshvara or Jnanadeva (1271 AD - 1296 AD) was a famous saint belonging to Maharashtra Dhamma. He belonged to the Varkari sect which centered around the worship of Vithoba, an incarnation of god Krishna. Pandharpur was the main center of this sect. So, statement 1 is correct.
- Jnaneshvara believed that the only way to attain God was bhakti and there were no caste distinctions in Bhakti. So, statement 2 is correct.
- Changadeva Prashasti and Bhavaratha Dipika were written by Jnanadeva. He also composed Abhangas (devotional songs used in honor of Vithoba). So, statement 3 is correct.

Therefore, option (d) is the correct answer.

Subject: History | Bhakti movement

Tag: Factual, Analytical

Q69. Consider the following statements with reference to 'Din-i-Ilahi':

1. It was an ethical system that prohibits sins such as slander, sensuality and pride.
2. It believed in one God and included good tenets from all religions.
3. It accorded utmost importance to sacred scriptures and priests.

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: a

Explanation:

- In 1582, Akbar promulgated a new concept called Din-i-Ilahi or Divine Faith. It was an ethical system that prohibits sins such as lust, sensuality, slander and pride and enjoins virtues of piety, abstinence and kindness. So, statement 1 is correct.
- It believed in One God and contains good points from all religions. It was aimed at bridging the gulf which separated different religions. The soul was encouraged to purify itself by yearning for God which is a tenet of Sufism. So, statement 2 is correct.
- The practice of Celibacy was condoned by Din i Ilahi. It also prohibited the slaughter of animals as in Jainism. There were no sacred scriptures or a priestly hierarchy in the Din-i Ilahi. In its ritual, it borrowed heavily from Zoroastrianism, making light (Sun and fire) an object of divine worship and reciting, as in Hinduism. So, statement 3 is not correct.

Therefore, option (a) is the correct answer.

Subject: History | Mughal Empire

Tag: Analytical

Q70. With reference to Dokra craft, consider the following statements:

1. It is a form of non-ferrous metal casting that uses the lost wax technique.
2. It is prevalent among the tribals of the Kashmir region.
3. The artifacts are mainly made in brass and the pieces do not have any form of joints.

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: c

Explanation:

- Dokra casting technology is one of the oldest forms of non-ferrous metal casting. It includes cast boxes, figures of Gods and Goddesses, and lamps made using the lost wax technique. It is the use of bee wax that makes it possible for the craftsmen to give shape to various structures. So, statement 1 is correct.
- Dokra is a form of ancient bell metal craft also practiced by the Ojha metal-smiths living in states like Jharkhand, Chhattisgarh, Odisha, West Bengal and Telangana. So, statement 2 is not correct.
- These Dokra artifacts are mainly made in brass and are highly unique wherein the pieces do not have any form of joints. The whole object is fully handcrafted. The traditional designs are considered highly aesthetic in nature and a collector's delight. So, statement 3 is correct.

Therefore, option (c) is the correct answer.

Relevance: On the sidelines of the 2nd India-Nordic Summit in Denmark Prime Minister of India presented a Dokra boat from Chhattisgarh to the Crown Prince of Denmark

Subject: History | Craft

Tags: Factual, Analytical

Q71. Consider the following pairs:

Sl. No.	Traditional Water Management Techniques	Associated Region
1.	Kuls :	Himachal Pradesh
2.	Araghatta :	Rajasthan
3.	Kovil Kulam :	Andhra Pradesh
4.	Zabo :	Nagaland

Which of the pairs given above are correctly matched?

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

Answer: b

Explanation:

- Kuls/Kuhls: They are long channels mainly found in Himachal Pradesh and in some parts of Jammu and Kashmir. The kul begins at the glacier and leads into a circular tank from where, when water is needed to irrigate the fields, a trickle of water is let out. This distribution is regulated by the villagers. So, pair 1 is correctly matched.
- Araghatta: Araghattas are water wheels found in the Kashmir Valley. Also known as the Persian wheel, these wooden wheels help lift water from the river Jhelum to the complex irrigation system of canals that irrigate rice fields in the Valley. So, pair 2 is not correctly matched.
- Kovil Kulam: They are found in Andhra Pradesh, Karnataka, Tamil Nadu and Kerala. The tanks vary in size and shape with corridors and long flights of steps surrounding them. Intricate inlet channels bring water from a stream or river and outlets carry away the excess water. So, pair 3 is correctly matched.
- Zabo: Found in Nagaland, it is a centuries-old system that combines forest, land and water management with agriculture. When rain falls on terraced hill slopes, the run-off collects in ponds in the middle terrace. The runoff then passes through slopes where cattle are reared and finally reaches the paddy fields at the foothills. So, pair 4 is correctly matched.

Therefore, option (b) is the correct answer.

Subject: Environment | Water conservation

Tag: Factual

Q72. Which one of the following species defines much of the structure of a community by creating locally stable conditions for other species and by modulating and stabilizing fundamental ecosystem processes?

- a) Flagship species
- b) Lazarus Species
- c) Dominant species
- d) Foundation species

Answer: d

Explanation:

- Foundation species is a single species that defines much of the structure of a community by creating locally stable conditions for other species, and by modulating and stabilizing fundamental ecosystem processes. So, option d is correct.
- In many ecosystems, a single foundation species controls population and community dynamics and modulates ecosystem processes. The loss of foundation species acutely and chronically impacts fluxes of energy and nutrients, hydrology, food webs, and biodiversity.
- A flagship species is a species selected to act as an ambassador, icon or symbol for a defined habitat, issue, campaign or environmental cause. So, option a is not correct.
- A Lazarus species is a group of living things that are assumed to be extinct, but then later discovered to exist either later in the fossil record or are unexpectedly found to be alive on the planet. So, option b is not correct.
- A dominant species is a species in an ecological community that has the highest abundance or highest biomass. So, option c is not correct.

