

UNION PUBLIC SERVICE COMMISSION

Civil Services (Preliminary Exam)- 2011

GENERAL STUDIES : PAPER-I

Time: 2 hours

(Exam Date : 12.06.2011)

Maximum Number: 200

1. In the Union Budget 2011-12, a full exemption from the basic customs duty was extended to the bio-based asphalt (bioasphalt). What is the importance of this material?

1. Unlike traditional asphalt, bio-asphalt is not based on fossil fuels.
2. Bioasphalt can be made from non-renewable resources.
3. Bioasphalt can be made from organic waste materials.
4. It is eco-friendly to use bioasphalt for surfacing of the roads.

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

Ans. (b): Bio-asphalt is an alternative to conventional asphalt, which is not manufactured based on fossil fuels. It is manufactured from non-petroleum based renewable sources. These sources include maize, paddy, sugar, molasses, waste of white mustard oil, waste of palm oil, lignin etc. Bio-asphalt is helpful in keeping the surface temperature of the roads low. Therefore, laying the top surface of roads with bio-asphalt is eco-friendly.

2. Consider the following:

1. Carbon dioxide
2. Oxides of Nitrogen
3. Oxides of Sulphur

Which of the above is/are the emission/emissions from coal combustion at thermal power plants?

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

Ans. (d) : Coal combustion in thermal power plants provides the emission of carbon dioxide, oxides of nitrogen, oxides of sulphur and airborne inorganic particles, etc.

3. Satellites used for telecommunication relay are kept in a geostationary orbit. A satellite is said to be in such an orbit when:

1. The orbit is geosynchronous.
2. The orbit is circular
3. The orbit lies in the plane of the Earth's equator.
4. The orbit is at an altitude of 22,236 km.

Select the correct answer using the codes given below :

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

Ans. (a) : A geostationary orbit is a circular geosynchronous orbit in which the satellite is placed at an altitude of approximately 35786 km above mean sea level. The orbit lies in the plane of the earth's equator. An object in such an orbit that has an orbital period equal to earth's rotational period and thus appear motionless.

4. India has experienced persistent and high food inflation in the recent past. What could be the reasons?

1. Due to a gradual switchover to the cultivation of commercial crops, the area under the cultivation of food grains has steadily decreased in the last five years by about 30%.
2. As a consequence of increasing incomes, the consumption patterns of the people have undergone a significant change.
3. The food supply chain has structural constraints.

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

Ans. (b): Increased income has led to significant changes in people's consumption patterns, leading to higher food inflation. Structural bottlenecks in supply chain demand for many food items have been one of the reasons for persistent and high food inflation in India in recent years.

5. At present, scientists can determine the arrangement or relative positions of genes or DNA sequences on a chromosome. How does this knowledge benefit us?

1. It is possible to know the pedigree of livestock.
2. It is possible to understand the causes of all human diseases.
3. It is possible to develop disease-resistant animal breeds.

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

Ans. (c) : The DNA sequence help in understanding the genealogies of the animals. In addition, various genetic diseases such as Alzheimer's, Myotonic dystrophy, cystic fibrosis and inability of gene and defects arising in them can be cured by finding out the cause of many diseases.

6. In terms of economy, the visit by foreign nationals to witness the XIX Common Wealth Games in India amounted to –

- (a) Export (b) Import
(c) Production (d) Consumption

Ans. (a) : The income comes from "tourism" and that is an invisible export.

7. Microbial fuel cells are considered a source of sustainable energy. Why?

1. They use living organisms as catalysts to generate electricity from certain substrates.
2. They use a variety of inorganic materials as substrates.
3. They can be installed in waste water treatment plants to cleanse water and produce electricity.

Which of the statement given above is/are correct?

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

Ans. (c): Microbial fuel cell (MFC) converts the chemical energy available in a biodegradable substrate directly into electrical energy. MFC is also considered an attractive alternative to power generation because it contains organic matter such as sucrose, glucose, acetate, starch format, methanol, protein etc. are used as substrates. Also, some inorganic substances such as sulfides are also used as substrates.

8. Which one of the following statements appropriately describes the "fiscal stimulus"?

- (a) It is massive investment by the Government in manufacturing sector to ensure the supply of goods to meet the demand surge cause by rapid economic growth.
- (b) It is an intense affirmative action of the Government to boost economic activity in the country.
- (c) It is Government's intensive action on financial institutions to ensure disbursement of loans to agriculture and allied sectors to promote greater food production and contain food inflation.
- (d) It is an extreme affirmative action by the Government to pursue its policy of financial inclusion.

Ans. (b) : 'Financial Stimulus' is a deeply determinative action of the government which aims to promote economic activities in the country. Government financial stimuli are provided to overcome the slowdown of the economy or to save it from the financial crisis. Under this, the save various sectors of the economy are provided with financial incentives to protect them from recession.

9. The formation of ozone hole in the Antarctic region has been a cause of concern. What could be the reason for the formation of this hole?

- (a) Presence of prominent troposphere turbulence, and inflow of chlorofluorocarbons.
- (b) Presence of prominent polar front and stratospheric clouds, and inflow of chlorofluorocarbons.
- (c) Absence of polar front and stratospheric clouds; and inflow of methane and chlorofluorocarbons.
- (d) Increased temperature at polar region due to global warming.

Ans. (b) : The formation of an ozone hole in the Antarctic region is a matter of concern, the possible reason for the formation of this hole in the presence of specific polar atmospheres and stratospheric clouds and the inflow of chlorofluorocarbons. Nitric acid present in polar stratospheric clouds reacts with chlorofluorocarbons to form chlorine which is responsible for the photochemical destruction of the ozone layer.

10. Consider the following actions which the Government can take –

1. Devaluing the domestic currency.
2. Reduction in the export subsidy.
3. Adopting suitable policies which attract greater FDI and more funds from FIIs.

Which of the above action/actions can help in reducing the current account deficit?

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

Ans. (d) : To reduce current account deficit, devaluation of domestic currency and adopting suitable policies which attract greater FDI and more funds from FIIs etc. are the actions which can be taken by a government.

11. The Constitution (Seventy-Third Amendment) Act, 1992, which aims at promoting the Panchayati Raj Institutions in the country, provides for which of the following?

1. Constitution of District Planning Committees.
 2. State Election Commissions to conduct all panchayat elections.
 3. Establishment of State Finance Commissions.
- Select the correct answer using the codes given below**

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

Ans. (d) : District Planning Committee (DPC) is a constitutional Body mentioned in 74th constitutional amendment 1992, article 243 (ZD). The committee composed of elected member of local bodies of urban or rural areas, and nominated members within districts. State Election commission in a constitutional body that comes under the article 243 (K).

State finance Commission is also a constitutional body that comes under article 243(I).

Hence option (c) should be correct answer.

Note : According to UPSC official Answer Key (d) is correct answer.

12. Two important rivers—one with its source in Jharkhand (and known by a different name in Odisha), and another, with its source in Odisha merge at a place only a short distance from the coast of Bay of Bengal before flowing into the Sea. This is an important site of wildlife and biodiversity and a protected area. Which one of the following could be this?

- (a) Bhitarkanika (b) Chandipur-on-sea
(c) Gopalpur-on-sea (d) Simlipal

Ans. (a) : The Bhitarkanika Mangroves are a mangrove wetland in India's Odisha state. The Bhitarkanika Mangroves cover an area of 650 km² in the river delta of the Brahmani and Baitarani rivers.

13. A rapid increase in the rate of inflation is sometimes attributed to the base effect. What is "base effect" ?

- (a) It is the impact of drastic deficiency in supply due to failure of crops.
- (b) It is the impact of the surge in demand due to rapid economic growth.
- (c) It is the impact of the price levels of previous year on the calculation of inflation rate.
- (d) None of the statements (a), (b) and (c) given above is correct in this context.

Ans. (c): The base effect is the effect of prior data on the calculation of current data. The 'base effect' is the effect of the previous years prices on the calculation of the current inflation rate in the context of an increase in the inflation rate.

14. India is regarded as a country with "Demographic Dividend". This is due to –

- (a) Its high population in the age group below 15 years.
- (b) Its high population in the age group of 15-64 years.
- (c) Its high population in the age group above 65 years.
- (d) Its high total population.

Ans. (b): India is counted as a country with the demographic dividend. The reason for this is that the population in the age group of 15-64 years is more and the number of children and old people is less.

15. Regarding "carbon credits", which one of the following statements is not correct ?

- (a) The carbon credit system was ratified in conjunction with the Kyoto Protocol .
- (b) Carbon credits are awarded to countries or groups that have reduced greenhouse gases below their emission quota.
- (c) The goal of the carbon credit system is to limit the increase of carbon dioxide emission.
- (d) Carbon credits are traded at a price fixed from time to time by the United Nations Environment Programme.

Ans. (d) : According to the carbon credit system, the maximum carbon emissions made by that country are determined according to the industries available in a country. The carbon credit system was implemented under the Kyoto Protocol to reduce carbon emissions in the environment. In international markets, carbon credits are traded according to their current market prices.

16. Which one of the following is not a feature of "Value Added Tax" ?

- (a) It is a multi-point destination-based system of taxation.
- (b) It is a tax levied on value addition at each stage of transaction in production-distribution chain.

(c) It is a tax on the final consumption of goods or services and must ultimately be borne by the consumer.

(d) It is basically a subject of the Central Government and the State governments are only a facilitator for its successful implementation.

Ans. (d): "Value-based tax" is a multi-point target based tax system. In this, a tax is levied on value addition at every stage of the transaction in the production/distribution chain. It is a tax on the final consumption of goods and services, which consumers eventually have to bear.

17. A "closed economy" is an economy in which –

- (a) the money supply is fully controlled.
- (b) deficit financing takes place.
- (c) only exports take place.
- (d) neither exports nor imports take place.

Ans. (d) : A closed economy is an economy where there is neither import nor export. That is, a closed economy is an economy that keeps off the import and export of goods and services. Hence, (d) is correct.

18. When the bark of a tree is removed in a circular fashion all around near its base, it gradually dries up and dies because–

- (a) Water from soil cannot rise to aerial parts
- (b) Roots are starved of energy
- (c) Tree is infected by soil microbes.
- (d) Roots do not receive oxygen for respiration.

Ans. (b): Two types of tissues are found in vascular plants: phloem and xylem. Phloem is the innermost layer of the bark of the tree. Its main function is to transport soluble organic matter produced in the process of photosynthesis. Phloem will also be damaged by removing the bark of a tree from all four sides near the base of the tree, due to which the nutrients produced by the leaves in the process of photosynthesis will not reach the roots, the roots will be deprived of energy, and the tree will gradually dry and slowly will be dead.

19. The new START treaty was in the news. What is this treaty ?

- (a) It is a bilateral strategic nuclear arms reduction treaty between the USA and the Russian Federation.
- (b) It is a multilateral energy security cooperation treaty among the members of the East Asia Summit.
- (c) It is a treaty between the Russian Federation and the European Union for the energy security cooperation.
- (d) It is a multilateral cooperation treaty among the BRICS countries for the promotion of trade.

Ans. (a) : The New Strategic Arms Reduction Treaty (New START) was signed in 2010 in Prague by Russia and the United States. This treaty continues the bipartisan process of verifiably reducing US and Russian strategic nuclear arsenals begun by former Presidents Ronald Reagan and George H.W. Bush through START-I in 1994.

20. Three of the following criteria have contributed to the recognition of Western Ghats-Sri Lanka and Indo-Burma regions as hotspots of biodiversity:

1. Species richness
2. Vegetation density
3. Endemism
4. Ethno- botanical importance
5. Threat perception
6. Adaption of flora and fauna to warm and humid condition

Which three of the above are correct criteria in this context?

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

Ans. (c): The Western Ghats-Sri Lanka and Indo-Burma regions have been recognized as biodiversity hotspots based on three parameters called species richness, endemism and threat perception.

21. Human activities in the recent past have caused the increased concentrations of carbon dioxide in the atmosphere, but a lot of it does not remain in the lower atmosphere because of –

1. Its escape into the outer stratosphere.
2. The photosynthesis by phytoplankton in the oceans.
3. The trapping of air in the polar ice caps.

Which of the statements given above is/are correct?

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

Ans. (b): The concentration of carbon dioxide in the atmosphere has increased in recent years due to globalization rapidly increasing population, deforestation and other human activities, but most of it does not remain in the lower part of the atmosphere. One of the main reasons is that phyto plankton performs photosynthesis in the oceans.

22. In the context of ecosystem productivity, marine upwelling zones are important as they increase the marine productivity by bringing the –

1. Decomposer microorganisms to the surface.
2. Nutrients to the surface.
3. Bottom-dwelling organisms to the surface.

Which of the statements given above is/are correct?

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

Ans. (b) : In the context of productivity, the upwelling area is important because they increase marine productivity by bringing nutrients to the surface. Under the sea flow, the hot and nutritious water present on the sea surface is transferred by the airflow through cold and nutrient- rich water.

23. If a tropical rain forest is removed, it does not regenerate quickly as compared to a tropical deciduous forest. This is because –

- (a) The soil or rain forest is deficient in nutrients.
(b) Propagules of the trees in a rain forest have poor viability.

- (c) The rain forest species are slow-growing.
(d) Exotic species invade the fertile soil of rain forest

Ans. (a) : If a tropical rain forest is removed, it does not re-developed as fast as a tropical deciduous forest; the main reason being the lack of nutrients in the soil of the rain forest.

24. The Himalayan Range is very rich in species diversity. Which one among the following is the most appropriate reason for this phenomenon?

- (a) It has a high rainfall that supports luxuriant vegetative growth.
(b) It is a confluence of different bio-geographical zones.
(c) Exotic and invasive species have not been introduced in this region.
(d) It has less human interference.

Ans. (b): The Himalayan Mountains form the natural and political boundary of the Indian sub-continent. Due to the geographical location of the Himalayas, the rest of the Indian subcontinent has become a distinct personality from Asia. The Himalayan mountains are extremely rich in terms of species. The main reason for that is that it is a confluence of different bio-geographical regions.

25. With reference to India, consider the following Central Acts :

1. Import and Export (Control) Act, 1947.
2. Mining and Mineral Development (Regulation) Act, 1957.
3. Customs Act, 1962
4. India Forest Act, 1927

Which of the above Acts have relevance to/ bearing on the biodiversity conservation in the country?

- (a) 1 and 3 only (b) 2, 3 and 4 only
(c) 1, 2, 3 and 4 (d) None of the above Acts

Ans. (c) : There are 35 Acts' of The Indian government that have relevance to biodiversity conservation which includes all the four options given in this question.

26. Karl Marx explained the process of class struggle with the help of which one of the following theories ?

- (a) Empirical liberalism
(b) Existentialism
(c) Darwin's theory of evolution
(d) Dialectical materialism

Ans. (d) : Darwin's 'struggle for existence' in natural history is analogous to the class struggle in "human history". So option (c) is incorrect. The sketch of dialectical materialism given by Karl Marx explains that Dialectical principle is of universal application and all the development is "struggle of opposites". Thus option (d) is the correct answer.

27. A layer in the Earth's atmosphere called Ionosphere facilitates radio communication. Why?

1. The presence of ozone caused the reflection of radio waves to Earth.
2. Radio waves have a very long wavelength.

Which of the statements given above is/are correct?

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

Ans. (d): A layer called the Ionosphere in the Earth's atmosphere facilitates radio communication because of the presence of electrically charged ions in the ionosphere.

28. Both Foreign Direct Investment (FDI) and Foreign Institutional Investor (FII) are related to investment in a country. Which one of the following statements best represents an important difference between the two ?

- (a) FII helps bring better management skills and technology, while FDI only brings in capital .
(b) FII helps in increasing capital availability in general, while FDI only targets specific sectors.
(c) FDI flows only into the secondary market, while FII targets primary market.
(d) FII is considered to be more stable than FDI.

Ans. (b): FDI only targets a specific enterprise. It aims to increase the enterprises capacity or productivity or change its management control. The FII investment flows only into the secondary market. It helps in increasing capital availability in general rather than enhancing the capital of a specific enterprise. The FDI is considered to be more stable than FII. FDI not only brings in capital but also helps in good governance practice and better management skills and even technology transfer.

29. A genetically engineered form of brinjal, known as the Bt-brinjal, has been developed. The objective of this is –

- (a) To make it pest-resistant
(b) To improve its taste and nutritive qualities.
(c) To make it drought-resistant
(d) To make its shelf-life longer

Ans. (a) : The Bt-brinjal has genetically modified strains to resist the pest bollworm and other pests, especially against the lepidopteran insects.

30. With reference to Aam Admi Bima Yojana Consider the following statements :

1. The member insured under the scheme must be the head of the family or an earning member of the family in a rural landless house-hold.
2. The member insured must be in the age group of 30 to 65 years.
3. There is a provision for free scholarship for up to two children of the insured who are studying between classes 9 and 12.

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

Ans. (c) : Aam Admi Bima Yojna (AABY) is a government of India social security scheme administered through Life Insurance Corporation of India (LIC) that provides death and disability cover to the head of the family between the age group of 18 to 59 years, under 48 identified vocational/occupational

groups/rural landless households. The scheme also provides an add-on-benefit wherein scholarship of Rs. 100 month per child is paid on a half-yearly basis to a maximum of two children per member, studying in 9th to 12th standard.

31. In the context of global oil prices, “Brent crude oil” is frequently referred to in the news. What does this term imply?

1. It is a major classification of crude oil.
2. It is sourced from North Sea.
3. It does not contain sulphur.

Which of the statements given above is/are correct?

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

Ans. (b): In the context of global oil prices, 'Brent crude oil' is often mentioned in the news. Brent crude oil is the largest of the major classification of crude oil. It is obtained from the North Sea. This includes Brent crude, Brent sweet, Light crude, Ecofisk and Oseberg. This oil is used for pricing about two-thirds of the world's international trade of crude oil.

32. The function of heavy water in a nuclear reactor is to –

- (a) Slow down the speed of neutrons.
(b) Increase the speed of neutrons.
(c) Cool down the reactor
(d) Stop the Nuclear reaction.

Ans. (a): The function of heavy water (D₂O) in a nuclear reactor is to reduce the speed of neutrons. Deuterium and tritium are isotopes of hydrogen (H₂). Heavy water is a compound of hydrogen, deuterium and oxygen. Its relative density is 101 and the freezing point is slightly higher than ordinary water. The Heavy Water Board, Mumbai, is responsible for the production of nuclear energy as well as for the supply of the required heavy water demand for research reactors.

33. In India, if a religious sect/ community is given the status of a national minority, what special advantages it is entitled to ?

1. It can establish and administer exclusive education institutions.
2. The President of India automatically nominates a representative of the community to Lok Sabha.
3. It can derive benefits from the Prime Minister's 15 Point Programme.

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

Ans. (c): Minority education has the power to reserve only up to 50% of seats for students belonging to its own community (Supreme Court Judgments on St. Stephens College Case, 1992, S.C.C. 550).

34. India is a home to lakhs of persons with disabilities. What are the benefits available to them under the law?

1. Free schooling till the age of 18 years in government-run schools.

2. Preferential allotment of land for setting up business.

3. Ramps in public buildings.

Which of the statements given above is/are correct?

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

Ans. (d) : All the above provisions are mentioned in the persons with Disabilities (equal opportunities, protection of rights and full participation) Act, 1995.

35. With what purpose is the Government of India promoting the concept of "Mega Food Parks"?

1. To provide good infrastructure facilities for the food processing industry.
2. To increase the processing of perishable items and reduce wastage.
3. To provide emerging and eco-friendly food processing technologies to entrepreneurs.

Select the correct answer using the codes given below.

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

Ans. (b): The Eleventh Five Year Plan (2007-12) was approved by the National Development Council on 19 December, 2007. The "Mega Food Park" scheme was launched by the Central Government in September, 2008 under the five-year plan. The major objectives of the schemes are— (i) To increase the processing of perishable materials from 6% to 20% and to reduce wastage. (ii) To provide innovative and eco-friendly food processing for entrepreneurs. (iii) To provide value-added supply chain from work to market with excellent adequate infrastructure facilities for the food processing industry.

36. The authorization for the withdrawal of funds from the Consolidated fund of India must come from –

- (a) The President of India
(b) The Parliament of India
(c) The Prime Minister of India
(d) The Union Finance Minister

Ans. (b) : Approval of the parliament of India is Mandatory to withdraw funds from the Consolidated Fund of India. The Consolidated Fund of India is the axis of parliamentary control regarding expenditure. It is a reservoir in which all the revenue received by the Government of India is deposited and all its borrowing will be paid through it. According to Article 266 (3), funds from consolidated fund of India will be spent according to law.

37. All revenues received by the Union Government by way of taxes and other receipts for the conduct of Government business are credited to the –

- (a) Contingency Fund of India
(b) Public Account
(c) Consolidated Fund of India
(d) Deposits and Advances Fund

Ans. (c): All revenues received by the Union Government by way of taxes and other receipts for the conduct of government business are credited to the consolidated fund of India. Consolidated Fund of India is the most important of all government accounts. This fund was constituted under Article 266 (1) of the Constitution of India. All revenues received by the government by way of direct taxes and indirect taxes, money borrowed as receipts from loans given to the government flow into the Consolidated Fund of India.

38. Microfinance is the provision of financial services to people of low-income groups. This includes both the consumers and the self-employed. The service/services rendered under micro-finance is/are:

1. Credit facilities
2. Saving facilities
3. Insurance facilities
4. Fund Transfer facilities

Select the correct answer using the codes given below the lists:

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

Ans. (d): Providing credit facilities to the rural poor, especially women, for carrying out income-generating activities without any collateral guarantee is called micro-financing. The services provided under micro-finance are credit facilities, saving facilities, insurance facilities and fund transfer facilities.