Therefore, option (d) is the correct answer.

Subject: Environment | Ecology

Tag: Conceptual

Q73. Consider the following statements in the context of 'Meat Alternatives' that are designed to mimic the flavour and texture of meat products:

1. They are made up from plant-based protein.
2. They contain less amount of saturated fatty acids than conventional meat.
3. They help in reducing antimicrobial resistance.
4. The manufacturing process results in more emissions of methane as compared to conventional meat.

Which of the statements given above are correct?

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

Answer: d

Explanation:

- Meat alternatives or meat analogues are food products that are designed to mimic the appearance, flavor, and texture of meat products. Their consumption has recently been increasing for various reasons including personal beliefs, health concerns, and social causes. Soybean proteins, wheat gluten, cottonseed proteins, and other plant proteins are used to formulate meat analogues. Meat analogues present a clear advantage to meat when it comes to shelf life and food safety. So, statement 1 is correct.
- Alternative meats seem to have lower amounts of total and saturated fat, higher amounts of fiber, and comparable amounts of protein and calories. However, plant-based meats are far from perfect. "They typically have higher amounts of sodium, usually in an attempt to make it more palatable and shelf-stable. So, statement 2 is correct.
- Secondly, with the consumption of plant-based meats, the consumers will be immune from the unscrupulous use of antibiotics in the Livestock sector resulting in a reduction of Antimicrobial Resistance. So, statement 3 is correct.
- Alternative meats have skyrocketed in popularity due to a rise in overall awareness about meat's impact on the environment and overall health. For example, if every American replaced all beef, chicken, and pork in their diet with a vegetarian option, that would save 280 million metric tons of carbon dioxide and methane emissions from the Livestock and animal husbandry sector. Decreasing animal product consumption also prevents water scarcity as more than 50% of Americans' freshwater use is for livestock production. So, statement 4 is not correct.

Therefore, option (d) is the correct answer.

Subject: Environment | Food and Food systems

Tag: Conceptual, Factual, Analytical

Q74. With reference to mining in India, consider the following statements:

1. Control of illegal mining for minerals is under the jurisdiction of state governments.
2. River bed mining operation is prohibited during the monsoon period.
3. Gram Panchayat grants environmental clearance for the mining of sand and gravel for areas up to 5 hectares.



4. Environmental clearance for sand mining for works under MGNREGA is provided by the Central government.

Which of the statements given above are correct?

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

Answer: a

Explanation:

Sand:

- Sand is a minor mineral, as defined under section 3(e) of the Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act).
- Section 23C of the MMDR Act, 1957 empowers state governments to frame rules to prevent illegal mining, transportation and storage of minerals and for purposes connected therewith. Control of illegal mining is, therefore, under the legislative and administrative jurisdiction of state governments. Ministry of Environment, Forest and Climate Change has issued Sustainable Sand Mining Management Guidelines, 2016, which, inter-alia, addresses the issues relating to the regulation of sand mining. So, statement 1 is correct.
- Enforcement & Monitoring Guidelines for Sand Mining (EMGSM-2020) states that there shall be no river bed mining operation allowed in the monsoon period. The period as defined by IMD Nagpur for each state shall be adhered with. So, statement 2 is correct.
- According to the rules:
  - Grant of Environment Clearance for minor minerals, including sand and gravel, for a mining lease of areas up to 5 hectares will be done by the District Environment Impact Assessment Authority headed by the District Collector/District Magistrate. So, statement 3 is not correct.
  - Exemption of certain cases from being considered as mining for the purpose of the requirement of environment clearance like:
    - Extraction of ordinary clay or ordinary sand manually by hereditary Kumhars (Potter);
    - Community works like desilting of village ponds/tanks, rural roads undertaken in MGNREGS and other Government-sponsored schemes. So, statement 4 is not correct.

Therefore, option (a) is the correct answer.

Subject: Environment | Environmental Governance

Tag: Factual

Q75. 'Acetylcholine, Noradrenaline, Dopamine and Serotonin', often seen in the news, are

- a) hormones
- b) persistent organic pollutants
- c) neurotransmitters
- d) artificial steroids

Answer: c

Explanation:

- Neurotransmitters are often referred to as the body's chemical messengers. They are the molecules used by the nervous system to transmit messages between neurons, or from neurons to muscles.
- Communication between two neurons happens in the synaptic cleft (the small gap between the synapses of neurons). Here, electrical signals that have travelled along the axon are briefly converted into chemical ones through the release of neurotransmitters, causing a specific response in the receiving neuron.
- Acetylcholine, Dopamine, noradrenaline, serotonin, glutamate etc. are some examples of Neurotransmitters.

Therefore, option (c) is the correct answer.

Subject: Science and Technology | Biology

Tag: Factual, Current Affair

Q76. In the context of mRNA vaccines, consider the following statements:

1. mRNA does not contain infectious viral elements that pose risks for infection and insertional mutagenesis.
2. It combines a weak antigen with a strong antigen as a carrier protein so that the immune system has a stronger response to the weak antigen.