39. Southeast Asia has captivated the attention of global community over space and time as a geostrategically significant region. Which among the following is the most convincing explanation for this global perspective ?

- (a) It was the hot theatre during the Second World War.
(b) Its location is between the Asian Powers of China and India.
(c) It was the arena of superpower confrontation during the Cold War period.
(d) Its location between the Pacific and Indian oceans and its pre-eminent maritime character.

Ans. (d) : As a geostrategically important area, South-East Asia attracts the attention of the global community over a long period of time and is situated between the Pacific Ocean and the Indian Ocean and has an excellent pre-eminent maritime character.

40. A company marketing food products advertises that its items do not contain trans-fats. What does this campaign signify to the customers?

1. The food products are not made out of hydrogenated oils.
2. The food products are not made out of animal fats/oils.
3. The oils used are not likely to damage the cardiovascular health of the consumers.

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

Ans. (c) : If a company marketing food product advertises that its items do not contain trans fats, the company wishes to inform the customers that the food products are made out of animal fats/oils and hydrogenated oils. The oil used are also not likely to damage the cardiovascular health of the consumers. Hence, statement 1, and 3 is correct.

41. Among the following who are eligible to benefit from the "Mahatma Gandhi National Rural Employment Guarantee Act"?

- Adult members of only the scheduled caste and scheduled tribe households.
- Adult members of below poverty line (BPL) households.
- Adult members of households of all backward communities.
- Adult members of any household.

Ans. (d) : Mahatma Gandhi National Rural Employment Guarantee Act is an Indian Labour law and social security measure that aims to guarantee the 'right to work'. This Act was passed in September 2005. The MGNREGA was initiated with the objective of "enhancing livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year, to every household whose adult members volunteer to do unskilled manual work".

42. With reference to "Look East Policy" of India, consider the following statements :

- India wants to establish itself as an important regional player in the East Asian Affairs
- India Wants to plug the vacuum created by the termination of Cold War.
- India wants to restore the historical and cultural ties with its neighbours in Southeast and East Asia.

Which of the statements given above is/are correct?

- 1 only
- 1 and 3 only
- 3 only
- 1, 2 and 3

Ans. (b) : The main objective of the look east policy is economic integration with east and southeast Asia. Indian realized that it's East Asian neighbours achieved rapid economic growth and that it was lagging behind.

43. When the annual Union Budget is not passed by the Lok Sabha –

- the Budget is modified and presented again
- the Budget is referred to the Rajya Sabha for suggestions
- the union finance Minister is asked to resign
- the Prime Minister submits the resignation of Council of Ministers

Ans. (d) : When the Lok Sabha does not pass the Annual Union Budget, the Prime Minister submits the resignation of the Council of Ministers. If the budget is not passed under any condition in Parliament, then it can be understood that the ruling party is in the minority. Technically, it means the government has lost the confidence vote in the Lok Sabha and it has to resign. In Indian history, this has not happened so far.

44. Under the constitution of India, Which one of the following is not a fundamental duty?

- To vote in public elections
- To develop the scientific temper
- To safeguard public property
- To abide by the constitution and respect its ideals

Ans. (a) : Under the constitution of India, to vote in public elections is not a fundamental duty.

45. With reference to the Finance Commission of India, which of the following statements is correct?

- It encourages the inflow of foreign capital for infrastructure development.
- It facilitates the proper distribution of finances among the Public Sector Undertakings.
- It ensures transparency in financial administration.
- None of the statements (a), (b) and (c) given above is correct in this context.

Ans. (d): The President of India established the Finance Commission of India in 1951, under Article 280 of the Indian Constitution. It was formed with an objective to define the financial relations between the central government of India and the state governments. There have been fifteen finance commissions till date. The most recent was constituted in 2017 and is chaired by N.K. Singh.

46. Consider the following

- Right to education
- Right to equal access to public service
- Right to food

Which of the above is/are Human Right/ Human Rights under Universal Declaration of Human Rights?

- 1 only
- 1 and 2 only
- 3 only
- 1, 2 and 3

Ans. (d) : Right to Education (Article 26), Right to equal access to public service [Article 21] and Right to food [Article 25] comes under the Universal Declaration of Human Rights.

47. There is a concern over the increase in harmful algal blooms in the seawaters of India. What could be the causative factors for this phenomenon?

- Discharge of nutrients from the estuaries.
- Run-off from the land during the monsoon.
- Upwelling in the seas.

Select the correct answer from the codes given below :

- 1 only
- 1 and 2 only
- 2 and 3 only
- 1, 2 and 3

Ans. (d): Concern has been expressed over the increase in harmful algae bloom in India's seawater. The main reason for this is the discharge of nutrients from the estuaries, run-off from the land during the monsoon and upwelling in the seas.

48. Consider the following

- Photosynthesis
- Respiration

3. Decay of organic matter

4. Volcanic action

Which of the above add carbon dioxide to the carbon cycle on Earth?

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

Ans. (c) : Carbon dioxide is a colourless, odourless gas. Carbon dioxide in the atmosphere is found to be 0.03 percent as required. Its aqueous solution is acidic. At atmospheric pressure, it transforms into solid -state at 78°C temperature, which is called 'dry ice'. 'Dry ice' is used in refrigeration, respiration, weathering of biomaterials and volcanic activity adds carbon dioxide to the carbon cycle while photosynthesis, weathering of rocks etc., results in reduced carbon dioxide in the atmosphere.

49. Recently, the USA decided to support India's membership in multi-lateral export control regimes called the "Australia Group" and the "Wassenaar Arrangement". What is the difference between them?

1. The Australia Group is an informal arrangement which aims to allow exporting countries to minimize the risk of assisting chemical and biological weapons proliferation, whereas the Wassenaar Arrangement is a formal group under the OECD holding identical objectives.
2. The Australia group comprises predominantly of Asian, African and North American countries, whereas the member countries of Wassenaar Arrangement are predominantly from the European Union and American Continents.

Which of the statements given above is/ are correct?

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

Ans. (d): The Australia Group (AG) is an informal association that works on the basis of consensus. It aims to allow exporters or transshipment countries to minimize the risk of further proliferation of Chemical and Biological Weapons (CBW). There are not many Asian/African 'countries in the Australian group. There are 43 members, including India, in this group.

50. The surface of a lake is frozen in severe winter, but the water at its bottom is still liquid. What is the reason?

- (a) Ice is a bad conductor of heat
(b) Since the surface of the lake is at the same temperature as the air, no heat is lost.
(c) The density of water is maximum at 4°C.
(d) None of the statements (a), (b) and (c) given above is correct.

Ans. (c): The surface of a lake is frozen in severe winter but the water at its bottom is still liquid because the density of water is maximum at 4°C. The surface water freezes at 0°C, but due to the temperature of the water below the surface being 4°C, the upper glacial surface of the lake acts as an insulator and does not allow the heat present in the water to go out.

51. A sandy and saline area is the natural habitat of an Indian animal species. The animal has no predators in that area but its existence is threatened due to the destruction of its habitat.

Which one of the following could be that animal?

- (a) Indian wild buffalo (b) Indian wild ass
(c) Indian wild boar (d) Indian gazelle

Ans. (b) Sandy and saline regions are the natural habitats of an Indian animal species; such animal is an Indian wild Ass. Rann of Kutch is its natural habitat. There are no predators of that animal in this area, but due to the destruction of the habitat, its existence is in danger.

52. La Nina is suspected to have caused recent floods in Australia. How is La Nina different from El Nino?

1. La Nina is characterised by unusually cold ocean temperature in equatorial Indian Ocean whereas El Nino is characterised by unusually warm ocean temperature in the equatorial Pacific Ocean.
2. El Nino has adverse effect on south-west monsoon of India, but La Nina has no effect on monsoon climate.

Which of the statements given above is/are correct?

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

Ans. (d): La Nina is a cold current flowing across the west coast of South America. It is characterized by the low and high pressure prevailing in the Pacific Ocean. Low pressure in that region bring goods monsoon to the Indian subcontinent.

53. The tendency for increased Litigation was visible after the introduction of the land settlement system of Lord Cornwallis in 1793. The reason for this is normally traced to which of the following provisions?

- (a) Making Zamindar's position stronger vis-a-vis the ryot
(b) Making East India Company an overlord of Zamindars
(c) Making judicial system more efficient
(d) None of the (a), (b) and (c) above

Ans. (d) : The Permanent Settlement was an agreement between the East India Company and Bengali landlords to fix revenues to be raised from land. It was concluded in 1793 by the Company administration headed by Charles Earl Cornwallis. The other two systems prevalent in India were the Ryotwari system and the Mahalwari system. The correct option is (d)

54. Which one of the following observations is not true about the Quit India Movement of 1942?

- (a) It was a non-violent movement
(b) It was led by Mahatma Gandhi
(c) It was a spontaneous movement
(d) It did not attract the labour class in general

Ans. (b) : The Quit India Movement started on 9 August, 1942. Initially this movement was non-violent. Most of popular leaders were arrested and imprisoned, and movement became leaderless this movement led to the end of British Rule in India.

55. Which amongst the following provided a common factor for tribal insurrection in India in the 19th century?

- (a) Introduction of a new system of land revenue and taxation of tribal products.
- (b) Influence of foreign religious missionaries in tribal areas.
- (c) Rise of a large number of money lenders, traders and revenue farmers as middlemen in tribal areas.
- (d) The complete disruption of the old agrarian order of the tribal communities.

Ans. (d) : The main reason for the 19th Century tribal movement in India were as follows– (i) The government weakened their traditions by granting zamindar status to the chieftains of the tribes and by implementing the new method of rest. (ii) Infiltration of Christian missionaries by the government in tribal areas, (iii) Among the tribals, a group of Mahajan, Merchants and Revenue Collectors, who were in the role of middlemen, were brought, (iv) To tighten government control in forest areas, banned the use of the forest as fuel & livestock and ban on jhoom and fallow farming.

56. India maintained its early cultural contacts and trade links with Southeast Asia across the Bay of Bengal. For this pre-eminence of early maritime history of Bay of Bengal, which of the following could be the most convincing explanation/ explanations?

- (a) As compared to other countries, India had a better ship-building technology in ancient and medieval times.
- (b) The rulers of southern India always patronized traders, brahmin priests and buddhist monks in this context.
- (c) Monsoon winds across the Bay of bengals Facilitated sea voyages.
- (d) Both (a) and (b) are convincing explanations in this context.

Ans. (c): India had maintained its initial cultural contacts and trade relations with South-East Asia even beyond the Bay of Bengal. The main reason for this was the ease of sea voyages through the monsoon winds in the Bay of Bengal.

57. What is the difference between Bluetooth and Wi-Fi Devices?

- (a) Bluetooth uses 2.4 GHz radio frequency band, whereas Wi-Fi can use 2.4 GHz or 5 GHz frequency band.
- (b) Bluetooth is used for Wireless Local Area Networks (WLAN) only, whereas Wi-Fi is used for Wireless Wide Area Networks (WWAN) only.
- (c) When information is transmitted between two devices using Bluetooth technology, the devices have to be in a line of sight of each other, but when Wi-Fi technology is used the devices need not be in the line of sight of each other
- (d) The Statements (a) and (b) given above are correct in this context

Ans. (a): Bluetooth uses a radio frequency spectrum in the range of 2.402 GHz to 2.480 GHz and Wi-Fi is IEEE 802.11 standard rate based technology using 2.4 GHz, 35 GHz and 5 GHz frequency spectrum.

58. With reference to micro-irrigation , which of the following statements is/are correct ?

- 1. Fertilizer/nutrient loss can be reduced
- 2. It is the only means of irrigation in dry land farming
- 3. In some areas of farming, receding of ground water table can be checked

Select the correct answer using the codes given below :

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

Ans. (c): The Micro irrigation system is one of the excellent modern techniques of irrigation. This can reduce fertilizer/nutrient loss from the soil and prevent groundwater levels in some agricultural areas.

59. With reference to the period of colonial rule in India, ' Home Charges' formed an important part of drain of wealth from India. Which of the following funds constituted Home Charges?

- 1. Funds used to support the India Office in London
- 2. Funds used to pay salaries and pensions of British personnel engaged in India
- 3. Funds used for waging wars outside India by the British

Select the correct answer using the codes given below :

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

Ans. (b) : In India during the colonial rule, "Home Charges" was an important part of the exploitation of property in India. In Colonial India, Home Charges was the expenditure incurred by the secretary of state in England on behalf of India. This included the India office in London. Funds used for maintenance, salaries of English employees working in India and funds used for pension, etc., were included.

60. What was the reason for Mahatma Gandhi to organize a satyagraha on behalf of the peasants of Kheda?

- 1. The Administration did not suspend the land revenue collection in spite of a drought.
- 2. The Administration proposed to introduce Permanent Settlement in Gujarat.

Which of the statements given above is/are correct?

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

Ans. (a): At the beginning of 1917 and 1918, Gandhiji participated in three struggles i.e. of Champaran Satyagraha (Bihar), Ahmedabad and Kheda (Gujarat). Gandhiji came to know that the farmers of the Kheda district are in a lot of trouble. The crop is ruined, yet the government is recovering tax from them, the farmers demanded for tax exemption, but the government refused. This was the reason for Mahatma Gandhi to organize Satyagraha.

61. Biodiversity forms the basis for human existence in the following ways :

1. Soil formation
2. Prevention of soil erosion
3. Recycling of waste
4. Pollination of crops

Select the correct answer using the code given below :

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

Ans. (d): Biodiversity remains the basis of human existence through soil formation, soil erosion prevention, crop pollination and recycling of waste.

62. Aspartame is an artificial sweetener sold in the market. It consists of amino acids and provides calories like other amino acids. Yet it is used as a low-calorie sweetening agent in food items. What is the basis of this use ?

- (a) Aspartame is as sweet as table sugar, but unlike table sugar, it is not readily oxidized in human body due to lack of requisite enzymes.
(b) When aspartame is used in food processing, the sweet taste remains, but it becomes resistant to oxidation.
(c) Aspartame is as sweet as sugar, but after ingestion into the body, it is converted into metabolites that yield no calories
(d) Aspartame is several times sweeter than table sugar, hence food items made with small quantities of aspartame yield fewer calories on oxidation.

Ans. (d) : Aspartame is an artificial sweetener sold in the market. It is many times sweeter than normal sugar or sucrose. Therefore, a very small amount of aspartame is sufficient to produce a sweet taste. Therefore, its calorie fraction is negligible.

63. What was the purpose with which Sir William Wedderburn and W.S. Caine had set up the Indian Parliamentary Committee in 1893 ?

- (a) To agitate for Indian political reforms in the House of Commons
(b) To campaign for the entry of Indians into the Imperial Judiciary
(c) To facilitate a discussion on India's Independence in the British Parliament
(d) To agitate for the entry of eminent Indians into the British Parliament .

Ans. (a): In 1893, the Indian Parliamentary Committee was setup by Sir William Wedderburn and WS Caine to organize an agitation in the House of Commons for political reforms in India.

64. What is the difference between a CFL and an LED lamp?

1. To produce light, a CFL uses mercury vapour and phosphor while an LED lamp uses semi-conductor material.

2. The average life span of a CFL is much longer than that of an LED lamps.
3. A CFL is less energy-efficient as compared to an LED lamp.

Which of the statements given above is/are correct?

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

Ans. (c): Ultraviolet light is generated in CFLs by passing electricity from mercury vapour, which is absorbed by the phosphor coating inside the lamp. LED lamps use traditional semiconductor light-emitting diodes, organic LED or polymer LED technology. CFLs have an average life span of 6000 to 15000 hours, while LED lamps can generally last 25-30 years.

65. Recently, 'oilzapper' was in the news. What is it?

- (a) It is an eco-friendly technology for the remediation of oily sludge and oil spills
(b) It is the latest technology developed for under sea oil exploration
(c) It is a genetically engineered high biofuel yielding maize variety
(d) It is the latest technology to control the accidentally caused flames oil wells.

Ans. (a) : Recently, 'oilzapper' was in the news. It is an ecologically developed technology for the treatment of oily punk and scattered oil. It has been developed by 'The Energy and Research Institute (TERI).

66. A married couple adopted a male child. A few years later, twin boys were born to them. The blood group of the couple is AB positive and O negative. The blood group of the three sons is A positive, B positive, and O positive. The blood group of the adopted son is –

- (a) O positive
(b) A positive
(c) B positive
(d) Cannot be determined on the basis of the given data.

Ans. (a): The blood group of the parents are AB and O; the child's blood group may be A or B and since the body is adopted and it is given in the question that "the blood group of the three sons are A⁺, B⁺, O⁺". The correct answer is O⁺.

67. Mahatma Gandhi said that some of his deepest convictions were reflected in a book titled, "Unto this last" and the book transformed his life. What was the message from the book that transformed Mahatma Gandhi?

- (a) Uplifting the oppressed and poor is the moral responsibility of an educated man.
(b) The good of an individual is contained in the good of all
(c) The life of celibacy and spiritual pursuit are essential for a noble life.

- (d) All the statements (a), (b) and (c) are correct in this context.

Ans. (b) : Mahatma Gandhi had read John Ruskin's book 'Unto this Last' during his stay in Africa. This book changed Gandhiji's life. The message in this book that changed the life of Gandhi was that the welfare of the individual lies in the welfare of all.

68. With reference to Indian freedom struggle, Usha Mehta is well-known for –

- (a) Running the secret Congress Radio in the wake of Quit India Movement
- (b) Participating in the Second Round table Conference
- (c) Leading a contingent of Indian National Army
- (d) Assisting in the formation of Interim Government under Pandit Jawaharlal Nehru

Ans. (a) : Quit India movement started on 9 August, 1942; during this movement, secret radio was broadcast by the Congress in many areas of Mumbai. While Dr. Ram Manohar Lohia used to broadcast on this radio, Usha Mehta was a member of a small organization operating underground radio.

69. A new optical disc format known as the Blu-ray Disc (BD) is becoming popular. In what way is it different from the traditional DVD ?

- 1. DVD supports Standard Definition video while BD supports High Definition video.
- 2. Compared to a DVD, the BD format has several times more storage capacity.
- 3. Thickness of BD is 2.4mm while that of DVD is 1.2 mm.

Which of the statements given above is/are correct?

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

Ans. (b) : The Blu-ray disc is the next-generation optical disc dedicated to high definition video. DVD discs can store a maximum of 4.7 GB of data and a single-layer Blu-ray disc can store 25 GB of data on an average.

70. With reference to the period of Indian freedom struggle, which of the following was/were recommended by the Nehru report ?

- 1. Complete Independence for India.
- 2. Joint electorates for reservation of seats for minorities .
- 3. Provision of fundamental rights for the people of Indian in the Constitution.

Select the correct answer using the codes given below:

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

Ans. (b): On 11 May, 1928, at the Second All Party Conference in Mumbai, a seven-member committee was set up under the chairmanship of Pt. Motilal Nehru to determine the principles of the Constitution of India.

The recommendation made in the report were as follows–

- (i) Dominion status to India.
- (ii) India will be a union under whose control there will be a bicameral legislature at the centre, the cabinet will be responsible to the house.
- (iii) The position of Governor- General shall be that of a constitutional head.
- (iv) The demand for a separate electorate on the communal ground was rejected.
- (v) Fundamental rights are defined by defining citizenship.

71. Among the following State, which one has the most suitable climatic conditions for the cultivation of a large variety of orchids with minimum cost of production, and can develop and export oriented industry in this field ?

- (a) Andhra Pradesh
- (b) Arunachal Pradesh
- (c) Madhya Pradesh
- (d) Uttar Pradesh

Ans. (b) : The state of Arunachal Pradesh has the best climatic conditions, which can lead to the cultivation of various varieties of orchids and export-oriented industries can be developed here. Arunachal Pradesh is emerging as a major tourist region in north-eastern India. It is considered to be a treasure of nature and home to a variety of orchids.

72. Which one of the following is not a site for in-situ method of conservation of flora?

- (a) Biosphere Reserve
- (b) Botanical Garden
- (c) National Park
- (d) Wild life Sanctuary

Ans. (b): Botanical garden does not come under the in-situ method of conservation of flora, while the biosphere reserve, national park and wildlife sanctuary are included in it.

73. Consider the following statements :

In India, a Metropolitan Planning Committee –

- 1. is constituted under the provisions of the Constitution of India.
- 2. prepares the draft development plans for metropolitan area.
- 3. has the sole responsibility for implementing Government sponsored schemes in the metropolitan area.

Which of the statements given above is/are correct?

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

Ans. (a): Article 243 ZE of part IX-A of the constitution of India mandates the formation of Metropolitan Planning Committees (MPCs) Accordingly, in each metropolitan area, a Metropolitan Planning Committee will be set up to prepare a development plan for the entire metropolitan area.

74. What is the difference between “vote-on-account” and “interim budget”?

1. The provision of a “vote-on-account” is used by a regular Government, while an interim budget is a provision used by a caretaker Government.
2. A “vote-on-account” only deals with the expenditure in Government's budget while an “interim budget” includes both expenditure and receipts.

Which of the statements given above is/are correct?

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

Ans. (b) : Under Article 116 (a), Lok Sabha can grant an advance amount to the government by a passing grant of accounts, about which it is not possible for the government to give budget redress. It is related to the expenditure side of the budget of the government. The interim budget includes both expenditure and receipts and can be presented by the caretaker before the election and the regular government after the election.

75. Regarding the International Monetary Fund, Which one of the following statements is correct?

- (a) It can grant loans to any country
(b) It can grant loans to only developed countries
(c) It grants loans to only member countries
(d) It can grant loans to the central bank of a country

Ans. (c): The International Monetary Fund (IMF) is an international monetary organization. It was established on 27 December, 1945 in Washington (United States) as decided by the Bretton Woods Conference. It provides loans only to member countries thereby correcting their adverse balance of payments.

76. The 2004 Tsunami made people realize that mangroves can serve as a reliable safety hedge against coastal calamities. How do mangroves function as a safety hedge ?

- (a) The mangrove swamps separate the human settlements from the sea by a wide zone in which people neither live nor venture out.
(b) The mangroves provide both food and medicines which people are in need of after any natural disaster.
(c) The mangrove trees are tall with dense canopies and serve as an excellent shelter during a cyclone or tsunami
(d) The mangrove trees do not get uprooted by storms and tides because of their extensive roots

Ans. (d) : Mangrove forests stabilize the coastline reducing erosion from surf waves, current waves and tides. The intricate root system of mangroves also makes these forests attractive to fishes and other organisms seeking food and shelter from predators.

77. The Jain philosophy holds that the world is created and maintained by -

- (a) Universal law (b) Universal Truth
(c) Universal Faith (d) Universal Soul

Ans. (a) : Jain philosophy believes that the whole world is made up of two continual and independent elements called Jiva and Ajiva. Jiva is a "living substance" or sentient, while Ajiva is an "inanimate substance" or insentient. Here, Jiva means individual soul and not the universal soul. According to Jainism, souls are many and creatures live in every particle of the universe. Therefore, according to Jain philosophy, the creation and maintenance of the universe are done by Universal Law.

78. Salinization occurs when the irrigation water accumulated in the soil evaporates, leaving behind salts and minerals. What are the effects of salinization on the irrigated land ?

- (a) It greatly increases the crop production
(b) It makes some soils impermeable
(c) It raises the water table
(d) It fills the air spaces in the soil with water

Ans. (b): The saline of the soil is generated from the salt and minerals left behind due to evaporation of the irrigated water collected in the soil. Soil becomes inaccessible due to salinization on the irrigated land.

79. The “Red Data Books” published by the International Union for Conservation of Nature and Natural Resources (IUCN) contain lists of –

1. Endemic plant and animal species present in the biodiversity hotspots.
2. Threatened plant and animal species.
3. Protected sites for conservation of nature and natural resources in various countries.

Select the correct answer using the codes given below :

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

Ans. (b): The list of threatened plant and animal species are included in the "Red Data Book" published by the International Union for Conservation of Nature and Natural Resources (IUCN).

80. Why is the offering of “teaser loans” by commercial banks a cause of economic concern?

1. The teaser loans are considered to be an aspect of sub-prime lending and banks may be exposed to the risk of defaulters in future.
2. In India, the teaser loans are mostly given to inexperienced entrepreneurs to set up manufacturing or export units.

Which of the statements given above is/are correct?

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

Ans. (a): There are such Teaser loans offered by commercial banks that are offered to the borrower irrespective of the ability to choose the loan and other parameters. The rate of interest on such loans is attractively low in the initial years and increases in subsequent years.

81. An artificial satellite orbiting around the Earth does not fall down. This is so because the attraction of Earth—

- (a) does not exist at such distance.
- (b) is neutralized by the attraction of the moon.
- (c) provides the necessary speed for its steady motion.
- (d) provides the necessary acceleration for its motion.

Ans. (d) : We observe weightlessness in satellites because the net magnitude of the force on the body is almost zero. i.e. earth's gravitation is nullified in terms of magnitude by centrifugal force. But, earth's gravitation is necessary to change the direction of the satellite continuously and thus providing the acceleration in terms of change in direction.

82. In the context of Indian economy, consider the following statements.

1. The growth rate GDP has steadily increased in the last five years.
2. The growth rate in per capita income has steadily increased in the last five years.

Which of the statements given above is/are correct ?

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

Ans. (d): Except for the slowdown in the year 2008-09, the Indian economy has consistently grown and at incrementing rate.

83. In India, which of the following have the highest share in the disbursement of credit to agriculture and allied activities?

- (a) Commercial Banks
- (b) Cooperative Banks
- (c) Regional Rural Banks
- (d) Microfinance Institutions.

Ans. (a) : Commercial banks account for the largest share of expenditure in agriculture and allied sectors. Commercial banks provided direct loans of Rs. 140380 crore to the agricultural sector along with the regional rural banks in 2006-07, while the regional rural bank provided an annual loan of about Rs. 20440 crore.

84. Which of the following can aid in furthering the Government's objective of inclusive growth ?

1. Promoting Self-Help Groups
2. Promoting Micro, Small and Medium Enterprises
3. Implementing the Right to Education Act

Select the correct answer using the codes given below:

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

Ans. (d): Inclusive development is called development in which the people belonging to the most vulnerable section of the society get a fair share in the distraction

of national income generated at a high rate of economic growth, i.e., the leakage of national income is more downstream. Encouraging self-help groups, promoting micro, small and medium enterprises and implementing the Right to Education Act can be helpful to take forward the inclusive growth target of the government.

85. Why is the Government of India disinvesting its equity in the Central Public Sector Enterprises (CPSEs)

1. The Government intends to use the revenue earned from the disinvestment mainly to pay back the external debt.
2. The Government no longer intends to retain the management control of the CPSEs.

Which of the statements given above is/are correct?

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

Ans. (d): The Government of India is disinvesting its equity in Central Public Sector Enterprises (CPSEs). The proceeds from the disinvestment of public sector undertaking go to the 'National Investment Fund' set up in 2005, whose main objective is to invest in social development projects. The government share of citizens in public sector undertakings, better corporate governance and management control are the main points of government disinvestment.

86. What is the difference between asteroids and comets?

1. Asteroids are small rocky planetoids, while comets are formed of frozen gases held together by rocky and metallic material.
2. Asteroids are found mostly between the orbits of Jupiter and Mars, while comets are found mostly between Venus and Mercury.
3. Comets show a perceptible glowing tail, while asteroids do not.

Which of the statements given above is/are correct?

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

Ans. (b): The main difference between asteroids and comets lies mainly in their composition. Both were formed during the early phase of the solar system. Asteroids mainly consist of rocky and metallic material, while comets comprise ice, frozen gases, dust and rocky and metallic material. Asteroids are found nearer to the Sun, while comets are found farther from the Sun as the heat can melt any comets ice. In fact, when a comets approaches the Sun, it starts losing its ice because of the Sun's heat, as a result of which a perceptible glowing tail can be seen.

87. Economic growth is usually coupled with –

- (a) Deflation
- (b) Inflation
- (c) Stagflation
- (d) Hyperinflation

Ans. (b): Inflation or currency expansion is the state in which the value of a currency falls and prices rise. Economic outlook committees and controlled inflation are beneficial to the underdeveloped economy as it increases production.

88. The lowering of Bank Rate by the Reserve Bank of India leads to

- (a) More liquidity in the market
- (b) Less liquidity in the market
- (c) No change in the liquidity in the market
- (d) Mobilization of more deposits by commercial bank

Ans. (a) : The liquidity in the market increases as a result of the Reserve Bank of India reducing the bank rate. Bank rate cuts are intended to help reduce other interest rates that encourage lending from banks.

89. Westerlies in southern hemisphere are stronger and persistent than in northern hemisphere. Why?

1. Southern hemisphere has less landmass as compared to northern hemisphere.
2. Coriolis force is higher in southern hemisphere as compared to northern hemisphere.

Which of the statements given above is/are correct?

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

Ans. (a) : The higher speed and the greater persistence of the westerlies in the Southern Hemisphere are caused by the difference in the atmospheric pressure patterns as well as its variation from that of the Northern Hemisphere. The landmass in the southern hemisphere is comparatively less and average annual pressure decreases much more rapidly on the pole ward side of the high- pressure belt .Hence statement (a) is correct.

As far as Coriolis force is concerned, it is strongest in the polar regions and zero at the equator. At the intermediate level, it varies directly as the sine of the latitude.

90. Between India and East Asia, the navigation-time and distance can be greatly reduced by which of the following?

1. Deepening the Malacca straits between Malaysia and Indonesia.
2. Opening a new canal across the Kra isthmus between the Gulf of Siam and Andaman Sea.

Which of the statements given above is /are correct?

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

Ans. (b): Navigation time and distance between India and East Asia can be reduced by opening a new canal across the Kra isthmus between the Gulf of Siam and the Andaman Sea.

91. Regular intake of fresh fruits and vegetables is recommended in the diet since they are a good source of antioxidants. How do antioxidants help a person maintain health and promote longevity?

- (a) They activate the enzymes necessary for vitamins synthesis in the body and help prevent vitamin deficiency.

- (b) They prevent excessive oxidation of carbohydrates, fats and proteins in the body and help avoid unnecessary wastage of energy.
- (c) They neutralize the free radicals produced in the body during metabolism.
- (d) They activate certain genes in the cells of the body and help delay and ageing process.

Ans. (c) : It is desirable to take fresh fruits and vegetables in the diet regularly as they are good source of anti-oxidant element. Anti-oxidant elements are helpful in keeping a person healthy and maintain longevity as they neutralize the free radicals produced in the body as a byproduct of metabolism. Oxidation is a chemical reaction in which electrons transfer from a substance to an oxidizing agent. Oxidation reactions can initiate chain reactions that damage cells.

92. Regarding the Indus Valley Civilization, consider the following statements:

1. It was predominantly a secular civilization, and the religious element, though present, did not dominate the scene.
2. During this period, cotton was used for manufacturing textiles in India.

Which of the statements given above is/are correct?

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

Ans. (c): The religious outlook of the Indus Valley civilization was primarily idyllic and customary. In this civilization, there is evidence of worship of many animals, birds, vegetation, trees etc., along with the worship of the Mother Goddess and the male deity. The Indus Valley people knew the first knowledge of the method of growing cotton. The Greeks named it 'Sindon'.

93. The lower Gangetic plain is characterised by humid climate with high temperature throughout the year. Which one among the following pairs of crops is most suitable for this region ?

- (a) Paddy and Cotton
- (b) Wheat and Jute
- (c) Paddy and Jute
- (d) Wheat and Cotton

Ans. (c) : The most important feature of the lower gangetic plains is that the climate here remains humid with high temperatures throughout the year, making this area the most suitable for Paddy and Jute crops.

94. What could be the main reason/reasons for the formation of Africa and Eurasian desert belt ?

1. It is located in the sub-tropical high pressure cells.
2. It is under the influence of warm ocean currents.

Which of the statements given above is/are correct in this context?

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

Ans. (a): The distance from the reach of the trade winds, the location of the continent or the western edge of the site and the effect of cold currents is the main reason for the creation of the African and Eurasian desert region. Apart from this, the location in sub-tropical high-pressure cells is also an important reason.

95. The jet aircrafts fly very easily and smoothly in the lower stratosphere. What could be the appropriate explanation?

1. There are no clouds or water vapour in the lower stratosphere.
2. There are no vertical winds in the lower stratosphere

Which of the statements given above/is are correct in this context?

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

Ans. (c) : In the lower part of the stratosphere, jet, planes can fly very smoothly as it does not have seasonal incidents like thunderstorms, thunder clouds, lightning strikes, water vapour and dust. The stratosphere ranges from 18 to 32 km. The ideal condition of flying for aircraft and jet aircraft is found in this stratosphere.

96. Consider the following statements :

1. Biodiversity is normally greater in the lower latitudes as compared to the higher latitudes.
2. Along the mountain gradient, biodiversity is normally greater in lower altitudes as compared to the higher altitudes.

Which of the statements given above is/are correct?

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

Ans. (c) : In mountain regions, Biodiversity is generally higher in lower elevations than in higher altitudes and Biodiversity is generally higher in lower latitudes than in higher latitudes.

97. The Brahmaputras, Irrawady and Mekong rivers originate in Tibet and flow through narrow and parallel mountain ranges in their upper reaches. Of these rivers, Brahmaputra makes a “U” turn in its course to flow into India. This “U” turn is due to :

- (a) Uplift of folded Himalayan series
- (b) Syntaxial bending of geologically young Himalayas
- (c) Geo-tectonic disturbance in the tertiary folded mountain chains
- (d) Both (a) and (b)

Ans. (b): The Brahmaputra, Irrawaddy and Mekong rivers have their origins in Tibet. They flow through narrow and parallel mountain ranges. The Brahmaputra takes a U-turn before entering India; this U-turn is due to syntaxial bending of the geologically young Himalayas.

98. A state in India has the following characteristics :

1. Its northern part is arid and semiarid.
2. Its central part produces cotton.
3. Cultivation of cash crops is predominant over food crops.

Which one of the following states has all of the above characteristics?

- (a) Andhra Pradesh (b) Gujarat
(c) Karnataka (d) Tamil Nadu

Ans. (b): The northern part of the state of Gujarat is dry and semiarid. Cotton is grown in its Central region and here, cash or commercial crops are cultivated more than food crops. Its present existence (Gujarat) came on 1 May, 1960. It is situated on the west coast of India. The main crops grown here are Cotton and Groundnut.

99. What is “Virtual Private Network”.

- (a) It is a private computer network of an organization where the remote users can transmit encrypted information through the server of the organization.
- (b) It is a computer network across a public internet that provides users access to their organization's network while maintaining the security of the information transmitted.
- (c) It is a computer network in which users can access a shared pool of computing resources through a service provider.
- (d) None of the statements (a), (b), and (c) given above is correct description of Virtual Private Network

Ans. (b): A secure way to connect to a private Local Area Network (LAN) located at an organization's remote location is a virtual private network (VPN) in which the internet or an unsecured public network is used to exchange private information by encryption technology.

100. The “dharma” and “rita” depict a central idea of ancient Vedic civilization of India. In this context, consider the following statements:

1. Dharma was a conception of obligations and of the discharge of one's duties to oneself and to others.
2. Rita was the fundamental moral law governing the functioning of the universe and all it contained.

Which of the statements given above is/are correct?

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

Ans. (c): The Rigveda, whose reign was from 1500 BC to 1000 BC. The word ‘dharma’ relates to morality. The meaning of ‘Rita’ is the moral and material system of the world.

UNION PUBLIC SERVICE COMMISSION

Civil Services (Preliminary Exam) - 2012

GENERAL STUDIES : PAPER-I

Time : 2 hours

(Exam Date : 20.05.2012)

Maximum Number : 200

1. In the areas covered under the Panchayat (Extension to the Scheduled Areas) Act, 1996, what is the role/power of Gram Sabha?

1. Gram Sabha has the power to prevent alienation of land in the Scheduled Areas.
2. Gram Sabha has the ownership of minor forest produce.
3. Recommendation of Gram Sabha is required for granting prospecting licence or mining lease for any mineral in the 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

Ans. (b): As per the provisions of the Panchayats (Extensions to Scheduled Areas) Act, 1996, Gram Sabha has ownership of minor forest produce and stops the transfer of land in scheduled areas mining for any mineral in scheduled area. The recommendation of Gram Sabha is also necessary for grant of lease and prospecting license.

2. In the Parliament of India, the purpose of an adjournment motion is-

- (a) to allow a discussion on a definite matter of urgent public importance
- (b) to let opposition members collect information from the ministers
- (c) to allow a reduction of specific amount in demand for grant
- (d) to postpone the proceedings to check the inappropriate or violent behaviour on the part of some members

Ans. (a): The purpose of bringing an adjournment motion in the Indian Parliament is to debate a certain urgent issue of public importance. There are many meetings per day in a session that are separated by adjournment. By adjournment, the consideration of the working of the house is deferred for a specified period of time. It can also be of a period of a few hours, days or weeks.

3. How does National Biodiversity Authority (NBA) help in protecting the Indian agriculture ?

1. NBA checks the biopiracy and protects the indigenous and traditional genetic resources.
2. NBA directly monitors and supervises the scientific research on genetic modification of crop plants.
3. Application for Intellectual Property Rights related to genetic/biological resources cannot be made without the approval of NBA .

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

Ans. (c): An application for intellectual property right related to genetic/biological resources cannot be applied without the recommendation of the National Biodiversity Authority. This authority prohibits bio-theft and treats native and traditional genetic resources. The Genetic Engineering Appraisal Committee (GEAC) is responsible for approval of proposal relating of Genetically Engineered organisms and products into the environment including experimental field trials as per the provisions of rules 1998.

4. The National Green Tribunal Act, 2010 was enacted in consonance with which of the following provisions of the Constitution of India?

1. Right to healthy environment, construed as a part of Right to life under Article 21.
2. Provision of grants for raising the level of administration in the Scheduled Areas for the welfare of Scheduled Tribes under Article 275 (1).
3. Powers and functions of Gram Sabha as mentioned under Article 243 (A.)

Select the correct answer using the codes given below:

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

Ans. (a) : The National Green Tribunal Act, 2010 embraces the objective that the right to a healthy environment has been construed as a part of the right to life under Article 21 of the Constitution in the judicial pronouncement in India.

5. If National Water Mission is properly and completely implemented, how will it impact the country ?

1. Part of the water needs of urban areas will be met through recycling of waste water.
2. The water requirements of coastal cities with inadequate alternative sources of water will be met by adopting appropriate technologies that allow for the use of ocean water.
3. All the rivers of Himalayan origin will be linked to the rivers of peninsular India.
4. The expenses incurred by farmers for digging, bore-wells and for installing motors and pump-sets to draw groundwater will be completely reimbursed by the Government.

Select the correct answer using the codes given below:

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

Ans. (b): If National Water Mission is properly and completely implemented, then the part of the water needs of urban areas will be met through recycling of waste

water. The water requirements of coastal cities with inadequate alternative sources of water will be met by adopting appropriate technologies that allow for the use of ocean water.

6. Consider the following provisions under the Directive Principles of State Policy as enshrined in the Constitution of India :

1. Securing for citizens of India a uniform civil code.
2. Organizing village Panchayats.
3. Promoting cottage industries in rural areas.
4. Securing for all the workers reasonable leisure and cultural opportunities.

Which of the above are the Gandhian Principles that are reflected in the Directive Principles of State Policy?

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

Ans. (b): Gandhian ideology is reflected in many provisions of the directive principles of state policy. Article 40 of the Indian Constitution describes the 'Organisation of village panchayats'. Article 43 describes the promotion of cottage industries and uniform civil code comes under the article 44. Securing a uniform civil code for Indian citizens (art. 44) and liberal ideology and securing proper leisure and cultural opportunities for all workers comes under socialist ideology.

7. Consider the following statements :

1. Union Territories are not represented in the Rajya Sabha.
2. It is within the purview of the Chief Election Commissioner to adjudicate the election disputes.
3. According to the Constitution of India, the Parliament consists of the Lok Sabha and the Rajya Sabha only.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 and 3
(c) 1 and 3 (d) None

Ans. (d): None of the above statements is correct: (i) Union Territories (Delhi and Puducherry) are represented in the Rajya Sabha. (ii) It is not within the purview of the Chief Election Commissioner to adjudicate election disputes. It is the Supreme Court and High Court which look into the disputes. (iii) According to the art. 79 of the Constitution of India, the Parliament consists of the Lok Sabha, the Rajya Sabha and the President of India.

8. With reference to consumers rights/privileges under the provisions of law in India, which of the following statements is/are correct ?

1. Consumers are empowered to take samples for food testing.
2. When a consumer files a complaint in any consumer forum, no fee is required to be paid.
3. In case of death of a consumer, his /her legal heir can file a complaint in the consumer forum on his/her behalf.

Select the correct answer using the codes given below:

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

Ans. (c) : The Consumer Protection Act, 1986 was passed by the Government of India in the year 1986 for the protection of the interests of consumers. Under its provisions, consumers have the right to take samples for testing the food. If a disturbance is found, the Consumer can file his complaint in the consumer forum. If the litigant consumer dies during the litigation, then his legal heir can file his complaint in the consumer forum on his/her behalf.

9. Regarding the office of the Lok Sabha Speaker, consider the following statements :

1. He/She holds the office during the pleasure of the President
2. He/She need not be a member of the House at the time of his/her election but has to become a member of the House within six months from the date of his/her election.
3. If/he/she intends to resign, the letter of his/her resignation has to be addressed to the Deputy Speaker.

Which of the statements given above is/are correct?

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

Ans. (b): Statements (1) and (2) are not correct. On the dissolution of the Lok Sabha, although the Speaker ceases to be a member of the House, he/she does not vacate his/her office. The Speaker may, at any time, resign from office by writing under his/her hand to the Deputy Speaker.

10. Which of the following are included in the original jurisdiction of the Supreme Court ?

1. A dispute between the Government of India and one or more States
2. A dispute regarding elections to either House of the Parliament or that of Legislature of a State
3. A dispute between the Government of India and a Union Territory
4. A dispute between two or more States

Select the correct answer using the code given below:

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

Ans. (c): Original jurisdiction of the supreme Court is defined under Article 131 of the India constitution. It refers to cases that can be directly filed in the supreme Court, without going through lower courts.

Under Article 131, the Supreme Court has original jurisdiction in any dispute:

- Between the Government of India and one or more states
- Between two or more States

Hence, Statement 1 and 4 are correct.

11. Consider the following kinds of organisms :

1. Bacteria
2. Fungi
3. Flowering plants

Some species of which of the above kinds of organisms are employed as biopesticides ?