Which 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:

- mRNA vaccines are a new form of vaccines that trigger immune responses by transfecting synthetic mRNA encoding viral antigens into human cells. Once the mRNA molecules are in the cytosol, the transfected cells translate the genetic information to the specific viral antigens. These antigens are then presented on the cell surface where they can be recognized by the immune cells.
- mRNA-based vaccines can be rapidly developed, while conventional vaccines often take years and require a deep understanding of the target virus to make the vaccine effective and safe. Due to high yields from in vitro transcription reactions, mRNA production can be rapid, inexpensive and scalable. mRNA does not contain infectious viral elements that pose risks for infection and insertional mutagenesis. So, statement 1 is correct.
- A conjugate vaccine combines a weak antigen with a strong antigen as a carrier protein so that the immune system has a stronger response to the weak antigen. So, statement 2 is not correct.

Therefore, option (a) is the correct answer.

Subject: Science and Technology | Recent Developments

Tag: Conceptual, Analytical

Q77. With reference to Semiconductors, consider the following statements:

1. They have more resistivity than insulators but less than that of metals.
2. The conductivity of a semiconductor decreases with an increase in temperature.
3. Tin, Selenium, Tellurium and Gallium arsenide are used as semiconductors.

Which of the statements given above is/are correct?

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

Answer: d

Explanation:

- On the basis of the relative values of electrical conductivity ( $\sigma$ ) or resistivity ( $\rho = 1/\sigma$ ), the solids are broadly classified as:
  - Metals: They possess very low resistivity (or high conductivity).
  - Semiconductors: They have resistivity or conductivity intermediate to metals and insulators. So, statement 1 is not correct.
  - Insulators: They have high resistivity (or low conductivity).
- In semiconductors, the energy gap between the conduction band and valence band decreases with an increase in temperature. The valence electrons in the semiconductor material

gain energy to break the covalent bond and jump to the conduction band at high temperatures. This creates more charge carriers in the semiconductor at high temperatures. The higher concentration of charge carriers decreases the resistivity of the semiconductor. As the resistivity of the semiconductor decreases with an increase in temperature, it becomes more conductive. A semiconductor exhibits excellent conductivity at high temperatures. So, statement 2 is not correct.

- The elemental semiconductors are those composed of single species of atoms, such as silicon (Si), germanium (Ge), and tin (Sn) in column IV and selenium (Se) and tellurium (Te) in column VI of the periodic table. Gallium arsenide is a III–V compound direct-gap semiconductor with the Ga and As belonging to the third and fifth column of the periodic table, respectively. So, statement 3 is correct.

Therefore, option (d) is the correct answer.

Subject: Science and Technology | Physics

Tag: Factual, Conceptual

Q78. Anabolic Steroids, in recent times, have become a cause of concern for which one of the following reasons?

- a) Heavy usage in COVID-19 vaccines
- b) Over usage as a fruit ripening agent
- c) Use by athletes to improve performance
- d) Overuse as fodder to milch animals to increase milk production

Answer: c

Explanation:

- Anabolic steroids are synthetic (man-made) versions of testosterone. Testosterone is the main sex hormone in men. It is needed to develop and maintain male sex characteristics, such as facial hair, deep voice, and muscle growth. Women do have some testosterone in their bodies, but in much smaller amounts.

- In recent times, they have become a cause of worry as some bodybuilders and athletes use anabolic steroids to build muscles and improve athletic performance. They may take the steroids orally, inject them into muscles, or apply them to the skin as a gel or cream.

Therefore, option (c) is the correct answer.

Subject: Science and Technology | Health

Tags: Conceptual, Factual

Q79. Consider the following statements:

1. Bose-Einstein Condensate is formed by cooling a high-density gas to an extremely low temperature.
2. The fluorescent tube and neon sign bulbs glow due to the presence of plasma.

Which 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:

- Bose-Einstein Condensate: In 1920, Indian physicist Satyendra Nath Bose had done some calculations for the fifth state of matter. Building on his calculations, Albert Einstein predicted a new state of matter – the Bose-Einstein Condensate (BEC). In 2001, Eric A. Cornell, Wolfgang Ketterle and Carl E. Wieman of the USA received the Nobel prize in physics for achieving “Bose-Einstein condensation”. The BEC is formed by cooling a gas of extremely low density, about one-hundred-thousandth the density of normal air, to super-low temperatures. So, statement 1 is not correct.
- Plasma: The state consists of super energetic and super excited particles. These particles are in the form of ionised gases. The fluorescent tube and neon sign bulbs consist of plasma. Inside a neon sign bulb there is neon gas and inside a fluorescent tube there is helium gas or some other gas. The gas gets ionised, that is, gets charged when electrical energy flows through it. This charging up creates a plasma glowing inside the tube or bulb. The plasma glows with a special colour depending on the nature of gas. The Sun and the stars glow because of the presence of plasma in them. The plasma is created in stars because of very high temperatures. So, statement 2 is correct.

Therefore, option (b) is the correct answer.

Subject: Science and Technology | Physics

Tag: Factual, Conceptual

Q80. Which of the following human diseases are caused by bacteria?

1. Tuberculosis
2. Hepatitis A
3. Cholera
4. Typhoid
5. Malaria

Select the correct answer using the code given below.

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

Answer: a

Explanation:

- Some common human diseases caused by microorganisms are as follow -

Therefore, option (a) is the correct answer.