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

Ans. (d): A fungal biopesticide formulation has been developed by a faculty member of the department of Biotechnology at Gitam University and the test results held at different districts showed that it could control several pests affecting chilli, paddy and vegetable crops.

12. Biomass gasification is considered to be one of the sustainable solutions to the power crisis in India. In this context, which of the following statements is/are correct ?

1. Coconut shells, groundnut shells and rice husk can be used in biomass gasification .
2. The combustible gases generated from biomass gasification consist of hydrogen and carbon dioxide only.
3. The combustible gases generated from biomass gasification can be used for direct heat generation but not in internal combustion engines.

Select the correct answer using the codes given below:

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

Ans. (a): Biomass gasification is considered one of the sustainable solutions to the energy crisis. In this context, coconut shell, peanut peel and paddy husk are used for biomass gasification.

13. What is the role of ultraviolet (UV) radiation in the water purification systems?

1. It inactivates/kills the harmful microorganisms in water.
2. It removes all the undesirable odours from the water.
3. It quickens the sedimentation of solid particles, removes turbidity and improves the clarity of water.

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

Ans. (a) : Ultraviolet radiation in water purification neutralizes/destroys harmful micro-organism present in water. Certain gases located in the atmosphere (i.e. Ozone) are allowed to come to the ground only after filtering the earth radiation waves. The gases are present the ultraviolet radiation of the Sun in the middle and protect the surface from overheating.

14. Graphene is frequently in news recently. What is its importance?

1. It is a two-dimensional material and has good electrical conductivity.
2. It is one of the thinnest but strongest materials tested so far.
3. It is entirely made of silicon and has high optical transparency.
4. It can be used as 'conducting electrodes' required for touch screens, LCDs and organic LEDs.

Which of the statements given above are correct?

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

Ans. (c): "Graphene" is a two-dimensional material and has good electrical conductivity. It is one of the thinnest but strongest materials tested so far. It can be used for conducting electrodes required for touch screens, LCDs and organic LEDs.

15. Lead, ingested or inhaled is a health hazard. After the addition of lead to petrol has been banned, what still are the sources of lead poisoning?

1. Smelting units
2. Pens and pencils
3. Paints
4. Hair oils and cosmetics

Select the correct answer using the codes given below :

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

Ans. (b): Among the options in questions are sources of lead poisoning are smelting units and paints. The amount of lead found in paint used for painting in homes is fatal to human health. The welding/smelting units of zinc and copper release lead into the atmosphere.

16. With reference to 'stem cells', frequently in the news, which of the following statements is / are correct?

1. Stem cells can be derived from mammals only.
2. Stem cells can be used for screening new drugs.
3. Stem cells can be used for medical therapies.

Select the correct answer using the codes given below :

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

Ans. (b): 'Stem cells', often in the spotlight can be used to test new drugs. In addition, they can also be used for medical therapy. It can independently perform such actions as nutrition, respiratory enhancement, reproduction and self-regulation.

17. Consider the following statements :

Chlorofluorocarbons, known as ozone-depleting substances, are used-

1. in the production of plastic foams.
2. in the production of tubeless tyres.
3. in cleaning certain electronic components.
4. as pressurizing, agents in aerosol cans.

Which of the statements given above is /are correct?

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

Ans. (c): Chlorofluorocarbons, popularly known as ozone depleting substances are used to clean certain electronic components. Aerosol is used as a compressive agent in cars and also in the manufacture of solvable foam. CFCs are simple compounds of chlorine, fluorine and carbon.

18. A team of scientists at Brookhaven National laboratory including those from India created the heaviest anti-matter (anti-helium nucleus).

What is/are the implication/implications of the creation of anti-matter ?

1. It will make mineral prospecting and oil exploration easier and cheaper.
2. It will help probe the possibility of the existence of stars and galaxies made of anti matter.
3. It will help understand the evolution of the universe.

Select the correct answer using the codes given below :

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

Ans. (b): The scientific team of the Brookhaven National Laboratory, which also included Indian scientists, produced the heaviest anti-matter in the form of anti-helium. This will be helpful in checking the possibility of stars or galaxies formed from anti-matter and it will also be helpful in developing an understanding of the universe.

19. Which of the following is /are cited by the scientists as evidence/evidences for the continued expansion of universe ?

1. Detection of microwaves in space.
2. Observation of red shift phenomenon in space.
3. Movement of asteroids in space.
4. Occurrence of supernova explosions in space.

Select the correct answer using the codes given below:

- (a) 1 and 2
(b) 2 only
(c) 1, 3 and 4
(d) None of the above can be cited as evidence

Ans. (a): Scientists cite the observation of a red shift phenomenon in space and the presence of microscopic waves in space as evidence of the continued expansion of the universe. In addition, supernova explosions in space and the movement of asteroids etc. are not used as an extension of the universe.

20. Electrically charged particles from space travelling at speeds of several hundred km/sec can severely harm living beings if they reach the surface of the Earth .What prevents them from reaching the surface of the Earth ?

- (a) The Earth's magnetic field diverts them towards its poles.
- (b) Ozone layer around the Earth reflects them back to outer space.
- (c) Moisture in the upper layers of atmosphere prevents them from reaching the surface of the Earth.
- (d) None of the statements (a), (b) and (c) given above is correct.

Ans. (a) : Electric charge particles travelling at a speed of several hundred km/sec in space cannot reach the surface of the earth because the Earth's magnetic force turns them towards the pole.

21. With reference to the scientific progress of ancient India, which of the statements given below are correct?

1. Different kinds of specialized surgical instruments were in common use by 1st century AD.
2. Transplant of internal organs in the human body had begun by the beginning of 3rd century AD.
3. The concept of sine of an angle was known in 5th century AD.
4. The concept of cyclic quadrilaterals was known in 7th century AD.

Select the correct answer using the codes given below :

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

Ans. (c): There was significant progress in India in ancient times. Various sources suggest that by the first century AD, a variety of surgical instruments were in use, but organ transplantation was not possible until the third century AD. By the 5th century AD, in the area of mathematics in the Gupta period, the principles of sine, cosine and inverse sine were known in India. They are mentioned in 'Surya Siddhanta' and 'Aryabhatiya'. In the seventh century CE, the theory of the cyclic quadrilateral was known by Brahmagupta.

22. With reference to the history of ancient India, which of the following was/were common to both Buddhism and Jainism?

1. Avoidance of extremities of penance and enjoyment.
2. Indifference to the authority of the Vedas.
3. Denial of efficacy of rituals.

Select the correct answer using the codes given below:

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

Ans. (b): The avoidance of excess asceticism and indulgence and following the middle path is found only in Buddhism. While ideologies such as disobedience to the authenticity of the Vedas, prohibitions of the virtue of rituals and prohibitions of violence of beings, etc., are found in both Buddhism and Jaina religions alike.

23. Which of the following can be said to be essentially the parts of 'Inclusive Governance' ?

1. Permitting the Non-Banking Financial Companies to do banking.
2. Establishing effective District planning Committees in all the districts.
3. Increasing the government spending on public health.
4. Strengthening the Mid-day Meal Scheme.

Select the correct answer using the codes given below:

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

Ans. (c): Inclusive governance refers to a regime in which the people belonging to the most vulnerable section of society get a fair share in the distribution of national income generated at a high economic growth rate. From this perspective, empowering the 'mid-day meal' scheme, increasing government expenditure on

public health, setting up effective district planning committees in all districts will be called part of inclusive governance. Permitting the non-banking financial companies to do banking is not the essential part of the 'Inclusive Governance'.

- 24. The Nagara, the Dravida and the Vesara are the**
- three main racial groups of the Indian subcontinent.
 - three main linguistic divisions into which the languages of India can be classified.
 - three main styles of Indian temple architecture.
 - three main musical Gharanas prevalent in India.

Ans. (c) : Ancient Indian temples are classified into three broad types. This classification is based on different architectural styles employed in the construction of these temples. The three types are Nagara, Vesara and Dravida. Nagara style temples are found in Northern India, Vesara style temples in the region between Vindhyas and the river Krishna and Dravida style temples are found between Godavari and Krishna rivers.

- 25. The Congress ministries resigned in the seven provinces in 1939, because-**
- The congress could not form ministries in the other four provinces.
 - Emergence of a 'left wing' in the Congress made the working of the ministries impossible.
 - There were widespread communal disturbances in their provinces.
 - None of the statements (a), (b) and (c) given above is correct.

Ans. (d) : Option (d) is correct in the given alternatives. The Congress ministers resigned in October 1939, in protest against Viceroy Lord Linlithgow's action of declaring India to be a belligerent in the Second World War (started in September 1939) without consulting the Indian people.

- 26. With reference to National Rural Health Mission, which of the following are the jobs of 'ASHA', trained community health worker ?**
- Accompanying women to the health facility for antenatal care checkup.
 - Using pregnancy test kits for early detection of pregnancy.
 - Providing information on nutrition and immunization.
 - Conducting the delivery of baby.

Select the correct answer using the codes given below :

- 1, 2 and 3 only
- 2 and 4 only
- 1 and 3 only
- 1, 2, 3 and 4

Ans. (a): One of the key components of the National Rural Health Mission is to provide every village in the country with a trained female community health activist, 'ASHA' or Accredited Social Health Activist. They are selected from the village itself and accountable to it, the ASHA will be trained to work as an interface between the community and the public health system.

- 27. Which of the following is/are the principal feature (s) of the Government of India Act, 1919?**

- Introduction of diarchy in the executive government of the provinces.
- Introduction of separate communal electorates for Muslims.
- Devolution of legislative authority by the centre to the provinces.

Select the correct answer using the codes given below:

- 1 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Ans. (c) The Act provided a dual form of government (dyarchy) for the major provinces. In each such province, control of some areas of government, (the "transferred list"), were given to a Government of ministers answerable to the Provincial Council. The transferred list included agriculture, supervision of the local government, health and education.

All other areas of government (reserved list) remained under the control of the Viceroy. The 'Reserved List' included defence, foreign affairs and communications.

- 28. During Indian freedom struggle, the National Social Conference was formed. What was the reason for its formation?**

- Different social reform groups or organizations of Bengal region united to form a single body to discuss the issues of larger interest and to prepare appropriate petitions/representations to the government.
- Indian National Congress did not want to include social reforms in its deliberations and decided to form a separate body for such a purpose.
- Behramji Malabar and M.G. Ranade decided to bring together all the social reform groups of the country under one organization.
- None of the statements (a), (b) and (c) given above is correct in this context.

Ans. (b) : The National Social Conference was formed in the year 1887. The main reason for its formation was that the Indian National Congress did not want to put social programs in its programs in the initial phase, so it suggested to form a separate organization for the purpose presented.

- 29. Which of the following parties were established by Dr. B.R. Ambedkar?**

- The Peasants and Workers Party of India.
- All India Scheduled Castes Federation.
- The Independent Labour Party.

Select the correct answer using the codes given below:

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Ans. (b): B.R. Ambedkar formed the Scheduled Caste Federation in 1942 as an All-India Party. The Independent Labour Party was also founded by B.R. Ambedkar in 1936. The peasants and workers party of India (Bharatiya Kisan Mazdoor Dal) was founded in Maharastra in 1948 by members Nana Patil, Datta Deshmukh, Keshavrao Jedhe, Madhavrao Bagal, etc.

30. Which of the following special powers have been conferred on the Rajya Sabha by the Constitution of India ?

- To change the existing territory of a State and to change the name of a State.
- To pass a resolution empowering the Parliament to make laws in the State List and to create one or more All India Services.
- To amend the election procedure of the President and to determine the pension of the President after his/her retirement.
- To determine the functions of the Election Commission and to determine the number of Election Commissioners .

Ans. (b): The privileges conferred on the Rajya Sabha by the Constitution of India are passing of a resolution to make rules in the State List and empower Article 312 of the Constitutions to create one or more All-India Services.

31. How does the National Rural Livelihood Mission seek to improve livelihood options of rural poor ?

- By setting up a large number of new manufacturing industries and agribusiness centers in rural areas.
- By strengthening 'self-help groups' and providing skill development.
- By supplying seeds, fertilizers, diesel pumps sets and micro-irrigation equipment free of cost to farmers.

Select the correct answer using the codes given below:

- 1 and 2 only
- 2 only
- 1 and 3 only
- 1, 2 and 3

Ans. (b): The National Rural Livelihood Mission is an attempt to improve the livelihood options of the rural regional poor. The Central Government launched the National Rural Livelihood Mission (NRLM) in June 2011. This mission, launched for strengthening self-help groups in rural areas and for the prevention of poverty of the poor through them, started in the Banswara district of Rajasthan. Under this mission, the government plans to provide self-help groups at the village level as federations and provide them with a suitable base of better livelihood by providing them with profitable self-employment opportunities.

32. The Multi-dimensional Poverty Index developed by Oxford Poverty and Human Development Initiative with UNDP support covers which of the following ?

- Deprivation of education, health, assets and services at household level.
- Purchasing power parity at national level.
- Extent of budget deficit and GDP growth rate at national level.

Select the correct answer using the codes given below :

- 1 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Ans. (a) : The Multidimensional Poverty Index (MPI) based its estimation on education (years of schooling and attendance in schools), health (child mortality and

nutrition) and standard of living (electricity, sanitization, drinking water, flooring of the house, cooking fuel and asset ownership). Equal weightage is assignments to the three lead factors such that weightage is proportionately split among the sub- factors.

33. Which of the following is/are among the noticeable features of the recommendations of the Thirteenth Finance Commission?

- A design for the Goods and Service Tax, and a compensation package linked to adherence to the proposed design.
- A design for the creation of lakhs of jobs in the next ten years in consonance with India's demographic dividend.
- Devolution of a specified share of central taxes to local bodies as grants.

Select the correct answer using the codes given below:

- 1 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Ans. (c): The 13th Finance Commission report has an elaborate design for the GST. Statement (1) is correct while Statement (2) is incorrect. The report basically discusses the improved implementation of the existing schemes. The statement (3) is correct. The report in its para 10.144 mentions: "Taking into account the demand of local bodies that they be allowed to benefit from the buoyancy of central taxes and the constitutional design of supplementing the resources of Panchayats and Municipalities through grant-in-aid, we recommend that local bodies be transferred a percentage of the divisible pool of taxes (over and above the share of the states) as stipulated by as, after converting this share to grant-in-aid under article 275".

34. What is /are the recent policy initiatives(s) of Government of India to promote the growth of manufacturing sector ?

- Setting up of National Investment and Manufacturing Zones.
- Providing the benefit of 'single window clearance'.
- Establishing the Technology Acquisition and Development Fund.

Select the correct answer using the codes given below :

- 1 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Ans. (d) : To encourage the development of the manufacturing sector, the Government of India has taken the initiative to establish national investment and manufacturing sectors, facilitate single-window clearance and establishment of Technology Acquisition and Development Fund.

35. Which of the following are the methods of Parliamentary control over public finance in India?

- Placing Annual Financial Statement before the Parliament.
- Withdrawal of money from Consolidated Fund of India only after passing the Appropriation Bill.
- Provisions of supplementary grants and vote-on-account.

4. A periodic or at least a mid-year review of programme of the Government against macroeconomic forecasts and expenditure by a Parliamentary Budget Office.
5. Introducing Finance Bill in the Parliament.

Select the correct answer using the codes given below:

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

Ans. (a): Parliament exercises the following types of control over the expenditure by placing annual financial statement before the parliament under Article 112. Under Article 114, it is given that no money can be withdrawn from the Consolidated Fund of India without passing Appropriation Bills.

36. Mahatma Gandhi undertook fast unto death in 1932, mainly because-

- (a) Round Table Conference failed to satisfy Indian political aspirations.
(b) Congress and Muslim League had differences of opinion.
(c) Ramsay Macdonald announced the Communal Award.
(d) None of the statements (a), (b) and (c) given above is correct in this context.

Ans. (c): On 17th August 1932, Ramsay MacDonald had announced his communal award, reserving seats for the "Depressed Classes" as well as Muslims and Sikhs. On the very next day, Gandhi wrote to MacDonald- "I have to resist your decision with my life". He declared fast unto death against the Communal Award.

37. With reference of Ryotwari Settlement, consider the following statements :

1. The rent was paid directly by the peasants to the Government.
2. The Government gave Pattas to the Ryots.
3. The lands were surveyed and assessed before being taxed.

Which of the statements given above is/are correct?

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

Ans. (c) : Under the Ryotwari system, every registered holder of land was recognized as its proprietor and paid directly to the government. The registered agreement called Pattas were given to the Ryots to recognize their ownership rights. The lands were surveyed and assessed before being taxed.

38. Consider the following specific stages of demographic transition associated with economic development :

1. Low birthrate with low death rate.
2. High birthrate with high death rate.
3. High birthrate with low death rate.

Select the correct order of the above stages using the codes given below :

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

Ans. (c): The theory of the demographic transition of economic development was conceived by W.S. Thomson in the year 1929, but it was given the

scientific form by Frank W Notestein in the year 1945. Specific stages of demographic transition related to economic development are as follows–

- High birth rate with high death rate.
-High birth rate with low death rate.
-Low birth rate with low death rate.

39. In India, in the overall Index of Industrial Production, the Indices of Eight Core Industries have a combined weight of 37.90%. Which of the following are among those Eight Core Industries?

1. Cement 2. Fertilizers
3. Natural gas 4. Refinery products
5. Textiles

Select the correct answer using the codes given below:

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

Ans. (c): Currently, the Eight Core Industries comprise 40.27 (37.90% at that time) percent of the weight of items included in the Index of Industrial Production (IIP). The eight core industries include coal, crude oil, steel, electricity, cement, fertilizer, natural gas and refinery products.

40. Which of the following provisions of the Constitution of India have a bearing on Education?

1. Directive Principles of State Policy
2. Rural and Urban Local Bodies
3. Fifth Schedule
4. Sixth Schedule
5. Seventh Schedule

Select the correct answer using the codes given below:

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

Ans. (d): Given all statement is correct Hence option (d) is correct answer.

- Directive Principles of State Policy
Rural and Urban Local Bodies
Fifth Schedule
Sixth Schedule
Seventh Schedule

According to the Directive Principles of State Policy, Article 41 provides right to education. The 86th Constitutional Amendment 2002 of article 45 states that the state shall endeavour to provide early childhood care and education for all children until they complete the age of six years. In addition, rural and urban local bodies and the seventh schedule (concurrent) have an impact on education.

41. Government of India encourages the cultivation of 'sea buckthorn'. What is the importance of this plant ?

1. It helps in controlling soil erosion and in preventing desertification.
2. It is a rich source of biodiesel.
3. It has nutritional value and is well-adapted to live in cold areas of high altitudes.
4. Its timber is of great commercial value.

Which of the statements given above is/are correct ?

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

Ans. (c) : The Indian government is encouraging 'Sea buckthorn' farming. The farming of this plant is helpful in controlling soil erosion and prevents desertification and has nutritional value and is well adapted to survive in high altitude cold areas.

42. Which of the following is the chief characteristic of 'mixed farming'?

- (a) Cultivation of both cash crops and food crops.
(b) Cultivation of two or more crops in the same field.
(c) Rearing of animals and cultivation of crops together.
(d) None of the above.

Ans. (c): The major feature of 'mixed farming' is that animal husbandry and cultivation of crops are carried out simultaneously.

43. A particular State in India has the following characteristics:

1. It is located on the same latitude which passes through northern Rajasthan.
2. It has over 80% of its area under forest cover.
3. Over 12% of forest cover constitutes Protected Area Network in this State.

Which one among the following States has all the above characteristics?

- (a) Arunachal Pradesh (b) Assam
(c) Himachal Pradesh (d) Uttarakhand

Ans. (a): Arunachal Pradesh is located on the same latitude which passes through northern Rajasthan. More than 12% of the forested area is in the form of a protected area network of this state and more than 80% area of this state comes under forest cover.

44. Consider the following crops of India:

1. Cowpea
2. Green gram
3. Pigeon pea

Which of the above is /are used as pulse, fodder and green manure?

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

Ans. (a): Green Manure Crops or legumes like cowpea, horse gram and green gram improves precipitation- use efficiency during off- season. Cow - pea is Lobia. Lobia as green manure puts in nitrogen, builds organic matter, smothers weeds and controls nematodes.

45. Consider the following factors :

1. Rotation of the Earth
2. Air pressure and wind
3. Density of ocean water
4. Revolution of the Earth

Which of the above factors influence the ocean currents?

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

Ans. (b): Earth's rotation, air pressure, wind and the density of ocean water affect ocean currents. It is an important physical property of ocean water. It is determined by the amount of sunset, heat balance, density of ocean water, salinity, evaporation and condensation, local seasonal conditions, etc.

46. With reference to the wetlands of India, consider the following statements:

1. The country's total geographical area under the category of wetlands is recorded more in Gujarat as compared to other States.
2. In India, the total geographical area of coastal wetlands is larger than that of inland wetlands.

Which of the statements given above is /are correct?

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

Ans. (a): The country's total geographical area under the wetlands is recorded highest in Gujarat as compared to other states. In India, the total geographical area of coastal wetlands is lesser than that of inland wetlands.

47. Consider the following crops of India :

1. Groundnut
2. Sesamum
3. Pearl millet

Which of the above is /are predominantly rain-fed crop/crops ?

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

Ans. (d) : Groundnut, sesamum and pearl millet are cultivated in dry agricultural areas. These crops are mainly rainfed crops.