Subject: Science and Technology | Health

Tags: Conceptual, Factual

Q81. In the context of Alopecia Areata, consider the following statements:

1. It is an auto-immune disorder that affects hair follicles and causes hair loss.
2. People with a family history of diabetes are more prone to this disease.
3. Its onset occurs only after the attainment of puberty by children.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

- Alopecia Areata is a disease that happens when the immune system attacks hair follicles and causes hair loss. Hair follicles are the structures in skin that form hair. While hair can be lost from any part of the body, alopecia areata usually affects the head and face. So, statement 1 is correct.

- Alopecia Areata mostly occurs in people who have a family history of auto-immune conditions, such as diabetes and thyroid. It may affect one's sense of well-being. There is no cure for Alopecia Areata, but there are treatments that help hair grow back. So, statement 2 is correct.
- Anyone can have alopecia Areata. Men and women get it equally, and it affects all racial and ethnic groups. The onset can be at any age, but most people get it in their teens, twenties, or thirties. When it occurs in children younger than age 10, it tends to be more extensive and progressive. So, statement 3 is not correct.

Therefore, option (b) is the correct answer.

Relevance: Actor Will Smith's wife Jada Pinkett is suffering from Alopecia Areata, the auto-immune disorder.

Subject: Science and Technology | Diseases

Tags: Factual, Analytical

Q82. 'Virgo', 'GEO600' and 'Kagra', sometimes seen in the news, are

- India's satellites to provide communication services in remote regions
- reusable rockets designed by ISRO
- gravitational waves observatories
- constellations found on the celestial equator

Answer: c

Explanation:

- The Laser Interferometer Gravitational-Wave Observatory (LIGO) may be the biggest gravitational wave observatory on Earth, but it is not the only one. Since the best way to learn about gravitational waves and their sources is by having many detectors observing simultaneously, LIGO and other observatories plan to share their data. At present, three other gravitational wave observatories are in operation or under construction in other parts of the world. These are LIGO's sister facilities.
  - Virgo
    - Located outside of Pisa, Italy, Virgo is gravitational wave interferometer with arms 3 km long (LIGO's are 4 km long).
    - Virgo is funded by the European Gravitational Observatory (EGO), a collaboration of the Italian and French governments.
  - GEO600
    - GEO600 is a 0.6 km (600 m) interferometer located near Hannover, Germany, funded by both the German and British governments. This working gravitational wave detector also serves as a

test site to develop advanced interferometer and optical suspension systems for use in future detectors.

- KAGRA

- Japan is currently building a 3 km interferometer inside of the Kamioka mine (also home to the Super Kamiokande neutrino detector). Being underground, the detector will be exposed to much less seismic vibration than surface instruments like LIGO, Virgo and GEO600.

Therefore, option (c) is the correct answer.

Subject: Science and Technology | Physics

Tag: Factual

Q83. Consider the following statements:

1. In any given electric circuit, the total voltage around the path of the circuit is zero.
2. Direct current (DC) flows continuously but changes directions.
3. Atmospheric electricity arises as a result of the separation of electric charges.

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

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

Answer: b

Explanation:

- Electricity is the flow of electrical energy through conductive materials. An electrical circuit is made up of two elements: a power source and components that convert electrical energy into other forms of energy. Voltage is a measure of the difference in electrical potential energy between two points in a circuit. It is measured in Volts. In any given circuit, the total voltage around the path of the circuit is zero. Each component that offers a resistance lowers the voltage, and by the time you reach the end of the circuit loop, there will be no voltage left. So, statement 1 is correct.

- Electricity appears in two forms: alternating current (AC) and direct current (DC). Direct current does not change directions-- the electron flow is always from the negative pole to the positive pole. Alternating current does change direction. AC electricity is the type of electricity commonly used in homes and businesses throughout the world. In a direct-current system, it's easy to determine voltage because it is non-varying or varies slowly over time. The voltage of AC electricity can be readily changed. So, statement 2 is not correct.



- Atmospheric electricity arises due to the separation of electric charges. In the ionosphere and magnetosphere, a strong electric current is generated from the solar-terrestrial interaction. In the lower atmosphere, the current is weaker and is maintained by thunderstorms. So, statement 3 is correct.

Therefore, option (b) is the answer.

Subject: Science and Technology| Energy

Tag: Analytical, Conceptual

Q84. With reference to Encryption, consider the following statements:

1. It involves converting transmitted information into an unintelligible form.
2. It can be done for information in Text and Audio formats and not in Image files.
3. End-to-end encryption keeps messages private from everyone, except the messaging service.

Which of the statements given above are correct?

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

Answer: a

Explanation:

Encryption:

- Encryption is the process of transforming plaintext data into an unintelligible form (cipher text) such that the original data either cannot be recovered (one-way encryption) or cannot be recovered without using an inverse decryption process (two-way encryption). So, statements 1 is correct.
- Encryption can be done on Text, Audio and Image Files also. Images are encrypted for many reasons, including identifying the creator of an image, protecting copyright information, deterring piracy, and blocking images from being viewed by users who shouldn't have access to them. By encrypting images, you can send them through email or over the Internet without worrying about your images are being viewed by people that you don't want to see them. So, statement 2 is not correct.

End-to-end encryption (E2EE):

- It is the act of applying encryption to messages on one device such that only the device to which it is sent can decrypt it. The message travels all the way from the sender to the recipient in encrypted form. It keeps messages private from everyone, including the messaging service. So, statement 3 is not correct.

Therefore, option (a) is the correct answer.

Subject: Science and technology | Information technology

Tag: Conceptual, Factual

Q85. With reference to food additives, consider the following pairs:

Sl. No.	Food additive	Used as
1.	Alitame :	Artificial sweetener
2.	Sodium benzoate :	Preservative
3.	Saccharin :	Colouring Agent

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

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

Answer: a

Explanation:

Artificial Sweetening Agents:

- Natural sweeteners, e.g., sucrose add to calorie intake and therefore many people prefer to use artificial sweeteners. Alitame is a high potency sweetener, although it is more stable than some other artificial sweeteners, the control of the sweetness of food is difficult while using it. It has 2000 times sweetness value in comparison to cane sugar. So, pair 1 is correctly matched.

Food preservatives:

- They prevent the spoilage of food due to microbial growth. The most commonly used preservatives include table salt, sugar, vegetable oils and sodium benzoate. Sodium benzoate is used in limited quantities and is metabolized in the body. Salts of sorbic acid and propanoic acid are also used as preservatives. So, pair 2 is correctly matched.

Saccharin:

- Ortho-sulphobenzimide, also called saccharin, is the first popular artificial sweetening agent. It has been used as a sweetening agent ever since it was discovered in 1879. It is about 550 times as sweet as cane sugar. It is excreted from the body in the urine unchanged. It appears to be entirely inert and harmless when taken. Its use is of great value to diabetic persons and people who need to control their intake of calories. So, pair 3 is not correctly matched.

Therefore, option (a) is the correct answer.

Subject: Science and technology | Miscellaneous

Tag: Conceptual, Factual

Q86. In spaceflights, astronauts often experience loss of bone density because

- a) atmospheric pressure is very high in space
- b) lack of protection against solar radiations
- c) there is a lack of proper nutritional diet
- d) bones no longer have to support the body against gravity

Answer: d

Explanation:

- Astronauts face a number of challenges during their spaceflights. Some of the processes and functions of bones change after the astronaut has lived in microgravity for several days. In space, the amount of weight that bones must support is reduced to almost zero. At the same time, many bones that aid in movement are no longer subjected to the same stresses that they are subjected to on Earth.
- Over time, calcium normally stored in the bones is broken down and released into the bloodstream. The high amount of calcium found in astronaut's blood during spaceflight (much higher than on Earth) reflects the decrease in bone density, or bone mass. This drop in density, known as disuse osteoporosis, leaves bone weak and less able to support the body's weight and movement upon return to Earth, putting the astronaut at a higher risk of fracture.

Therefore, option (d) is the correct answer.

Relevance: India is preparing for Gaganyaan Programme that envisages undertaking the demonstration of human spaceflight to Low Earth Orbit (LEO).

Subject: Science and Technology | Space

Tags: Conceptual

Q87. If Parliament enacts a law that threatens the fundamental rights of an individual, then which of the following Articles can be used by the Supreme Court to declare it void?

- a) Article 13
- b) Article 21

c) Article 226

d) Article 368

Answer: a

Explanation:

- Article 13 aids the court and citizens to keep the powers of the legislature under preview. Article 13 of the Indian Constitution describes the means for judicial review. It enjoins a duty on the Indian State to respect and implement the fundamental right. And at the same time, it confers a power on the courts to declare a law or an act void if it infringes the fundamental rights.
- The judiciary plays a very important role as a protector of constitutional rights. The primary responsibility for the implementation of the rule of law lies with the judiciary. It is the significance of judicial review, to ensure that democracy is inclusive and there is accountability of everyone who wields or Exercises public power.
- The principle of judicial review has become an essential feature of the Indian constitution. The power of judicial review is incorporated in Article 226 and 227 of the Constitution as far as the high courts are concerned and in Article 32 and 136 with regard to the Supreme Court. So, option c is not correct.
- Judicial review is the power of go to pronounce upon the constitutionality of legislative acts which fall within their normal jurisdiction to enforce and the power to refuse to enforce such as they find to be unconstitutional and hence void. So, option a is correct.
- Article 21 deals with an individual's right to life and liberty, whereas Article 368 deals with the procedure for amendment of the Constitution. So, option b and option d are not correct.

Therefore, option (a) is the correct answer.

Subject: Polity | Basic structure

Tag: Conceptual, Factual

Q88. Consider the following statements with reference to the Panchayat (Extension of the Scheduled Areas) Act, 1996:

1. It was enacted upon the recommendations of the Bhuria Committee Report.
2. At least half the number of seats are reserved for Scheduled Tribes in Panchayats of Scheduled Areas.
3. It empowered state legislatures to frame all laws concerning the provisions of Part IX of the Constitution relating to the Panchayats in Fifth Scheduled Areas.

Which of the statements given above is/are correct?

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

Answer: d

Explanation:

- The Central Government enacted Panchayats Extension to Scheduled Area (PESA) Act 1996 following the recommendations of the Bhuria Committee Report in 1995. The Bhuria Committee favored democratic decentralization in scheduled areas. So, statement 1 is correct.
- Under PESA, the seats in the Gram Panchayat, Panchayat Samiti and Zilla Parishad shall be constituted with at least half with STs and with STs as Chairpersons provided, they fall within the Scheduled Area. So, statement 2 is correct.
- Also, in terms of PESA, State Legislatures have been empowered to frame all laws concerning the extension of the provisions of Part IX of the Constitution relating to the Panchayats in Fifth Scheduled Areas. As such, the subject being in the purview of State Governments, these details are not maintained centrally. So, statement 3 is correct.
- Consultation with the Gram Sabha becomes mandatory for any acquisition of land for development projects and before resettlement or rehabilitation of project affected people in the Scheduled Area. Beneficiaries under poverty alleviation and other programmes are to be identified or selected only by the concerned Gram Sabha and not by any others.

Therefore, option (d) is the correct answer.