48. When you travel in Himalayas, you will see the following ?

1. Deep gorges
2. U-turn river courses
3. Parallel mountain ranges
4. Steep gradients causing land-sliding

Which of the above can be said to be the evidences for Himalayas being young fold mountains?

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

Ans. (d): Young fold mountains are rising under the influence of the earth's tectonic forces. They have a variety of rock structures, deep gorges and high pyramidal peaks. In the high Himalayas, the rivers have steep gradients, which result from the differential uplift of the high Himalayas. It suggested a long and narrow area of High Himalayas being uplifted during quaternary. Then, the Himalayas are called young fold mountains because parallel ranges are found here. Finally, all statements are correct. The correct answer is option (d).

49. Normally, the temperature decreases with the increase in height from the Earth's surface, because

1. the atmosphere can be heated upwards only from the Earth's surface.

2. there is more moisture in the upper atmosphere.
3. the air is less dense in the upper atmosphere.

Select the correct answer using the codes given below:

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

Ans. (c): Generally, the temperature decreases as the altitude increases from the earth's surface because the atmosphere can only warm upward from the Earth's surface and the air in the upper atmosphere is less dense. The atmosphere is mainly composed of gases, water vapour and dust. The amount of water vapour in the atmosphere is between 0 to 5%.

50. The acidification of oceans is increasing . Why is this phenomenon a cause of concern?

1. The growth and survival of calcareous phytoplankton will be adversely affected.
2. The growth and survival of coral reefs will be adversely affected.
3. The survival of some animals that have phytoplanktonic larvae will be adversely affected.
4. The cloud seeding and formation of clouds will be adversely affected.

Which of the statements given above is/are correct?

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

Ans. (a): The acidification of the oceans is increasing. This phenomenon is a matter of concern as the growth and survival of coral reefs is adversely affected and the growth and survival of calcareous phytoplankton will be adversely affected. In addition, the survival of some animals whose ovaries are phytoplankton is adversely affected.

51. In India, other than ensuring that public funds, are used efficiently and for intended purpose, what is the importance of the office of the Comptroller and Auditor General (CAG) ?

1. CAG exercises exchequer control on behalf of the Parliament when the President of India declares national emergency/financial emergency.
2. CAG reports on the execution of projects or programmes by the ministries are discussed by the Public Accounts Committee.
3. Information from CAG reports can be used by investigating agencies to press charges against those who have violated the law while managing public finances.
4. While dealing with the audit and accounting of government companies, CAG has certain judicial powers for prosecuting those who violate the law.

Which of the statements given above is/are correct?

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

Ans. (c) : CAG reports on execution of projects or programmes by the Public Accounts Committee.

Information from CAG reports can be used by investigating agencies to press charges against those who have violated the law while managing public finance.

Only (2) and (3) are correct statements.

52. The endeavour of 'Janani Suraksha Yojana' programme is

1. to promote institutional deliveries.
2. to provide monetary assistance to the mother to meet the cost of delivery.
3. to provide for wage loss due to pregnancy and confinement.

Which of the statements given above is/are correct?

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

Ans. (a) : The Endeavour of Janani Suraksha Yojana programmes are (i) To promote institutional deliveries, (ii) To provide monetary assistance to the mother to meet the cost of delivery. Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NRHM) being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women. The Yojana was launched on 12th April 2005, by the Hon'ble Prime Minister, Manmohan Singh.

53. The Prime Minister of India, at the time of his/her appointment

- (a) need not necessarily be a member of one of the Houses of the Parliament but must become a member of one of the Houses within six months.
- (b) need not necessarily be a member of one of the Houses of the Parliament but must become a member of the Lok Sabha within six months.
- (c) must be a member of one of the Houses of the Parliament.
- (d) must be a member of the Lok Sabha.

Ans. (a): The Prime Minister is appointed by the president. The minimum age required is 25 years, as he can be a member of either house if not, must be within 6 months. In normal circumstances, the president can hardly exercise his discretion; the president's choice to appoint the Prime Minister is restricted to the leader of the party with majority of Lok Sabha. The correct option is (a).

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

1. The orders of the Delimitation Commission cannot be challenged in a Court of Law.
2. When the orders of the Delimitation Commission are laid before the Lok Sabha or State Legislative Assembly, they cannot effect any modifications in the orders.

Which of the statements given above is/are correct?

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

Ans. (c) : The Government of India established the Delimitation Commission under the provisions of the Delimitation Commission Act. Delimitation Commission has been set up four times in the past - 1952, 1962, 1972 and 2002 Under Delimitation Acts of 1952, 1962, 1972, and 2002.

The commission is a powerful and independent body whose orders cannot be challenged in any court of law. The orders are laid before the Lok Sabha and the respective State Legislative Assemblies. However, modifications are not permitted.

55. Consider the following :

1. Hotel and restaurants.
2. Motor transport undertakings.
3. Newspaper establishments.
4. Private medical institutions.

The employees of which of the above can have the 'Social Security' coverage under Employees' State Insurance Scheme ?

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

Ans. (d) : According to the latest decision of Employees State Insurance Corporation (ESIC) Act-1948, now factories/institutions with 10 employees will also come under its purview, even if they are using electricity in the construction process or not. Employees of hotel and restaurant, motor transport industry, newspaper establishments and private medical institutions can get social security cover under the 'Employees Insurance Scheme'.

56. According to the Constitution of India, it is the duty of the President of India to cause to be laid before the Parliament which of the following?

1. The Recommendations of the Union Finance Commission.
2. The Report of the Public Accounts Committee.
3. The Report of the Comptroller and Auditor General.
4. The Report of the National Commission for Schedules Castes.

Select the correct answer using the codes given below:

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

Ans. (c) : It is not the duty of the president of India to cause to be laid the report of public account committee before the parliament.

57. A deadlock between the Lok Sabha and the Rajya Sabha calls for a joint sitting of the Parliament during the passage of

1. Ordinary Legislation
2. Money Bill
3. Constitution Amendment Bill

Select the correct answer using the codes given below :

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

Ans. (a): Unlike a money bill, a bill can become law only when both the houses agree to it with or without amendments. This question does not arise in relation to the Money Bill because the Lok Sabha has the ultimate power to pass it. It should be kept in mind that the procedure for joint sitting prescribed by Article 108 is limited to general legislation. This does not apply to the constitutional amendment. It is governed by Article 368(2). It should be passed by a separate special majority by each house.

58. How do District Rural Development Agencies (DRDAs) help in the reduction of rural poverty in India ?

1. DRDAs act as Panchayati Raj Institutions in certain specified backward regions of the country

2. DRDAs undertake area- specific scientific study of the causes of poverty and malnutrition and prepare detailed remedial measures.
3. DRDAs secure inter-sectoral and inter departmental coordination and cooperation for effective implementation of anti-poverty programmes.
4. DRDAs watch over the ensure effective utilization of the funds intended for anti poverty programmes.

Which of the statements given above is/are correct ?

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

Ans. (b): In order to strengthen the District Rural Development Agencies and make them more professional in their functioning, a program called District Rural Development Agency (DRDA) Administration was launched on 1 April 1999 as a centrally sponsored scheme. The center and the state provide funds for this program in the ratio of 75:25. DRDAs secure inter-sectoral and inter-departmental coordination and co-operation for effective implementation of anti-poverty programs. DRDAs monitor funds received for anti-poverty programs and ensured that they are used effectively.

59. Which of the following is/are among the Fundamental Duties of citizens laid down in the Indian Constitution ?

1. To preserve the rich heritage of our composite culture.
2. To protect the weaker sections from social injustice.
3. To develop the scientific temper and spirit of inquiry.
4. To strive towards excellence in all spheres of individual and collective activity.

Select the correct answer using the codes given below:

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

Ans. (c): The fundamental duties are defined as the moral obligations of all citizens to help promote a spirit of patriotism and uphold India's Unity. These duties set out in part IV-A of the constitution, concern individuals and the nation. Like the directive principles, they are not legally enforceable. The correct option is (c).

60. What is the provision to safeguard the autonomy of the Supreme Court of India ?

1. While appointing the Supreme Court Judges, the President of India has to consult the Chief Justice of India.
2. The Supreme Court Judges can be removed by the Chief Justice of India only.
3. The salaries of the Judges are charged on the Consolidated Fund of India to which the legislature does not have to vote.
4. All appointments of officers and staffs of the Supreme Court of India are made by the Government only after consulting the Chief Justice of India.

Which of the statements given above is/are correct?

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

Ans. (a): Every judge of the Supreme Court shall be appointed by the President. The President may consult other persons for this purpose in addition to the advice of ministers. In addition to the appointment of other judges of the Supreme Court, it is mandatory to consult the Chief Justice of India (Article 124). It has been provided that the administrative expenses of the Supreme Court and the salaries, allowances etc. of the Judges and other staff of the Supreme Court will be charged on the Consolidated Fund of India. i.e., Parliament cannot vote on them (Article 146).

61. To meet its rapidly growing energy demand, some opine that India should pursue research and development on thorium as the future fuel of nuclear energy. In this context, what advantage does thorium hold over uranium ?

1. Thorium is far more abundant in nature than uranium.
2. On the basis of per unit mass of mined mineral, thorium can generate more energy compared to natural uranium.
3. Thorium produces less harmful waste compared to uranium.

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

Ans. (d): Thorium could be used to fuel nuclear reactors, just like Uranium. Thorium is three times more abundant in nature than uranium, is not fissile on its own (which means reactions can be stopped when necessary), produces waste products that are less radioactive, and generates more energy per ton. All statement are correct.

62. The increasing amount of carbon dioxide in the air is slowly raising the temperature of the atmosphere, because it absorbs

- (a) the water vapour of the air and retains its heat.
- (b) the ultraviolet part of the solar radiation.
- (c) all the solar radiations.
- (d) the infrared part of the solar radiation.

Ans. (d): Among greenhouse gases, carbon dioxide absorbs mainly the infrared (IR) radiation emitted by the Earth's surface. This traps heat and leads to global warming. While water vapour also absorbs IR radiation and contributes significantly to the greenhouse effect, UV radiation is primarily absorbed by ozone in the stratosphere, not by water vapour or CO₂.

63. Which one of the following sets of elements was primarily responsible for the origin of life on the Earth?

- (a) Hydrogen, Oxygen, Sodium
- (b) Carbon, Hydrogen, Nitrogen
- (c) Oxygen, Calcium, Phosphorus
- (d) Carbon, Hydrogen, Potassium

Ans. (b): Carbon, Hydrogen, Nitrogen are basically responsible for the origin of life on Earth. Because of these primary gases, the necessities of life, availability of water, food and environment etc. are ensured.

64. What are the reasons for the people's resistance to the introduction of Bt brinjal in India?

1. Bt brinjal has been created by inserting a gene from a soil fungus into its genome.
2. The seeds of Bt brinjal are terminator seeds and therefore, the farmers have to buy the seeds before every season from the seed companies.
3. There is an apprehension that the consumption of Bt brinjal may have adverse impact on health.
4. There is some concern that the introduction of Bt brinjal may have adverse effect on the biodiversity.

Select the correct answer using the codes given below:

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

Ans. (c): The main reason for people opposing the introduction of Bt-Brinjal in India is that introducing Bt brinjal will have an adverse effect on biodiversity and possibility that the use of Bt brinjal may have adverse effects on health. Apart from this, the farmers will also have the opposite effect on the labourers working in fields and other tree plants.

65. Other than resistance to pests, what are the prospects for which genetically engineered plants have been created ?

1. To enable them to withstand drought.
2. To increase the nutritive value of the produce.
3. To enable them to grow and do photosynthesis in spaceships and space stations.
4. To increase their shelf life.

Select the correct answer using the codes given below:

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

Ans. (c) : Other than resistance to pests following are prospects for genetically engineered plants have been created-

To enable them to withstand drought
To increase the nutritive value of the produce
To increase their shelf life.

66. Consider the following Statements:

The most effective contribution made by Dadabhai Naoroji to the cause of Indian National Movement was that he

1. exposed the economic exploitation of India by the British
2. interpreted the ancient Indian texts and restored the self-confidence of Indians
3. stressed the need for eradication of all the social evils before anything else

Which of the statement given above is/are correct?

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

Ans. (a): Exposed the economic exploitation of India by the British - Correct.

Dadabhai Naoroji is most well-known for his "Drain of Wealth" theory, which highlighted how Britain was economically exploiting India by transferring wealth to England. This was his most significant and effective contribution to the India National Movement. His book "Poverty and Un-British Rule in India" (1901) laid out this theory in detail and had a profound impact on nationalist thought.

67. With reference to Dhrupad, one of the major traditions of India that has been kept alive for centuries, which of the following statements are correct ?

1. Dhrupad originated and developed in the Rajput kingdoms during the Mughal period.
2. Dhrupad is primarily a devotional and spiritual music.
3. Dhrupad Alap uses Sanskrit syllables from Mantras.

Select the correct answer using the codes given below:

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

Ans. (b) : Dhrupad is the oldest surviving form of Indian classical music and traces its origin to the chanting of Vedic hymns and mantras during the Vedic age. Most Dhrupads are religious in nature praising Hindu Gods (originally sung in temples), although some texts praise the kings. A Dhrupad performance starts with the alap, which uses sacred Sanskrit syllables from Sanskrit Mantras.

68. How do you distinguish between Kuchipudi and Bharatanatyam dances ?

1. Dancers occasionally speaking dialogues is found in Kuchipudi dance but not in Bharatanatyam.
2. Dancing on the brass plate by keeping the feet on its edges is a feature of Bharatanatyam but Kuchipudi dance does not have such a form of movements.

Which of the statements given above is/are correct?

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

Ans. (a) : 'Bharatanatyam' is primarily a dance form of Tamil Nadu and has now taken PAN India form. Kuchipudi has its roots in Andhra Pradesh. Tambulam (brass plate) is not used in Bharatanatyam, whereas in Kuchipudi dance, the dancers use Tambulam in popular form.

69. With reference to the religious history of medieval India, the Sufi mystics were known to pursue which of the following practices?

1. Meditation and control of breath.
2. Severe ascetic exercises in a lonely place.
3. Recitation of holy songs to arouse a state of ecstasy in their audience.

Select the correct answer using the codes given below :

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

Ans. (d): The original Sufis were mystic people who followed a pious form of Islam believed that God's direct personal experience could be achieved through meditation and self-discipline. Sufi mysticism endeavored to produce a personal experience of the divine through mystic and ascetic discipline.

70. The Rowlatt Act aimed at -

- (a) compulsory economic support to war efforts.
- (b) imprisonment without trial and summary procedures for trial.
- (c) suppression of the Khilafat Movement .
- (d) imposition of restrictions on freedom of the press.

Ans. (b) : Rowlatt Act passed on the recommendations of the Rowlatt Committee and named after its president, British Judge Sir Sidney Rowlatt. This Act effectively authorized the government to imprison any person suspected of terrorism living in British India for upto two years without a trial and gave the colonial authorities power to deal with all revolutionary activities.

71. The Lahore Session of the Indian National Congress (1929) is very important in history, because

1. the Congress passed a resolution demanding complete independence.
2. the rift between the extremists and moderates was resolved in that Session.
3. a resolution was passed rejecting the two-nation theory in that Session.

Which of the statements given above is/are correct?

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

Ans. (a): The 1929 Lahore Session under the presidency of Jawaharlal Nehru holds special significance as in this session, "Purna Swaraj" (complete independence) was declared as the goal of the Indian National Congress. 26th January 1930 was declared as "Purna Swaraj Diwas".

72. Lord Buddha's image is sometimes shown with the hand gesture called 'Bhumisparsha Mudra' It symbolizes.

- (a) Buddha's calling of the Earth to watch over Mara and to prevent Mara from disturbing his meditation.
- (b) Buddha's calling of the Earth to witness his purity and chastity despite the temptation of Mara.
- (c) Buddha's reminder to his followers that they all arise from the Earth and finally dissolve into the Earth, and thus this life is transitory.
- (d) Both the statements (a) and (b) are correct in this context.

Ans. (b): The 'Bhumisparsha Mudra' is one of the most common iconic images of Buddhism. It depicts the Buddha sitting in meditation with his left hand, palm upright, in his lap, and his right hand touching the earth. This represents the moment of the Buddha's enlightenment.

73. The religion of early Vedic Aryans was primarily of

- (a) Bhakti.
- (b) Image worship and Yajnas.
- (c) Worship of nature and Yajnas.
- (d) Worship of nature and Bhakti.

Ans. (c): Vedic deities were predominantly Indra, Agni (fire), Soma, Mitra, Varuna, Ushas, Aditi & Rudra. Aryans used to worship nature deities such as Surya (Sun), Vayu (Wind) and Prithvi (Earth). Rivers, especially Saraswati, were worshipped as the goddess. Yajna was the mode of worship, which was the performance of sacrifices. It included vedic chants, samans singing and sacrificial mantra i.e., yajus. Yajna involved sacrificing havan samagri in the fire while chanting the vedic mantra.

74. Which of the following statements is/are correct regarding Brahmo Samaj?

- 1. It opposed idolatry.
- 2. It denied the need for a priestly class for interpreting the religious texts.
- 3. It popularized the doctrine that the Vedas are infallible.

Select the correct answer using the codes given below:

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

Ans. (b): Brahmo Samaj and the majority of contemporary social reform organisations were Vedantists in their philosophy. They were opposed to idolatry and priestly class and Brahmo samaj spread the religion treasure and Kachings of Vedas but never claimed that Vedas are infallible.

75. The Reserve Bank of India (RBI) acts as a banker's bank. This would imply which of the following?

- 1. Other banks retain their deposits with the RBI.
- 2. The RBI lends funds to the commercial banks in times of need.
- 3. The RBI advises the commercial banks on monetary matters.

Select the correct answer using the codes given below:

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

Ans. (d): The Reserve Bank of India is the Central Bank of India. It was established on 1st April 1925 with an authorized capital of 5 crore rupees. The Reserve Bank was nationalized on 1st January 1949. The Reserve Bank acts as a bankers bank i.e., the central bank, which means other banks keep their deposits with the RBI to control the credit. It gives loans to commercial banks and advises on monetary matters. Apart from this, control of foreign exchange, issue of notes, functioning as a bank of banks are also included in its functions.

76. Under, which of the following circumstances may 'capital gains' arise?

- 1. When there is an increase in the sales of product.

2. When there is a natural increase in the value of the property owned.

3. When you purchase a painting and there is a growth in its value due to increase in its popularity.

Select the correct answer using the codes given below:

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

Ans. (b): Capital gains arise when there is a natural increase in the value of the property owned and when you purchase a painting and there is a growth in its value due to an increase in its popularity.

77. Which of the following measures would result in an increase in the money supply in the economy?

- 1. Purchase of government securities from the public by the Central Bank
- 2. Deposit of currency in commercial banks by the public
- 3. Borrowing by the government from the Central Bank
- 4. Sale of government securities to the public by the Central Bank

Select the correct answer using the codes given below :

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

Ans. (c): Among the given measures, only the purchase of government securities by the Central Bank and government borrowing from the Central Bank lead to an increase in the money supply by injecting more funds into the economy. Therefore, the correct answer is (c).

78. Which of the following would include Foreign Direct Investment in India ?

- 1. Subsidiaries of foreign companies in India.
- 2. Majority foreign equity holding in Indian companies.
- 3. Companies exclusively financed by foreign companies.
- 4. Portfolio investment.

Select the correct answer using the codes given below :

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

Ans. (d): Foreign Direct Investment (FDI) is a direct investment into production or business in a country by an individual or company of another country, either by buying a company in the target country or expanding operations of an existing business in that country. Foreign direct investment is in contrast to portfolio investment, which is a passive investment in the securities of another country such as stocks and bonds.

79. Consider the following statements :

The price of any currency in international market is decided by the-

- 1. World Bank.
- 2. Demand for goods/services provided by the country concerned.

3. Stability of the government of the concerned country.

4. Economic potential of the country in question.

Which of the statements given above are correct?

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

Ans. (b): Money supply increases when money flows out of the RBI. The purchase of Government securities from the public by the central bank leads to the transfer of money to the public, thereby leading to an increase in money supply in the economy. Similarly, borrowing by the government from the central bank leads to an increased money supply.

However, the deposit of currency in commercial banks by the public doesn't increase money supply as the money just gets transferred from the public to commercial banks.

80. The basic aim of Lead Bank Scheme is that

- (a) Big banks should try to open offices in each district.
(b) There should be stiff competition among the various nationalized banks.
(c) Individual banks should adopt particular districts for intensive development.
(d) All the banks should make intensive efforts to mobilize deposits.

Ans. (c): The basic aim of Lead Bank Scheme is that individual banks should adopt particular districts for intensive development.

81. Consider the following :

1. Assessment of land revenue on the basis of nature of the soil and the quality of crops.
2. Use of mobile cannons in warfare.
3. Cultivation of tobacco and red chillies.

Which of the above was/were introduced in to India by the English?

- (a) 1 only (b) 1 and 2
(c) 2 and 3 (d) None

Ans. (d): Land revenue was assessed only in the medieval period based on the nature of the soil and the properties of the produce. In the war, mobile canons were used by Babur in the first battle of Panipat. Apart from this, tobacco was first brought to India by the Portuguese during the reign of Mughal Emperor Akbar.

82. With reference to the guilds (Shreni) of ancient India that played a very important role in the country's economy, which of the following statements is/are correct ?

1. Every guild was registered with the central authority of the State and the king was the chief administrative authority on them.
2. The wages, rules of work, standards and price were fixed by the guild.
3. The guild had judicial powers over its own members.