Subject: Polity | Scheduled Areas

Tag: Factual, Analytical

Q89. For which one of the following reasons, the rights listed under Part III of the Constitution are called as 'Fundamental Rights'?

- a) These rights are guaranteed and protected by the Constitution.
- b) These rights are listed in the United Nation's Universal Declaration of Human Rights.
- c) These rights are part of the basic structure of the Constitution which cannot be altered.
- d) All these rights are available to both citizens and non-citizens alike.

Answer: a

Explanation:

- The Fundamental Rights are meant for promoting the ideal of political democracy. They prevent the establishment of an authoritarian and despotic rule in the country, and protect the liberties and freedoms of the people against the invasion by the State. They operate as limitations on the tyranny of the executive and arbitrary laws of the legislature. In short, they aim at establishing 'a government of laws and not of men'.
- The Fundamental Rights are named so because they are guaranteed and protected by the Constitution, which is the fundamental law of the land. They are 'fundamental' also in the sense that they are most essential for the all-round development (material, intellectual, moral and spiritual) of the individuals.

Therefore, option (a) is the correct answer.

Subject: Polity | Fundamental Rights

Tag: Conceptual

Q90. With reference to state governments, consider the following statements:

1. According to the Constitution, the Governor should not belong to the state where he is appointed.
2. The 42nd Constitutional Amendment Act has made ministerial advice binding on the Governor.

Which 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 Governor of a state is the chief executive head of the state. But, like the president, he is a nominal executive head (titular or constitutional head). The governor also acts as an agent of the central government.
- Punchhi Commission on centre-state relations suggested that the Central Government should adopt the following strict guidelines as recommended in the Sarkaria Commission report and follow its mandate in letter and spirit : (i) He should be eminent in some walk of life; (ii) He should be a person from outside the state; (iii) He should be a detached figure and not too intimately connected with the local politics of the state; (iv) He should be a person who has not taken too great a part in politics generally and particularly in the recent past. These recommendations were not mentioned in the Constitution of India. So, statement 1 is not correct.
- While the Constitution envisages the possibility of the governor acting at times in his discretion, no such possibility has been envisaged for the President. After the 42nd Constitutional

Amendment (1976), ministerial advice has been made binding on the President, but no such provision has been made with respect to the governor. So, statement 2 is not correct.

Therefore, option (d) is the correct answer.

Subject: Polity | State Executive

Tag: Conceptual

Q91. Which of the following statements is/are correct with reference to the Official Languages Act, 1963?

1. It provided for the continuation of the English Language for use in Parliament.
2. Both Hindi and English languages must be used for resolutions, general orders and notifications made by the Central Government.
3. It is obligatory to use English language for purposes of communication between the states.

Select the correct answer using the code given below.

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

Answer: b

Explanation:

- According to the Official Languages Act of 1963, the English language may continue to be used in addition to Hindi,
  - o for all the official purposes of the Union for which it was being used immediately before that day; and
  - o for the transaction of business in Parliament. So, statement 1 is correct.
- The Act also provided that both Hindi and the English languages shall be used for-
  - o resolutions, general orders, rules, notifications, administrative or other reports or press communiques issued or made by the Central Government or by a Ministry, Department or office thereof or by a corporation or company owned or controlled by the Central Government
  - o administrative and other reports and official papers laid before a House or the Houses of Parliament. So, statement 2 is correct.
- The Act provided that the English language shall be used for purposes of communication between the Union and a State which has not adopted Hindi as its Official Language. For a State which has not adopted Hindi as its official language, it can also use Hindi for purposes of communication with the Union or with a State which has adopted Hindi as its official language, or by

agreement with any other State. In such a case, it shall not be obligatory to use the English language for purposes of communication with that State. So, statement 3 is not correct.

Therefore, option (b) is the correct answer.

Relevance: There is a debate surrounding whether Hindi should be our national language or not.

Subject: Polity | Languages

Tag: Factual, Analytical

Q92. With reference to India, the Lok Sabha can express a lack of confidence in the government in which of the following ways?

1. By not passing a motion of thanks
2. By rejecting a money bill
3. By passing a cut motion
4. By passing a private member's bill

Select the correct answer using the code given below.

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

Answer: b

Explanation:

- In India, the ministers are collectively responsible to the Parliament in general and to the Lok Sabha in particular. This means that they continue in office so long as they enjoy the confidence of the majority members in the Lok Sabha. In other words, the council of ministers can be removed from office by the Lok Sabha by passing a no-confidence motion. The Lok Sabha can also express lack of confidence in the government in the following ways:

- o By not passing a motion of thanks on the President's inaugural address.
- o By rejecting a money bill.
- o By passing a censure motion or an adjournment motion.
- o By defeating the government on a vital issue.
- o By passing a cut motion. So, points 1, 2 and 3 are correct.

- Private member's bill is introduced by any member of Parliament other than a minister. Passage of a private member's bill does not express a lack of confidence in the government. So, point 4 is not correct.

Therefore, option (b) is the correct answer.



Subject: Polity | Parliament

Tag: Conceptual

Q93. Consider the following statements:

1. In Authoritarianism, the state controls all aspects of public as well as private life.
2. In Oligarchy, there is essentially a hereditary rule by a small number of people.
3. Technocracy is a form of government in which experts in technology control all the decision-making.

Which of the statements given above is/are correct?

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

Answer: c

Explanation:

- Authoritarianism primarily differs from totalitarianism in that social and economic institutions exist free from governmental control. By contrast, totalitarianism is a political system where the state holds total authority over the society and seeks to control all aspects of public and private life wherever necessary. Totalitarianism is an extreme version of authoritarianism. So, statement 1 is not correct.
- An oligarchy is a form of government where very few people are given the chance to change things. An oligarchy does not have to be hereditary or monarchic. An oligarchy does not have one clear ruler, but several powerful people. An oligarchy is a form of power structure in which power effectively rests with a small number of people. These people could be distinguished by royalty, wealth, family ties, education, corporate, or military control. Some historical examples of oligarchy are the former Union of Soviet Socialist Republics and Apartheid in South Africa. So, statement 2 is not correct.
- Technocracy is a form of government in which experts in technology would be in control of all decision-making. Scientists, engineers, and technologists who have knowledge, expertise, or skills, would compose the governing body instead of politicians, businessmen, and economists. In a technocracy, decision-makers would be selected based on how knowledgeable and skilful they are in their field. So, statement 3 is correct.

Therefore, option (c) is the correct answer.

Subject: Polity | Forms of Government

Tags: Conceptual

Q94. With reference to 'Chief Secretary', consider the following statements:

1. S/he is provided with security of tenure.
2. S/he is the chairperson of the state civil services board.
3. S/he holds the rank of secretary to the Government of India.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

- Chief Secretary is the principal adviser to the Chief Minister in which capacity s/he works out the detailed administrative implications of the proposals made by ministers and coordinates them into a cohesive plan of action. The Chief Secretary's office has been excluded from the operation of the tenure system. Chief Secretary would normally retire as the Chief Secretary or else he would, from this position, move to the Union government to take up a more important position. So, statement 1 is not correct.
- As per rules, all states should have a civil services board to decide on transfers and postings of the bureaucrats. The board is mandated to decide on the transfer of a civil servant before completion of his or her fixed tenure. The civil services board is headed by chief secretary of the state. So, statement 2 is correct.
- Since 1973, the office of the Chief Secretary has been standardized; it's incumbent since then has begun to hold the rank of the Secretary to Government of India and receives emoluments admissible to the latter. So, statement 3 is correct.

Therefore option (b) is the correct answer.

Subject: Polity | Civil Services

Tags: Conceptual, Factual

Q95. With reference to international relations, "Bucharest Nine" is

- a) an alliance of small island nations to fight climate change
- b) a group that focuses on electric transportation
- c) an initiative that aims to reduce ozone holes over Antarctica
- d) a platform for dialogue within the North Atlantic Treaty Organization

Answer: d

Explanation:

- The “Bucharest Nine” is a group of nine North Atlantic Treaty Organization (NATO) countries in Eastern Europe that became part of the US-led military alliance after the end of the Cold War. The Bucharest Nine or Bucharest Format, often abbreviated as the B9, was founded on November 4, 2015, and takes its name from Bucharest, the capital of Romania. The Bucharest Format (B9) offers a platform for deepening the dialogue and consultation among the participant allied states, in order to articulate their specific contribution to the ongoing processes across the North-Atlantic Alliance, in total compliance with the principles of solidarity and indivisibility of the security of the NATO Member States.

Therefore, option (d) is the correct answer.

Relevance: The envoys to India of nine Eastern European countries wrote an article to acquaint the Indian public with the basic facts on the ground” about the “premeditated, unprovoked and unjustified Russian aggression in Ukraine.

Subject: Polity| International Relations

Tag: Factual

Q96. Consider the following pairs:

Sl. No.	Regions in news	Country
1.	Donbas :	Russia
2.	Panjshir:	Afghanistan
3.	Tel Aviv :	Iran
4.	Sittwe Port :	Myanmar

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) 2 and 4 only

Answer: d

Explanation:

- Luhansk & Donetsk are two areas located in south-eastern Ukraine and are major industrial centres in an area which is collectively known as the Donbas. This area has borders with Russia. In 2014, the two areas declared themselves independent of Ukraine. They were encouraged by the annexation of Crimea by Russia, but had remained unrecognised by Moscow and the international community. While the intelligence reports from the Western world have mentioned the presence of the Russian troops in these two areas, this has been denied by the Russians. So, pair 1 is not correctly matched.
- Panjshir valley is located north of Kabul in the Hindu Kush. This was a resistance stronghold against the Soviets in the 1980s and then against the Taliban in the 1990s. The people in the region strongly resisted the coming of Taliban in 2021. So, pair 2 is correctly matched.
- Tel Aviv or Tel Aviv–Yafo is a major city and economic centre in Israel, situated on the Mediterranean coast some 40 miles (60 km) northwest of Jerusalem. Most of the foreign embassies in Israel are also located in the city. In addition, most of Israel's large corporations are headquartered in Tel Aviv. So, pair 3 is not correctly matched.
- The Sittwe deep-water port off the west coast of Myanmar is a part of the \$484 million Kaladan multimodal project constructed by India. The project aims to reduce the cost and time for transporting goods, including essentials, to landlocked Mizoram. So, pair 4 is correctly matched.

Therefore, option (d) is the correct answer.

Subject: Polity | International Relations

Tags: Factual, Analytical

Q97. With reference to 'United Nations Human Rights Council (UNHRC)', consider the following statements:

1. The United Nations Commission on Human Rights is the investigative body of the UNHRC.
2. Its members are elected by the UN General Assembly based on equitable geographical distribution.
3. In 2021, it recognized the human right to a clean, healthy and sustainable environment, for the first time.