Select the correct answer using the codes given below :

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

Ans. (c): The guilds (Shreni) that played very important role in the ancient economy had their own separate courts that settled their members' disputes. The 'guilds' itself ensured salaries, work rules, standards and prices. The craft guilds was headed by a Chief called the Jetthaka.

83. The distribution of powers between the Centre and the States in the Indian Constitution is based on the scheme provided in the

- (a) Morley-Minto Reforms, 1909
(b) Montagu-Chelmsford Act, 1919
(c) Government of India Act, 1935
(d) Indian Independence Act, 1947

Ans. (c): In the constitution of India, the separation of powers between the center and the states is based on the Government of India Act, 1935. The federal system consists of two governments and the division of powers between them. The federal polity depends on the co-ordination between these two governments.

84. Despite having large reserves of coal, why does India import millions of tonnes of coal?

1. It is the policy of India to save its own coal reserves for future, and import it from other countries for the present use.
2. Most of the power plants in India are coal -based and they are not able to get sufficient supplies of coal from within the country.
3. Steel companies need large quantity of coking coal which had to be imported.

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

Ans. (b) : Indian imports several million tonnes of coal. Despite being a large reserve of coal, as steel companies require large amounts of coke coal and most of India's power plants are based on coal and have a substantial amount of coal that could not be supplied internally.

85. A person stood alone in a desert on a dark night and wanted to reach his village which was situated 5 km east of the point where he was standing. He had no instruments to find the direction but he located the polestar. The most convenient way now to reach his village is to walk in the

- (a) direction facing the polestar
(b) direction opposite to the polestar
(c) direction keeping the polestar to his left
(d) direction keeping the polestar to his right

Ans. (c): Pole star's position with respect to rotating earth never changes and it always points to the north direction. Thus, if the person keeps the pole star to his left, he can be sure of walking in the eastern direction in which his village is located. Polestar was used widely for navigation in ancient and medieval times due to its stable position.

86. Recently, there has been a concern over the short supply of a group of elements called 'rare earth metals'. Why ?

1. China, which is the largest producer of these elements, has imposed some restrictions on their export.
2. Other than China, Australia, Canada and Chile, these elements are not found in any country.
3. Rare earth metals are essential for the manufacture of various kinds of electronic items and there is a growing demand for these elements.

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

Ans. (c): The concern over the short supply of rare earth metals arises primarily because China, the leading global producer, has imposed export restrictions, and these metals are critical for the growing electronics and high-tech industries. Therefore, statements 1 and 3 are correct.

87. Consider the following protected areas:

1. Bandipur
2. Bhitarkanika
3. Manas
4. Sunderbans

Which of the above are declared Tiger Reserves?

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

Ans. (b) : Bhitarkanika (Odisha) is reserved for crocodile while Bandipur (Karnataka), Manas (Assam) and Sunderbans (West Bengal) are tiger reserves. The 'Project Tiger' was launched in India on 1st April 1973. A total of 42 tiger reserves have been created in the country so far (when the questions was asked). Currently, 52 tiger reserves are in India (June 2021).

88. Consider the following statements:

1. The duration of the monsoon decreases from southern India to northern India.
2. The amount annual rainfall in the northern plains of India decreases from east to west.

Which of the statements given above is/are correct?

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

Ans. (c) : Rainfall gradually lessens from east to west due to a steady reduction in wind humidity. Since the southern region of India lies closer to the sea, it experiences rainfall earlier and for a longer period compared to the northern region. Therefore, both statements hold true.

89. Which one of the following is the characteristic climate of the Tropical Savannah Region ?

- (a) Rainfall throughout the year
(b) Rainfall in winter only
(c) An extremely short dry season
(d) A definite dry and wet season

Ans. (d): Tropical Savannah has a definite dry and wet season. The wet summer season lasts 6-8 months and during these days, there is plenty of rainfall. Winter lasts for 4-6 months and there might be no rain in winter. This winter is the dry season in which there are frequent forest fires.

90. In which one among the following categories of protected areas in India are local people not allowed to collect and use the biomass ?

- (a) Biosphere Reserve
(b) National Park
(c) Wetlands declared under Ramsar Conventions
(d) Wildlife Sanctuaries

Ans. (b): In the national parks of India, local people are not allowed to accure and use livestock in reserved areas. The National Wildlife Action plan was launched in 1983. Harvesting, grazing and habitat damages are not allowed in the park areas, while the sanctuary has some leeway.

91. Consider the following kinds of organisms:

1. Bat
2. Bee
3. Bird

Which of the above is/are pollinating agent/agents?

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

Ans. (d): Pollination, in the scientific sense, is the process of pollen reaching the ovary or spore, which produces fruits and seed after conception. Bees acts as pollinators as well as birds in tropical regions are also commonly known as pollinators. Bats are also pollinators of many flowers.

92. Which one of the following groups of animals belongs to the category of endangered species?

- (a) Great Indian Bustard , Musk Deer, Red Panda and Asiatic Wild Ass.
(b) Kashmir Stage, Cheetal, Blue Bull and Great Indian Bustard.
(c) Snow Leopard, Swamp Deer, Rhesus Monkey and Saras (Crane).
(d) Lion-tailed Macaque, Blue Bull, Hanuman Langur and Cheetal.

Ans. (a): The Great Indian Bustard, Musk Dear, Red Panda and Asiatic Wild Ass come under the category of endangered species. Some such species of fauna have not disappeared completely but are on the verge of extinction. Such as African elephant, vulture, porcupine, black beer, reindeer, etc., are prominent.

93. Consider the following statements:

If there were no phenomenon of capillarity

1. it would be difficult to use a kerosene lamp
2. one would not be able to use a straw to consume a soft drink
3. the blotting paper would fail to function
4. the big trees that we see around would not have grown on the Earth

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

Ans. (b): Capillarity plays a crucial role in several natural and practical processes. Without it, kerosene lamps would not function properly, blotting paper would lose its absorbent ability, and the upward

movement of water in tall trees would be severely impaired. However, drinking through a straw relies on suction and atmospheric pressure, not capillary action. Therefore, statements 1, 3, and 4 are correct.

94. The Millennium Ecosystem Assessment describes the following major categories of ecosystem services-provisioning, supporting, regulating, preserving and cultural. Which one of the following is supporting service ?

- (a) Production of food and water
- (b) Control of climate and disease
- (c) Nutrient cycling and crop pollination
- (d) Maintenance of diversity

Ans. (c) : According to the 'Millennium Ecosystem Assessment, Nutrient cycling and pollination is in the category of supporting services. These services are essential for all other services and the basic sustenance of the ecosystem. The Millennium Ecosystem Assessment (MEA) was called for by the United Nations Secretary-General Kofi Annan in 2000. Initiated in 2001, the objective of the MA was to assess the consequences of ecosystem change for human well-being and the scientific basis for action needed to enhance the conservation and sustainable use of those systems and their contribution to human well-being.

95. What is the difference between the antelopes Oryx and Chiru?

- (a) Oryx is adapted to live in hot and arid areas whereas Chiru is adapted to live in steppes and semi-desert areas of cold height mountains.
- (b) Oryx is poached for its antlers whereas Chiru is poached for its musk.
- (c) Oryx exists in western India only whereas Chiru exists in north-east India only.
- (d) None of the statements (a), (b) and (c) given above is correct.

Ans. (a): The Oryx is well-known for living in hot and dry areas, while Chiru is adapted to live in cold, high mountain meadows and semi-desert areas.

96. Which of the following can be threats to the biodiversity of a geographical area?

- 1. Global warming
- 2. Fragmentation of habitat
- 3. Invasion of alien species
- 4. Promotion of vegetarianism

Select the correct answer using the codes given below:

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

Ans. (a) Global warming, habitat fragmentation, and the invasion of alien species are significant threats to biodiversity, as they disrupt ecosystems and reduce species survival. However, the promotion of vegetarianism does not threaten biodiversity and can even have positive effects by lessening environmental pressure. Therefore, only options 1, 2, and 3 pose threats to biodiversity.

97. Consider the following

- 1. Black necked crane

- 2. Cheetah
- 3. Flying squirrel
- 4. Snow leopard

Which of the above are naturally found in India?

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

Ans. (b) : The Black-necked crane, Flying squirrel, and snow leopard are all naturally found in India, while the cheetah is currently extinct in the wild in the country. Therefore, only species Black necked crane, Flying squirrel, Snow leopard occur naturally in India.

98. Consider the following agricultural practices:

- 1. Contour bonding
- 2. Relay cropping
- 3. Zero tillage

In the context of global climate change, which of the above helps/help in carbon sequestration/storage in the soil?

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

Ans. (b): In the context of global climate change, contour bunding, relay cropping and zero tillage all three methods are helpful in the storage of carbon in the soil. But the Union Public Service Commission has considered the answer to this question as an option (b).

99. What would happen if phytoplankton of an ocean is completely destroyed for some reason?

- 1. The ocean as a carbon sink would be adversely affected.
- 2. The food chains in the ocean would be adversely affected.
- 3. The density of ocean water would drastically decrease.

Select the correct answer using the codes given below :

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

Ans. (a) : If the phytoplankton of an ocean is destroyed due to some reason, it will have the effect that the ocean will be adversely affected in the form of carbon sinks and the food chain of the ocean will be adversely affected.

100. Vultures which used to be very common in Indian countryside some years ago are rarely seen nowadays. This is attributed to

- (a) the destruction of their nesting sites by new invasive species.
- (b) a drug used by cattle owners for treating their diseased cattle.
- (c) scarcity of food available to them.
- (d) a widespread, persistent and fatal disease among them.

Ans. (b) : Until a few years ago, vultures used to appear in the Indian countryside but are rarely seen nowadays. The main reason for this is the drug (diclofenac) used by cattle owners for the treatment of sick animals. About 100 million vultures have been killed in India and Pakistan in the last decade as a result of the use of diclofenac medicine.

UNION PUBLIC SERVICE COMMISSION

Civil Services (Preliminary Exam) - 2013

GENERAL STUDIES : PAPER-I

Time: 2 hours

(Exam Date : 19.05.2013)

Maximum Number: 200

1. What will follow if a Money Bill is substantially amended by the Rajya Sabha ?

- (a) The Lok Sabha may still proceed with the Bill, accepting or not accepting the recommendations of the Rajya Sabha.
- (b) The Lok Sabha cannot consider the Bill further.
- (c) The Lok Sabha may send the Bill to the Rajya Sabha for reconsideration.
- (d) The President may call a joint sitting for passing the Bill.

Ans : (a) The procedure to pass money Bill is mentioned in Article 109 of the Constitution. Such a bill can be introduced only in the Lok Sabha and on the recommendations of the President. After being passed in the Lok Sabha, Rajya Sabha then has three options. It can either pass the bill; in that case it goes to the President for his assent. It can keep the bill with itself, in which case, after 14 days, the bill is deemed to be passed by both houses in the form in which it was passed by the Lok Sabha. The third is, Rajya Sabha can make recommendations that Lok Sabha may or may not accept. So, Option (a) is correct.

2. Which one of the following statements is correct?

- (a) In India, the same person cannot be appointed as Governor for two or more States at the same time.
- (b) The Judges of the High Court of the States in India are appointed by the Governor of the State just as the Judges of the Supreme Court are appointed by the President.
- (c) No procedure has been laid down in the Constitution of India for the removal of a Governor from his/ her post.
- (d) In the case of a Union Territory having a legislative setup, the Chief Minister is appointed by the Lt. Governor on the basis of majority support.

Ans : (c)

- No procedure has been laid down in the constitution of India for the removal of a Governor from his post. This is correct. The constitution of India does not provide a specific procedure for the removal of Governor
- The same person can be appointed as Governor of two or more states at the same time.
- Judges of HC are also appointed by the President.
- In the case of UTs, CM is appointed by the President.

3. Which one of the following pairs is correctly matched ?

Geographical Feature	Region
(a) Abyssinian Plateau	Arabia
(b) Atlas Mountains	North-Western Africa
(c) Guiana Highlands	South-Western Africa
(d) Okavango Basin	Patagonia

Ans : (b) The correct Match are–

Geographical Feature	Region
Abyssinian Plateau	– Ethiopia
Atlas Mountains	– North-Western Africa
Guiana Highlands	– North-East South America
Okavango Basin	– South-west Africa

4. With reference to the history of Indian rock-cut architecture, consider the following statements:

- 1. The caves at Badami are the oldest surviving rock-cut caves in India.
- 2. The Barabar rock-cut caves were originally made for Ajivikas by Emperor Chandragupta Maurya.
- 3. At Ellora, caves were made for different faiths.

Which of the statements given above is/are correct ?

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

Ans : (c) The period of construction of rock-cut caves of Badami, Barabar, and Ellora was between the sixth century, to the first century B.C. and the fifth to seventh century B.C., respectively. The rock cut caves of Badami are not the oldest as the caves of Barabar, Ajanta and Ellora were built earlier. The Barabar rock-cut caves were built by Emperor Ashoka and the Ellora caves belonged to Jain, Buddhist and Hindu religions.

5. Recombinant DNA technology (Genetic Engineering) allows genes to be transferred

- 1. across different species of plants
- 2. from animals to plants
- 3. from microorganisms to higher organisms

Select the correct answer using the codes given below

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

Ans : (d) Recombinant DNA are DNA sequences, which result from bringing genetic material from different sources. Here the genes can be transferred between any species, that is, across different species of plants from animals to plants and for microorganisms to higher organisms. Thus, all three options are correct.

6. The Chinese traveller Yuan Chwang (Hiuen Tsang) who visited India recorded the general conditions and culture of India at that time. In this context, which of the following statements is/are correct.

1. The roads and river-routes were completely immune from robbery.
2. As regards punishment for offences, ordeals by fire, water and poison were the instruments for determining the innocence or guilt of a person.
3. The tradesmen had to pay duties at ferries and barrier stations.

Select the correct answer using the codes given

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

Ans : (b) Chinese traveller Hiuen Tsang came to India during Harshavardhana (606-647 AD) time. According to him, public on the roads was not always completely safe. Hence statement (1) is wrong. According to him, for the crime or guilt/ innocent accomplishment, fire water and poison were subjected to a truth test. According to him, the tax was paid to the state by the merchants on the trading ghats, routes and items of sale. Hiuen Tsang biography 'Si-Yu-Ki' provides many important information in the context of political, social, religious and economic subjects of erstwhile India.

7. Consider the following :

1. Star tortoise
2. Monitor lizard
3. Pygmy hog
4. Spider monkey

Which of the above are naturally found in India?

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

Ans : (a) Spider monkeys live in tropical climates, specifically the evergreen forests of Central and South America. They are not found in India. Star tortoise is found in India in the dry and scrub forests. Pygmy Hog is an endangered species found in Assam. Monitor Lizard is found in India, Sri Lanka and Pakistan.

8. Which of the following can be found as pollutants in the drinking water in some parts of India ?

1. Arsenic
2. Sorbitol
3. Fluoride
4. Formaldehyde
5. Uranium

Select the correct answer using the codes given below:

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

Ans : (c) Uranium has been found in the water of Punjab and Fluoride in the water of Andhra Pradesh, Gujarat, Haryana, Odisha, Punjab etc. Arsenic has been found in Haryana and West Bengal, among others. Sorbitol, on the other hand, is a bulk sweetener found in food products. Formaldehyde is an organic compound, which is toxic to human beings. It is a gas at room temperature. It is not a water pollutant in India.

9. With reference to Indian History, the Members of the Constituent Assembly from the Provinces were

- (a) directly elected by the people of those provinces
- (b) nominated by the Indian National Congress and the Muslim League
- (c) elected by the Provincial Legislative Assemblies
- (d) selected by the Government for their expertise in constitutional matters

Ans : (c) The Assembly members were elected to it indirectly by the members of the individual provincial legislative assemblies.

10. Consider the following animals :

1. Sea cow
2. Sea horse
3. Sea lion

Which of the above is/are mammal/ mammals ?

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

Ans : (b) Mammals are a class of animals, which are differentiated from other classes of animals such as reptile, birds, fish, etc. by the presence of hair, three middle ear bones, mammary glands in females, among others. While Sea cow (also known as Dugong) and Sea lion are examples of mammals, Sea horse is a vertebrate fish.

11. Consider the following statements :

1. An amendment to the Constitution of India can be initiated by an introduction of a bill in the Lok Sabha only.
2. If such an amendment seeks to make changes in the federal character of the Constitution, the amendment also requires to be ratified by the legislature of all the States of India.

Which of the statements given above is/are correct?

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

Ans : (d) Statement 1 is incorrect. A constitutional amendment can be initiated in any House of Parliament. Statement 2 is also incorrect. If certain federal features of the constitution are to be amended, then apart from Parliamentary approval, they require to be ratified by the legislature of one half of the states.

12. Consider the following statements.

Attorney General of India can –

1. take part in the proceedings of the Lok Sabha
2. be a member of a committee of the Lok Sabha
3. speak in the Lok Sabha
4. vote in the Lok Sabha

Which of the statements given above is/are correct?

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

Ans : (c) Article 88 of the constitution provides that the Attorney General has the right to speak in and take part in the proceedings of either house of parliament or a joint sitting of the two houses or any of their committees. However, he does not have the power to vote in any such proceedings, according to the same article.

13. With reference to the usefulness of the by-products of sugar industry, which of the following statements is/are correct ?

1. Bagasse can be used as biomass fuel for the generation of energy.
2. Molasses can be used as one of the feedstocks for the production of synthetic chemical fertilizers.
3. Molasses can be used for the production of ethanol.

Select the correct answer using the codes given below :

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

Ans : (c) Statement 1 : When burned by a Sugar mill, bagasse, the fibrous material left over after the juice is extracted from sugarcane, usually produces enough electricity to power all of the mills operations. Statement 2: Molasses fertilizer is an organic fertilizer. Statement 3 : Sugarcane ethanol is an alcohol based fuel produced by the fermentation of Sugarcane juice and molasses. Sugarcane ethanol has emerged as a leading renewable fuel for the transportation sector.

14. Variations in the length of daytime and night time from season to season are due to

- (a) the earth's rotation on its axis
- (b) the earth's revolution round the sun in an elliptical manner
- (c) latitudinal position of the place
- (d) revolution of the earth on a tilted axis

Ans : (d) On its path around the Sun the earth's axis always remains inclined to one side. Because of this constant inclination in one direction. The Northern Hemisphere remains inclined towards the sun or faces the sun during one half of the year. Therefore, a larger part of this hemisphere receives sunlight. Every point in this hemisphere takes a longer time to go out of the sunlight, with the result that the days are longer. In contrast, the Southern Hemisphere is away from the sun. It, therefore, has shorter days and longer nights. During the other half of the year, the Southern Hemisphere is inclined towards the Sun. Hence, it has longer days and shorter nights.

15. The narmada river flows to the west, while most other large peninsular rivers flow to the east. Why?

1. It occupies a linear rift valley.
2. It flows between the Vindhya and the Satpuras.
3. The land slopes to the west from Central India

Select the correct answer using the codes given below

- (a) 1 only (b) 2 and 3
(c) 1 and 3 (d) None

Ans : (a) Statement 1 is correct. The Narmada and the Tapi flow through the rift valley. Statement 3 is wrong, as land slopes to the east in this region. Statement 2 is factually correct however it is not the reason for the rivers to flow to the west.

16. On the planet earth, most of the freshwater exists as ice caps and glaciers. Out of the remaining freshwater, the largest proportion

- (a) is found in atmosphere as moisture and clouds
- (b) is found in freshwater lakes and rivers
- (c) exists as ground water
- (d) exists as soil moisture

Ans : (c) Of the total water on Earth, the percentage of water in the freshwater resources are as follows –

Ice caps and glaciers	– 1.74%
Fresh groundwater	– 0.76%
Freshwater Lakes	– 0.007%
Rivers	– 0.002%
Soil moisture	– 0.001%
Atmosphere	– 0.001%

17. Consider the following pairs :

1. Nokrek Biosphere Reserve : Garo Hills
2. Logtak (Loktak) Lake : Barail Range
3. Namdapha National Park : Dafla Hills

Which of the above pairs is /are correctly matched ?

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

Ans : (a) Pair 1 is correctly matched since the Nokrek Biosphere Reserve is located in the Garo Hills. Pair 2 is incorrectly matched because Loktak Lake is located in the Laimatol Range (Manipur), not in Barail Range. Pair 3 is also incorrect since the Namdapha National Park is located far away from the Dafla Hills. While Dafla Hills is located in the western part of Arunachal Pradesh. Namdapha is located in the Extreme East.

18. Consider the following :

1. Electromagnetic radiation
2. Geothermal energy
3. Gravitational forces
4. Plate movements
5. Rotation of the earth
6. Revolution of the earth

Which of the above are responsible for bringing dynamic changes on the surface of the earth ?

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

Ans : (d) Endogenous forces have a role in bringing dynamic changes to the surface of the earth. Endogenous forces are generated due to thermal asymmetry in the interior of the Earth and contraction and expansion of rocks. Electromagnetic radiation, the gravitational force also has a role. The rotation, revolution and geothermal energy of the Earth is also a reason to bring in dynamic changes on the Earth's surface.

19. Which of the following bodies does not / do not find mention in the Constitution ?

1. National Development Council
2. Planning Commission
3. Zonal Councils

Select the correct answer using the code given below :

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

Ans : (d) None of the bodies mentioned above are found in the Constitution. The Planning Commission and the National Development Council are not even statutory bodies and have been set by executive orders in 1950 and 1952, respectively. The zonal councils are statutory bodies and were set up under the States Reorganization Act 1956.

20. The demand for the Tebhaga Peasant Movement in Bengal was for

- (a) the reduction of the share of the landlords from one-half of the crop to one-third.
(b) the grant of ownership of land to peasants as they were the actual cultivators of the land.
(c) The uprooting of Zamindari system and the end of serfdom.
(d) Writing off all peasant debts.

Ans : (a) The Tebhaga Peasant Movement was initiated in Bengal in 1946 by the Bengal Provincial Kisan Sabha to implement the Flood Commission recommendation, which asked for Share-croppers to give one-third of their harvest to the landowner instead of the one-half, which they were paying at that time. In its response, the Bargadari Act was passed, which provided that share croppers need to pay only one-third of their harvest to the landlords.

21. The Parliament can make any law for whole or any part of India for implementing international treaties –

- (a) with the consent of all the states
(b) with the consent of majority of states
(c) with the consent of the states concerned
(d) without the consent of any state

Ans : (d) Article 253 of the constitution of India provides that the Union Parliament can make any law to implement international treaties and obligations. In such a case, the Parliament is not bounded by the usual divisions of legislative subjects between the Union and the states and does not need the consent of any of the states concerned.

22. In the grasslands, trees do not replace the grasses as a part of an ecological succession because of

- (a) insects and fungi
(b) limited sunlight and paucity of nutrients
(c) water limits and fire
(d) None of the above

Ans : (c) In a grassland, trees have already been cleared away due to fires in the past, which also changes the ground composition. Without the trees to hold them, water washes away most of the soil and the underlying ground becomes rocky and barren. After this, lichens become the pioneer population, which is then replaced by grasses. The grasses, however absorb most of the water before it reaches the roots of the shrubs. Thus, the ecological succession does not occur beyond the grasses.

23. Which one of the following is the correct sequence of ecosystems in the order of decreasing productivity ?

- (a) Oceans, lakes, grasslands mangroves
(b) Mangroves, oceans, grasslands, lakes
(c) Mangroves, grasslands, lakes, oceans
(d) Oceans, mangroves, lakes, grasslands

Ans : (c) In order of decreasing productivity of an ecosystem, their correct sequence is – Mangrove > grassland > lakes > oceans.

24. Contour bunding is a method of soil conservation used in –

- (a) desert margins, liable to strong wind action
(b) low flat plains, close to stream courses, liable to flooding
(c) scrublands, liable to spread of weed growth
(d) None of the above

Ans : (d) Contour bunding (or contour bundling), involves the placement of lines of stones along with the natural rises of a landscape. It helps to capture and hold rainfall before it can become runoff which reduces soil erosion and retards overall water loss.

25. The Government enacted the Panchayat (Extension to Scheduled Areas) (PESA) Act in 1996. Which one of the following is not identified as its objective ?

- (a) To provide self-governance
(b) To recognize traditional rights
(c) To create autonomous regions in tribal areas
(d) To free tribal people from exploitation

Ans : (c) The Panchayat Extension Act 1996 was brought for Scheduled Areas for Tribal Self Governance to protect the traditional rights of tribes and ensure their freedom from exploitation. The Act does not include the purpose of creating autonomous areas in tribal areas.

26. Under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, who shall be the authority to initiate the process for determining the nature and extent of individual or community forest rights or both?

- (a) State Forest Department
(b) District Collector / Deputy Commissioner
(c) Tahsildar/Block Development Officer/ Mandal Revenue Officer
(d) Gram Sabha

Ans : (d) Under section 6 of the Forest Right Act, 2006, the Gram Sabha has been given the authority to initiate the process for determining the nature and extent of these rights.

27. Improper handling and storage of cereal grains and oilseeds result in the production of toxins known as aflatoxins which are not generally destroyed by normal cooking process. Aflatoxins are produced by

- (a) bacteria (b) Protozoa
(c) moulds (d) viruses

Ans: (c) Aflatoxins are naturally occurring mycotoxins, which are produced by many species of *Aspergillus*, a fungus. The fungus can be considered a type of mould. Aflatoxins are toxic and are among the most carcinogenic substances known.

28. 'Economic Justice' as one of the objectives of the Indian Constitution has been provided in

- The Preamble and the Fundamental Rights
- The Preamble and the Directive Principles of State Policy
- The Fundamental Rights and the Directive Principles of State Policy
- None of the above

Ans : (b) Directive Principle of state policy strives for economic democracy justice. While fundamental rights strive for 'Political democracy justice.'

29. Due to improper/ indiscriminate disposal of old and used computers or their parts, which of the following are released into the environment as e-waste ?

- Beryllium
- Cadmium
- Chromium
- Heptachlor
- Mercury
- Lead
- Plutonium

Select the correct answer using the codes given below

- 1, 3, 4, 6 and 7 only
- 1, 2, 3, 5 and 6 only
- 2, 4, 5 and 7 only
- 1, 2, 3, 4, 5, 6 and 7

Ans : (b) Beryllium is used in Circuits board, Hard disk drive, Motherboard, wiring board and connectors. So option (c) is wrong. Mercury is a key part of some modern technologies, including LCD Screens, Laptops and Computers, so option (a) is also wrong. Heptachlor is an organochlorine compound that was used as an insecticide. So option (d) is also wrong. So, the correct answer is (b).

30. Acid rain is caused by the pollution of environment by

- carbon dioxide and nitrogen
- carbon monoxide and carbon dioxide
- ozone and carbon dioxide
- nitrous oxide and sulphur dioxide

Ans : (d) Nitrous acid and sulphur dioxide are mainly responsible for acid rain. Nitrogen and sulphur oxides react with water to make ammonium nitrate and sulfuric acid, respectively and they cause damage in the form of rain.

31. With reference to food chain in ecosystems, consider the following statements :

- A food chain illustrates the order in which a chain of organisms feed upon each other.
- Food chain are found within the populations of a species.
- A food chain illustrates the numbers of each organism which are eaten by others.

Which of the statements given above is/are correct?

- 1 only
- 1 and 2 only
- 1, 2 and 3
- None

Ans : (a) A food chain is a sequence of who eats whom in a biological community (an ecosystem) to obtain nutrition.

32. Consider the following pairs:

National Park

River flowing through the Park

- Corbett National Park – Ganga
- Kaziranga National Park – Manas
- Silent Valley National Park – Kaveri

Which of the above pairs is/are correctly matched ?

- 1 and 2
- 3 only
- 1 and 3
- None

Ans : (d) Ramganga, a tributary of Ganga, passes through Corbett National Park. While silent valley National Park is located in the state of Kerala, the Kunthipuzha river flows through this park and the Brahmaputra flows through Kaziranga National Park (Assam).

33. Consider the following organisms :

- Agaricus
- Nostoc
- Spirogyra

Which of the above is /are used as bio fertilizer/bio –fertilizers ?.

- 1 and 2
- 2 only
- 2 and 3
- 3 only

Ans : (b) Bioinoculants are the microbial preparation that enhances the uptake of nutrients by plants from the soil, increase the availability of the nutrient and stimulate plant growth.

There are two types of organisms that are used as inoculants:

- Symbolic organisms (such as *Rhizobium*, *Synorhizobium*, *Bradyrhizobium*, *Nostoc*, *Anabaena* etc..) and
- Non-Symbiotic organism (such as *Azoto-bacter*, *Azospirillum*, *Beijerinckia*, etc.) *Agaricus* is a genus of mushrooms, both edible and poisonous species.

Spirogyra is a genus of filamentous algae of the order of *zygnematales*, named for the helical or spiral arrangement of the chloroplasts that is diagnostic of the genus.

34. Which of the following adds/ add nitrogen to the soil ?

- Excretion of urea by animals
- Burning of coal by man
- Death of vegetation

Select the correct answer using the codes given below :

- 1 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Ans : (c) Waste products of animals, as well as dead remains of organism, are converted into inorganic ammonia by bacteria in the process of ammonification.

This ammonia is then converted into nitrate then nitrites by Nitrosomonas and Nitrococcus bacteria, respectively. Another soil bacteria Nitrobacter can convert nitrate into nitrite. In this way, the process of nitrogen cycle continues and the amount of the nitrogen in the soil is replenished. Statement 2 is wrong as the burning coal does not produce nitrogen.

35. In which of the following States is lion-tailed macaque found in its natural habitat ?

1. Tamil Nadu 2. Kerala
3. Karnataka 4. Andhra Pradesh

Select the correct answer using the codes given below :

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

Ans : (a) Lion-tailed macaque is found in the Western Ghats of India. It is an endangered species, which is found mostly in Kerala, Karnataka and the border regions of Tamil Nadu. It is not found in Andhra Pradesh.

36. Some Buddhist rock-cut caves are called Chaityas, while the others are called Viharas.

What is the difference between the two ?

- (a) Vihara is a place of worship, while Chaitya is the dwelling place of the monks.
- (b) Chaitya is a place of worship, while vihara is the dwelling place of the monks.
- (c) Chaitya is the stupa at the far end of the cave, while Vihara is the hall axial to it.
- (d) There is no material difference between the two.

Ans : (b) In Buddhist architecture, Chaitya is an assembly or prayer hall, which houses a Stupa. Vihara, on the other hand, is a dwelling or refuge for monks.

37. Which one of the following describes best the concept of Nirvana in Buddhism?

- (a) The extinction of the flame of desire
- (b) The complete annihilation of self
- (c) A state of bliss and rest
- (d) A mental stage beyond all comprehension

Ans : (a) According to Buddhism, the ultimate goal of human life is to attain Nirvana. Nirvana means the extinguishment of the flame of personal desires i.e. getting rid of the cycle of life and death. This Nirvana can be attained only when all the present desires cease and the desires arising in the future are destroyed from the root. In Nirvana, cravings and malice are ceased from the root, due to which one attains freedom from all kinds of suffering and the rebirth cycle of the world.

38. According to the Constitution of India, which of the following are fundamental for the governance of the country ?

- (a) Fundamental Rights
- (b) Fundamental Duties
- (c) Directive Principles of State Policy
- (d) Fundamental Rights and Fundamental Duties

Ans : (c) Directive Principles of state policy are fundamental for the governance of country .

39. The people of India agitated against the arrival of Simon Commission because :

- (a) Indians never wanted the review of the working of the Act of 1919
- (b) Simon Commission recommended the abolition of Dyarchy (Diarchy) in the Provinces
- (c) There was no Indian member in the Simon Commission
- (d) The Simon Commission suggested the partition of the country

Ans : (c) All the members of the 7 members of the Simon Commission Constituted under the chairmanship of Simon were English; hence Congressmen called it white commission. Then an annual session of the congress held in Madras on 27 December 1927, presided over by M.A. Ansari, it was decided to complete boycott the Simon Commission.

40. Quit India Movement was launched in response to

- (a) Cabinet Mission Plan
- (b) Cripps Proposals
- (c) Simon Commission Report
- (d) Wavell Plan

Ans : (b) Quit India Movement was launched in August 1942. It came in response to the Cripps' Proposal. The Cripps Mission came to India in March 1942 and was headed by Sir Stafford Cripps. It had come to negotiate a proposal for self-government for India in return for cooperation in the World War II effort. Commenting on Cripps proposals Gandhi said, it is a post-dated cheque of a failing bank.

41. The balance of payments of a country is a systematic record of –

- (a) all import and export transactions of a country during a given period of time, normally a year
- (b) goods exported from a country during a year
- (c) economic transaction between the government of one country to another
- (d) capital movements from one country to another

Ans : (a) The Balance of payment (BoP) record the transactions in goods, services and assets between residents of a country with the rest of the world for a specified time period, typically a year. So the best option is A.

42. The Reserve Bank of India regulates the commercial banks in matters of

1. liquidity of assets 2. branch expansion
3. merger of banks 4. winding-up of banks

Select the correct answer using the codes given below :

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

Ans : (d) The Reserve Bank of India Controls Commercial banks as follows–

- By Liquidity of assets
- By Merger of Banks
- By Branch expansion
- By Winding up of banks

43. An increase in the Bank Rate generally indicates that the –

- (a) market rate of interest is likely to fall
- (b) Central Bank is no longer making loans to commercial banks
- (c) Central Bank is following an easy money policy
- (d) Central Bank is following a tight money policy

Ans : (d) Increase in Bank Rate means that interest rates will rise. This means that money becomes dearer and borrowing becomes more expensive. This squeezes out liquidity from the economy and so, it can be said that RBI is following a tight money policy.

44. In India, deficit financing is used for raising resources for –

- (a) economic development
- (b) redemption of public debt
- (c) adjusting the balance of payments
- (d) reducing the foreign debt

Ans : (a) India is a developing country. For the development of infrastructure here, the government takes the help of deficit financing so that economic development can be made possible.

45. Which of the following characterizes/characterize the people of Indus Civilization?

- 1. They possessed great palaces and temples.
- 2. They worshipped both male and female deities.
- 3. They employed horse-drawn chariots in warfare.

Select the correct statement/ statements using the codes given below :

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

Ans : (b) Excavation of Indus valley civilization has not found evidence of a place of worship or temple from any site. Evidence of worship of Matri Devi and Adya Shiva is found on the basis of female Terracotta figurines found from places like Harappa, Mohenjodaro. There is no clear evidence of horse from any site other than horse bone found at Surkotada in Indus civilization. For this reason, any evidences of a chariot drawn by horses are inaccessible.

46. Which of the following diseases can be transmitted from one person to another through tattooing?

- 1. Chikungunya
- 2. Hepatitis B
- 3. HIV-AIDS

Select the correct answer using the codes given below :

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

Ans : (b) AIDS and hepatitis B are diseases that are transmitted from person to person through tattooing or infection. On the other hand, chikungunya is a viral disease and is spread by mosquito bites. Its carrier is mosquito.

47. Which of the following statements is/ are applicable to Jain doctrine ?

- 1. The surest way of annihilating Karma is to practice penance.
- 2. Every object, even the smallest particle has a soul.
- 3. Karma is the bane of the soul and must be ended.

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

Ans: (d) Mahavir Swami was the 24th Tirthankara of Jainism and he is believed to be the real founder of Jainism. The Jain text 'Acharang Sutra' states that the surest way to annihilate Karma is austerity. According to Jain philosophy, the soul resides in everything in the universe, even if it is the smallest particle. In Jain philosophy, the flow of the molecules of Karma towards the life 'Asrav', if the flow of the molecules of Karma stops towards the organism, the burning of residual Karma or the erosion of the already existing molecules is called 'Nirjara'. According to these principles, karma is the bane of the soul and it must be ended.

48. Which one of the following terms describes not only the physical space occupied by an organism, but also its functional role in the community of organisms ?

- (a) Ecotone
- (b) Ecological niche
- (c) Habitat
- (d) Home range

Ans : (b) In nature, many species occupy the same habitat, but they perform different functions. The functional characteristics of a species in its habitat are referred to as 'niche' in that common habitat. Ecological niche refers to both the ecological role and the space that an organism occupies in the community of organisms.

49. Photochemical smog is a resultant of the reaction among –

- (a) NO₂, O₃ and peroxyacetyl nitrate in the presence of sunlight
- (b) CO, O₂ and peroxyacetyl nitrate in the presence of sunlight
- (c) CO, CO₂ and NO₂ at low temperature
- (d) high concentration of NO₂, O₃ and CO in the evening

Ans : (a) Major chemical pollutant in photochemical smog :

- (i) Nitrogen oxides (NO and NO₂)
- (ii) Volatile Organic Compounds (VOC_s)
- (iii) Ozone (O₃)
- (iv) Peroxyacetyl Nitrates (PAN)

50. Consider the following minerals :

- 1. Calcium
- 2. Iron
- 3. Sodium

Which of the minerals given above is /are required by human body for the contraction of muscles ?

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

Ans : (d) Calcium : Calcium is essential for activating enzymes that cause muscle contraction.

Iron : Iron helps support continued muscle function by supporting energy production in your muscle cells so that muscles fibres always have the energy they need to contract properly. Iron also helps muscles store oxygen to fuel muscle contractions & promotes healthy circulation so that muscles can get additional oxygen from the bloodstream.

Sodium : One needs sodium for muscle contraction because it balances potassium to maintain membrane potential.

51. Consider the following statements:

The Parliamentary Committee on public Accounts

1. consists of not more than 25 Members of the Lok Sabha

2. scrutinizes appropriation and finance accounts of the Government

3. examines the report of the Comptroller and Auditor General 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

Ans. (b) : The public Accounts committee consists of not more than 22 members comprising 15 members elected by Lok Sabha every year from amongst its members. Statement 1 is not correct.

• The public Account committee carries out the examination of the Appropriation Accounts relating to the Railways, Defenses services, P&T Department and other civil Ministries of the Government of India and Reports of the Comptroller and Auditor-General of India thereon as also the Reports of the Comptroller and Auditor-General on Revenue receipts mainly from the basis of the deliberation of the Committee.

Hence statement 2 and 3 are correct

The comptroller and Auditor General is the "friend philosopher and guide" of the Committee.

He attends the sitting of the Committee and assists it in its deliberations.

Hence option b is correct

52. Consider the following Bhakti Saints :

1. Dadu Dayal
2. Guru Nanak
3. Tyagaraja

Who among the above was/ were preaching When the Lodi dynasty fell and Babur took over?

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

Ans : (b) The period of the Lodi dynasty was from 1451 to 1526. At this time, Guru Nanak (1469-1539) gave his Sermons. He conceived the formless God and called this God as a man of Famine. However, as per the question, other devotee Saint, Dadu-Dayal, was born in 1544 and died in 1603 A.D. and Tyagaraja was born in 1767 and died in 1847.

53. With reference to the food chains in ecosystems. Which of the following kinds. of organism is/ are known as decomposer organism/organisms ?

1. Virus
2. Fungi
3. Bacteria

Select the correct answer using the codes given below :

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

Ans : (b) Viruses are not decomposers. They are like parasites and live off on a living organism. Fungi and Bacteria, on the other hand, are decomposers and perform the important role of breaking down the dead remains of plants and animals into nutrients.

54. The most important fishing grounds of the world are found in the regions where

- (a) warm and cold atmospheric currents meet
(b) rivers drain out large amounts of freshwater into the sea
(c) warm and cold oceanic currents meet
(d) continental shelf is undulating

Ans : (c) Planktons are abundant where warm and cold oceanic currents meet. That makes these areas important fishing grounds of the world oceanic.

55. Which of the following is/are unique characteristic/characteristics of equatorial forests

1. Presence of tall, closely set trees with crowns forming a continuous canopy
2. Coexistence of a large number of species
3. Presence of numerous varieties of epiphytes

Select the correct answer using the codes given below

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

Ans : (d) Equatorial forests are found between 0° to 5° northern and southern latitudes. The main features of these forests are as follows—

- Existence of Tall, dense trees.
- Coexistence of the large number of various species.
- The existence of innumerable varieties of epiphytes.

56. Which of the following constitute Capital Account?

1. Foreign Loans
2. Foreign Direct Investment
3. Private Remittances
4. Portfolio Investment

Select the correct answer using the codes given below:

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

Ans : (b) Capital account is related to financial transactions. It includes the following facts—

- Short and long term international capital transfers.
- Exchange of gold.
- Private payments.
- Payments and receipts related to national institutions.
- Government Loans, interest, grants etc., are included.
- All the transactions in the Capital Accounts are only related to financial transfers, so it has no direct effect on the production, income and employment of the country.

57. Consider the following historical places :

1. Ajanta Caves
2. Lepakshi Temple
3. Sanchi Stupa

Which of the above places is/are also known for mural paintings ?

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

Ans : (b) It is well known that the Ajanta caves have mural paintings. These paintings have Buddhist religious themes and depict the Jataka tales. The Lepakshi temple also has mural paintings of the Vijaynagara kings. The Sanchi Stupa, on the other hand, does not have mural paintings.

58. With reference to the history of philosophical thought in India, consider the following statements regarding Samkhya school.

1. Samkhya does not accept the theory of rebirth or transmigration of soul.
2. Samkhya holds that it is the self-knowledge that leads to liberation and not any exterior influence or agent.

Which of the statements given above is/are correct?

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

Ans : (b) The Samkhya school is part of the six orthodox schools of Indian philosophy. The Sage Kapila was the founder of Samkhya School. This school denies the existence of God. However, rebirth and transmigration of the soul are inherent in the Samkhya School. In Samkhya School, liberation results from the disappearance of the limitations of self-awareness. It is not from any external influence or agent.

59. In the context of India, which of the following principles is /are implied institutionally in the parliamentary government ?

1. Members of the Cabinet are Members of the Parliament.
2. Ministers hold of the office till they enjoy confidence in the Parliament.
3. Cabinet is headed by the Head of the State.

Select the correct answer using the codes given below

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

Ans : (a) In the parliamentary system as existing in India, members of the cabinet have to be members of the parliament. If they are not members of the parliament at the time of appointment as Cabinet Ministers, then they have to do so in 6 months. Article 75 (3) ministers shall be collectively responsible to the house of people i.e. Lok Sabha. Statement 3 is wrong as the cabinet is headed by the Head of Government (i.e. P.M.) and not by the head of State (i.e. President).

60. The annual range of temperature in the interior of the continents is high as compared to coastal areas. What is / are the reason/ reasons ?