Which of the statements given above is/are correct?

a) 1 and 2 only

b) 3 only

c) 2 and 3 only

d) 1, 2 and 3

Answer: c

Explanation:

- The UN Commission on Human Rights was created as a subsidiary body of Economic and Social Council, and served as the UN's central policy organ in the human rights field. Initially, the commission believed itself to be unauthorized to deal with human rights complaints. Since 1967, the commission was explicitly authorized to deal with violations of human rights. In the early 21st century the Commission on Human Rights came to be viewed as ineffective, in part because its membership included countries with poor human rights records. It was replaced by the UN Human Rights Council in 2006. So, statement 1 is not correct.
- The Human Rights Council is an inter-governmental body within the United Nations system responsible for strengthening the promotion and protection of human rights around the globe and for addressing situations of human rights violations and make recommendations on them.
- The Council is made of 47 Member States, which are elected by the majority of members of the General Assembly of the United Nations through direct and secret ballots. The Council's Membership is based on equitable geographical distribution. Seats are distributed as follows: 1. African States: 13 seats; 2. Asia-Pacific States: 13 seats; 3. Latin American and Caribbean States: 8 seats; 4. Western European and other States: 7 seats; 5. Eastern European States: 6 seats. Members of the council for three years and are not eligible for immediate re-election after serving two consecutive terms. So, statement 2 is correct.
- In 2021, the Human Rights Council recognised for the first time, that having a clean, healthy and sustainable environment is a human right by adopting resolution 48/13. So, statement 3 is correct.

Therefore, option (c) is the correct answer.

Relevance: India got elected to the United Nations Human Rights Council for the sixth term with an overwhelming majority in the year 2021 for a term of three years.

Subject: Polity | International Relations

Tag: Factual, Analytical

Q98. Which of the following Heritage Monuments will you be able to spot on the current series of Indian Currency?

1. Stone Chariot of Hampi
2. Rani ki Vav
3. Amaravati Stupa

4. Hoyasaleshwar Temple complex
5. Sun Temple of Konark
6. Khajuraho Temple complex
7. Mamallapuram temple complex
8. Sanchi Stupa

Select the correct answer using the code given below.

- a) 1, 3, 4, 6 and 8
- b) 1, 2, 5 and 8
- c) 2, 3, 4, 6, 7
- d) 1, 2, 5, 6 and 8

Answer: b

Explanation:

- Indian currency notes are notable for their monumental and architectural images printed on the back. Monuments printed in the current series of Indian currency are:

Currency Denomination	Monument
Rs 10	Sun temple, Konark
Rs 20	Ellora caves, Aurangabad
Rs 50	Stone Chariot of Hampi
Rs 100	Rani ki Vav, Patan (Gujrat)
Rs 200	Sanchi stupa
Rs 500	Red fort

Therefore, option (b) is the correct answer.

Subject: History | Monuments

Tag: Factual

Q99. Consider the following statements:

1. The symbol for Asian Games is the rising sun with interlocking rings.
2. India hosted the inaugural edition of the Asian Games in 1951.
3. India has won at least one gold medal in every edition of the Asian Games.

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:

- Asian Games were regulated by the Asian Games Federation from 1951 to 1978. Since 1982, Olympic Council of Asia now regulates the Asian Games. The symbol for Asian Games is rising sun with interlocking rings. Nine nations have hosted the Asian Games so far and 46 nations have participated in the games. Israel has not taken part in Asian Games since 1974. So, statement 1 is correct.
- India played an integral role in the establishment of the Asian Games and even hosted the inaugural edition in New Delhi in 1951. India won 51 medals – 15 gold, 16 silver and 20 bronze – at Asian Games 1951 to finish second behind Japan (60 medals). It remains India's best finish at the continental Games. So, statement 2 is correct.
- India is one of the seven countries to have participated in all the editions of the Asian Games. India along with Japan is the only country to have won at-least one gold medal in every edition of Asian Games. India has always ranked in the top 10 in the medals tally in Asian Games, except in the 1990 games. So, statement 3 is correct.

Therefore, option (d) is the correct answer.

Relevance: The 19th edition of the games is scheduled to be held in September, 2022, in Hangzhou near Shanghai in China.

Subject: Economy | Sports

Tags: Factual

Q100. With reference to 'Javelin throw', consider the following statements:

1. An athlete must not turn her/his back to the landing area at any stage during the throw.
2. The javelin must stick in the ground to be counted as a valid throw.
3. Sumit Antil won a gold medal in the javelin event at Tokyo Paralympics 2020.

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 and 3

Answer: c

Explanation:

- Javelin has been part of the modern Olympic Games programme since 1908 for men and 1932 for women.
- For the throw to be measured, the athlete must not turn his or her back to the landing area at any stage during their approach and throw; they must throw the javelin over the upper part of their throwing arm, and they must not cross the foul line, aka scratch line, at any time. So, statement 1 is correct.
- The javelin must also land tip first and within the marked 29-degree sector. The javelin need only make a mark on the ground and not stick in or 'break turf'. So, statement 2 is not correct.
- India's Sumit Antil won a gold medal in the men's javelin throw (F64) event at the Tokyo Paralympics 2020. Devendra Jhajharia (javelin event) is the only Indian to have ever won two gold medals at any Olympic or Paralympic games – one at the 2004 Athens Paralympics and another at the 2016 Rio Paralympics. So, statement 3 is correct.

Therefore, option (c) is the correct answer.

Relevance: India won gold in javelin throw at 2020 Olympics, which is for the first time in the field of athletics.

Subject: Polity | Sports

Tag: Factual, Analytical