1. Thermal difference between land and water

2. Variation in altitude between continents and oceans
3. Presence of strong winds in the interior
4. Heavy rains in the interior as compared to coasts

Select the correct answer using the codes given below :

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

Ans : (a) Lands heats up and cool down very fast as compared to the water. Areas in the interior of India are far away from the moderating influence of the Sea. Such areas have extremes of climate. Statement 2 is wrong as there may or may not be much difference between the altitudes of land and ocean. Statement 3 is wrong as winds do not contribute enough to the variations in temperature. Statement 4 is wrong as coastal regions receive more rainfall.

61. Which of the following is/are the characteristic/characteristics of Indian coal ?

1. High ash content
2. Low sulphur content
3. Low ash fusion temperature

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

Ans : (a) Indian coal has a very high ash content, which varies from 35 to 45% as compared to 15% in other parts of the world. Indian coal also has a high ash fusion temperature of 1500°C. However, Indian coal has a low sulphur content at about 0.5%.

62. Which of the following statements regarding laterite soils of India are correct.

1. They are generally red in colour.
2. They are rich in nitrogen and Potash
3. They are well-developed in Rajasthan and UP.
4. Tapioca and cashew nuts grow well on these soils.

Select the correct answer using the codes given below :

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

Ans : (c) Statement 2 is wrong as these soil are poor in nitrogen and phosphate. Statement 3 is wrong as laterite is not found in U.P. and Rajasthan. Red Laterite soils found in Tamil Nadu, Andhra Pradesh and Kerala are more suitable for tree crops like cashewnut and Tapioca.

63. Consider the following statements :

1. Natural gas occurs in the Gondwana beds
2. Mica occurs in abundance in Kodarma.
3. Dharwars are famous for petroleum.

Which of the statements given above is/are correct?

- (a) 1 and 2 (b) 2 only
(c) 2 and 3 (d) None

Ans : (b) Natural gas is obtained along with oil in all the oil fields but exclusive reserves have been located along the eastern coast (Tamil Nadu, Odisha and

Andhra Pradesh) as well as Tripura, Rajasthan and offshore wells in Gujarat and Maharashtra. Crude petroleum occurs in sedimentary rocks of the tertiary period. Koderma (Jharkhand) is a popular site of mining for Mica.

64. Consider the following crops :

- | | |
|-----------|--------------|
| 1. Cotton | 2. Groundnut |
| 3. Rice | 4. Wheat |

Which of these are Kharif crops ?

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

Ans : (c) In India, the cultivation seasons are divided into Kharif and Rabi. Wheat is a Rabi crop since it requires a lower temperature. All the other three are Kharif crops. Kharif Crops: Paddy (Rice) Maize, Groundnut, Sugarcane, Horse grain, Jute, Flax, Cotton etc.

Rabi Crops: -Wheat , Barley, Oats, tauria (lahi) and mustard, Sun Flower etc.

65. "Climate is extreme, rainfall is scanty as the people used to be nomadic herders"

The above statement best describes which of the following regions ?

- African Savannah
- Central Asian Steppe
- North American Prairie
- Siberian Tundra

Ans : (b) Steppe's climate is continental with extremes of temperature. Nomadic tribes like Kirghiz are found. Rainfall is expected to be light. African Savannah gets moderate rainfall.

66. Consider the following Statements:

- Inflation benefits the debtors.
- Inflation benefits the bond-holders.

Which of the statements given above is/are correct?

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

Ans : (a) For debtors, the "real" interest rate goes down with inflation. Thus it benefits them. On the other hand, with inflation, the yield of the bond goes down, thus a negative effect for bondholders.

67. Disguised unemployment generally means –

- large number of people remain unemployed
- alternative employment is not available
- marginal productivity of labour is zero
- productivity of workers is low

Ans : (c) Disguised unemployment means that more people are engaged in a job, which can be performed with less number of people. In disguised unemployment, the output remains the same even after the removal of some of the labour. Thus, the marginal productivity of labour is zero.

68. Consider the following statements :

- The Council of Ministers in the Centre shall be collectively responsible to the Parliament.
- The Union Ministers shall hold the office during the pleasure of the President of India.

- The Prime Minister shall communicate to the President about the proposals for legislation.

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 |

Ans : (b) Statement 2 is from Article 75. Statement 3 is from Article 78. Statement 1 is from Article 75, where it is collectively responsible to the House of People (Lok Sabha). Parliament means both Rajya Sabha and Lok Sabha. So the answer should be (b).

69. Consider the following statements :

- National Development Council is an organ of the Planning Commission.
- The Economic and Social Planning is kept in the Concurrent List in the Constitution of India.
- The Constitution of India prescribes that Panchayats should be assigned the task of preparation of plans for economic development and social justice.

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 |

Ans : (b) NDC is listed as an advisory body to the planning commission. Moreover, the plans made by the planning commission are placed before NDC for its acceptance. So statement 1 is wrong.

70. Consider the following statements :

- The Chairman and the Deputy Chairman of the Rajya Sabha are not the members of that House.
- While the nominated members of the two Houses of the Parliament have no voting right in the presidential election, they have the right to vote in the election of the Vice President

Which of the statements given above is/are correct ?

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

Ans : (b) Statement 1 is incorrect. The chairman of Rajya Sabha is the Vice-President. However, the Deputy Chairman is a member of the Rajya Sabha and is elected among them. Statement 2 is correct; the electoral college in the presidential election consists of only the elected members of the Parliament and state Legislative Assemblies. The Vice-Presidential election, however has a part of its electoral college of all the members of the Parliament, whether elected or nominated.

71. With reference to National Legal Services Authority, consider the following –

- Its objective is to provide free and competent legal services to the weaker sections of the society on the basis of equal opportunity.
- It issues guidelines for the State Legal Services Authorities to implement the legal programmes and schemes throughout the country.

Which of the statements given above is /are correct ?

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

Ans: (c) The National Legal Services Authority has been constituted to provide free legal service to the weaker sections under the "Legal Services Authorities Act, 1987." The National Legal Services Authority issues directives to the state legal services authorities to provide free legal services to the weaker sections in that state and to organize Lok Adalats for amicable settlement of disputes.

72. During a thunderstorm, the thunder in the skies is produced by the

1. meeting of cumulonimbus clouds in the sky
2. lightning that separates the nimbus clouds
3. violent upward movement of air and water particles.

Select the correct answer using the codes given below :

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

Ans : (d) Thunderstorm is an intense local thunderstorm, with wide and dense rainy cumulus clouds and a strong wind moving from the bottom to the top. A thunderstorm often arises due to atmospheric instability, i.e. low pressure and intense convective airflow. In fact, thunderstorms are local storms in which the winds blow upward at high speeds, accompanied by lightning and thunder clouds and also heavy rain.

73. Consider the following pairs:

Tribe	State
1. Limboo (Limbu)	— Sikkim
2. Karbi	— Himachal Pradesh
3. Dongaria Kondh	— Odisha
4. Bonda	— Tamilnadu

Which of the above pairs are correctly matched?

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

Ans : (a) Correct matches are –

Tribe	State
Limboo	Sikkim
Karbi	Assam
Dongaria Kondh	Odisha
Bonda	Odisha

74. Consider the following liquid assets :

1. Demand deposits with the banks.
2. Time deposits with the banks.
3. Savings deposits with the bank.
4. Currency

The correct sequence of these assets in the decreasing order of liquidity is

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

Ans : (d) Liquidity of currency is highest. Next will come demand liabilities as they have to be cleared when demanded. The next is savings and least liquidity will be of time deposits. [Currency > Demand Deposits > Saving deposits > Time deposits]

75. In the context of Indian economy, 'Open Market Operations' refers to

- (a) borrowing by scheduled banks from the RBI
- (b) lending by commercial banks to industry and trade
- (c) purchase and sales of government securities by the RBI
- (d) None of the above

Ans : (c) The repo and reverse repo rates are used when RBI purchases or sells government securities. The open market operations of RBI refer to the sale and purchase of government securities by the RBI in the open market. Most central banks use this as their primary tool of monetary policy. The sale of government securities by the RBI leads to an increase in interest rates and contraction in liquidity, while the purchase of government securities by the RBI leads to a fall in interest rates and an expansion of liquidity.

76. Priority Sector Lending by banks in India constitutes the Lending to –

- (a) agriculture
- (b) micro and small enterprises
- (c) weaker sections
- (d) All of the above

Ans : (d) According to the priority sector, lending norms of the RBI banks have to extend at least 40% of their credit to the priority sector. Some of the priority sectors mentioned by the RBI are agriculture, micro and small enterprises, education, housing, exports, credit & loans to weaker sections.

77. Which one among the following industries is the maximum consumer of water in India ?

- (a) Engineering
- (b) Paper and pulp
- (c) Textiles
- (d) Thermal power

Ans : (d) Of the total water used by the industry, thermal power plants are the biggest users of water and account for 88% of the total industrial water use. They are followed by engineering (5.05%), pulp & paper (2.26%) and textiles (2.07%) industries.

78. To obtain full benefits of demographic dividend, what should India do ?

- (a) Promoting skill development
- (b) Introducing more social security schemes
- (c) Reducing infant mortality rate
- (d) Privatization of higher education

Ans: (a) Option (b) will not provide any benefit of demographic dividend. Social security schemes can be used for providing security to non-working populations like old-age pension etc. Option (c) is one of the Millennium Development Goals, but it does not provide any benefit of demographic dividend. Option (d), in fact, have a negative effect as it will make education costlier, thus making it out of reach of a large section of the eligible population.

Option (a) If India were to follow a similar path, it would need to increase savings and investment both of which will follow from the demographic transformation. But it will also have to increase the intrinsic productivity of jobs, that is total factor productivity (TFP).

This can be done via skill development and that is why skill development is key to reaping the demographic dividend for a country like India.

Hence the correct option is (a).

79. In the context of cultural history of India, a pose in dance and dramatics called Tribhanga' has been a favorite of Indian artists from ancient times till today. Which one of the following statements best describes this pose ?

- One leg is bent and the body is slightly but oppositely curved at waist and neck
- Facial expressions, hand gestures and make up are combined to symbolize certain epic or historic characters
- Movements of body, face and hands are used to express oneself or to tell a story
- A little smile, slightly curved waist and certain hand gestures are emphasized to express the feelings of love or eroticism

Ans : (a) Tribhanga literally meaning three parts break, consists of three bends in the body, at the neck, waist and knee; hence the body is oppositely curved at waist and neck, which gives it a gentle 'S' shape.

80. Annie Besant was

- Responsible for starting the Home Rule Movement
- The founder of the Theosophical Society
- Once the President of the Indian National Congress

Select the correct statement/statements using the codes given below :

- 1 only
- 2 and 3 only
- 1 and 3
- 1, 2 and 3

Ans : (c) The Establishment of Home Rule League was originally planned by Annie Besant. She founded it in September 1916 and through her newspaper 'Commonweal' and 'New India', she publicized the programs of the league. She was elected President at the 1917 INC session. The Theosophical Society was founded in Adyar (Chennai) in the year 1882 by Colonel H.S. Olcott and Madame Blavatsky.

81. The Ilbert Bill controversy was related to the

- imposition of certain restrictions to carry arms by the Indians
- imposition of restrictions on newspapers and magazines published in Indian languages
- removal of disqualifications imposed on the Indian magistrates with regard to the trial of the Europeans
- removal of a duty on imported cotton cloth

Ans : (c) The Ilbert Bill was introduced in 1883 by Viceroy Ripon to amend the existing laws to allow the Indian judges to try British offenders in criminal cases at the district level.

82. A rise in general level of prices may be caused by-

- an increase in the money supply
- a decrease in the aggregate level of output
- an increase in the effective demand

Select the correct answer using the codes given below :

- 1 only
- 1 and 2 only
- 2 and 3 only
- 1, 2 and 3

Ans : (d) Rise or fall in prices is caused due to changes in supply and demand. An increase in the money supply increases the demand and thus, increases prices. A decrease in the aggregate level of output will reduce supply and thus, prices increase again. An increase in effective demand would again raise up the prices. Thus, all three events will raise the prices.

83. Which one of the following groups of items is included in India's foreign-exchange reserves ?

- Foreign-currency assets, Special Drawing Rights (SDRs) and loans from foreign countries.
- Foreign-currency assets, gold holdings of the RBI and SDRs.
- Foreign-currency assets, loans from the World Bank and SDRs.
- Foreign-currency assets, gold holdings of the RBI and loans from the World Bank

Ans : (b) India's foreign exchange reserves consist of the foreign-currency assets, gold, special drawing rights and the reserve tranche position in the International Monetary Fund. It does not consist of the loans from World Bank or from foreign countries.

84. Which one of the following is likely to be the most inflationary in its effect ?

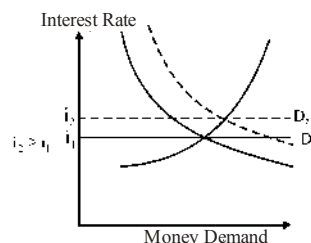
- Repayment of public debt
- Borrowing from the public to finance a budget deficit
- Borrowing from banks to finance a budget deficit
- Creating new money to finance a budget deficit

Ans : (d) Deficit financing always brings inflationary pressure whatever be the means but 'creation' (printing) of new money has the highest inflationary impact.

85. Supply of money remaining the same when there is an increase in demand for money, there will be-

- a fall in the level of prices
- an increase in the rate of interest
- a decrease in the rate of interest
- an increase in the level of income and employment

Ans : (b) This is a simple supply and demand question. Since the supply of money is constant and its demand is increasing, there will be an increase in interest rate. It does not have much to do with the level of prices and the increase in the level of income and employment.



86. Fruits stored in a cold chamber exhibit longer storage life because –

- (a) exposure to sunlight is prevented
- (b) concentration of carbon dioxide in the environment is increased
- (c) rate of respiration is decreased
- (d) there is an increase in humidity

Ans : (c) The stored fruits in the cold cell last longer because the rate of respiration decreases as temperature drops, which reduces the decaying capacity and therefore the food in the refrigerator does not spoil quickly.

87. Consider the following fauna of India :

- 1. Gharial
- 2. Leatherback turtle
- 3. Swamp deer

Which of the above is/are endangered ?

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

Ans : (c) In Indian animals, Gharial have been declared as endangered species by the IUCN. The world's most endangered Sea turtle is a leatherback turtle found near Nicobar Island and Swamp deer found in Central and Northern India is also an endangered species. Hence the correct answer will be (c).

88. Ball bearings are used in bicycles, cars, etc. because –

- (a) The actual area of contact between the wheel and axle is increased
- (b) The effective area of contact between the wheel and axle is increased
- (c) The effective area of contact between the wheel and axle is reduced
- (d) None of the above statements is correct

Ans : (c) The roundness of the bearing creates less contact between the bearing that is trying to move objects and the objects being moved. A reduction in contact area means less friction.

89. Consider the following phenomena :

- 1. Size of the sun at dusk
- 2. Colour of the sun at dawn
- 3. Moon being visible at dawn
- 4. Twinkle of stars in the sky
- 5. Polestar being visible in the sky

Which of the above are optical illusions ?

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

Ans : (c) The following are the optical illusions-

- Size of the sun at dusk
This is an optical illusion. The sun appears larger near the horizon due to the Ponzo illusion, a perceptual effect where distant objects appear larger.
- The red appearance of the sun at sunrise and sunset, it happens due to the refraction of light.
- While, polestar and moon are visible at dawn in the actual (real) scenario.

90. Rainbow is produced when sunlight falls on drops of rain. Which of the following physical phenomena are responsible for this ?

- 1. Dispersion
- 2. Refraction
- 3. Internal reflection

Select the correct answer using the codes given below

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

Ans : (d) Option-1, Each individual droplet of water acts as a tiny prism that both disperses the light and reflects it back to our eye.

Option-2, Since water is more denser than air, light is refracted as it enters the drop.

Option-3, Some of the light will reflect off the back of the drop if the angle is larger than the critical angle (48° for water).

91. Many transplanted seedlings do not grow because

- (a) the new soil does not contain favourable minerals
- (b) most of the root hairs grip the new soil too hard
- (c) most of the root hairs are lost during transplantation
- (d) leaves get damaged during transplantation

Ans : (c) Newly transplanted trees or shrubs experience some degree of transplant shock. This is simply the plant reacting to having been moved. It is generally caused by damage to the roots of the plants during transplant. While the thickest roots are nearest to the root ball, the most important roots, those that actually "do the work", are located the farthest away from the plant. These tiny roots are covered by even tinier hairs which absorb most of the water that is eventually carried to the top growth of the plant.

92. Economic growth in country X will necessarily have to occur if –

- (a) there is technical progress in the world economy.
- (b) there is population growth in X.
- (c) there is capital formation in X.
- (d) The volume of trade grows in the world economy.

Ans : (c) a & d statement does not say anything about country X, only about the general world economy. In b, if there is population growth without any avenues for the economy to absorb them, it will have a deteriorating effect. C is the most appropriate option as whenever there is capital formation in country, it will lead to growth.

93. Which of the following statements is/are correct?

- 1. Viruses lack enzymes necessary for the generation of energy
- 2. Viruses can be cultured in any synthetic medium
- 3. Viruses are transmitted from one organism to another by biological vectors only.

Select the correct answer using the codes given below :

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

Ans : (a) Statement 1 is correct and viruses do not have the capacity to survive on their own and they need a living host for survival. Statement 2 is incorrect; viruses cannot grow in a synthetic medium. Statement 3 is incorrect because viruses enter the body from the environment or other individuals from soil to water or air via nose, mouth, or any cracks in the skin and seek a cell to infect.

94. Which of the following leaf modifications occurs/occur in desert areas to inhibit water loss

1. Hard and waxy leaves
2. Tiny leaves or no leaves
3. Thorns instead of leaves

Select the correct answer using the codes given below :

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

Ans : (d) To prevent water loss in the desert, there are three factors which are as follows- Hard and Waxy leaf, small leaf or foliage, Thorn in place of the leaf. Since there is a shortage of water in the desert land, the plants do not get enough water. In order to maintain water compatibility, the emission of water is minimal, for this the bark of desert plants turn into hard foliage and leaf into a thorn.

95. The known forces of nature can be divided into four classes, viz., gravity, electromagnetism, weak nuclear force and strong nuclear force. With reference to them, which one of the following statements is not correct ?

- (a) Gravity is the strongest of the four
- (b) Electromagnetism acts only on particles with an electric charge
- (c) Weak nuclear force causes radioactivity
- (d) Strong nuclear force holds protons and neutrons inside the nucleus of an atom

Ans : (a) The known forces of nature are divided into four classes. These forces are gravity force, electromagnetism force, weak nuclear force and strong nuclear force. The decreasing order of these forces is as follows-strong nuclear force > electromagnetism force > weak nuclear force > Gravitational force.

96. The efforts to detect the existence of Higgs boson particle have become frequent news in the recent past. What is / are the importance/ importances of discovering this particle ?

1. It will enable us to understand as to why elementary particles have mass.
2. It will enable us in the near future to develop the technology of transferring matter from one point to another without traversing the physical space between them.
3. It will enable us to create better fuels for nuclear fission.

Select the correct answer using the codes given below.

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

Ans : (a) Higgs Boson is a particle postulated by the standard model of physics to provide mass to all particles in the universe. Discovery of the Higgs Boson will help us to further understand why elementary particles have mass.

97. Mycorrhizal biotechnology has been used in rehabilitating degraded sites because mycorrhiza enables the plants to –

1. resist drought and increase absorptive area

2. tolerate extremes of pH
3. resist disease infestation

Select the correct answer using the codes given below :

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

Ans : (d) Mycorrhizal biotechnology is used in the rehabilitation of degraded sites. This gives plants the ability to resist drought and increases absorptive area. Also, the ability to tolerate pH extremes and resistance to disease increases.

98. Who among the following constitute the National Development Council ?

1. The Prime Minister
2. The Chairman Finance Commission
3. Ministers of the Union Cabinet
4. Chief Ministers of the States

Select the correct answer using the codes given below :

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

Ans : (b) On August 6, 1952, the National Development Council was formed as a non-constitutional body by a resolution of the government. It is headed by the Prime Minister. Initially, the chief minister of the states used to be its member. However, since 1967 all members of the Union Council of Ministers and Planning Commission and Administrations of Union Territories are also its members.

99. The national income of a country for a given period is equal to the –

- (a) total value of goods and services produced by the nationals.
- (b) Sum of total consumption and investment expenditure.
- (c) sum of personal income of all individuals.
- (d) money value of final goods and services produced.

Ans: (d) National income means the sum of the monetary value of the final goods and services produced as a result of the economic activities of a nation in a year. This includes the prices of all final goods and services that have been produced by ordinary residents of the country living within or outside the domestic boundary. It also includes the means of income earned from abroad.

100. Which of the following grants / grant direct credit assistance to rural households ?

1. Regional Rural Banks
2. National Bank for Agriculture and Rural Development
3. Land Development Banks

Select the correct answer using the codes given below :

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

Ans : (c) NABARD do not provide direct assistance. It "refinance" the assistance by other institutions.

UNION PUBLIC SERVICE COMMISSION

Civil Services (Preliminary Exam) - 2014

GENERAL STUDIES : PAPER-I

Time: 2 hours

(Exam Date : 24.08.2014)

Maximum Number: 200

1. What are the significances of a practical approach to sugarcane production known as 'Sustainable Sugarcane Initiative' ?

1. Seed cost is very low in this compared to the conventional method of cultivation
2. Drip irrigation can be practiced very effectively in this.
3. There is no application of chemical/inorganic fertilizers at all in this.
4. The scope for intercropping is more in this compared to the conventional method of cultivation.

Select the correct answer using the code given below:

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

Ans. (b) The SSI method encourages the application of organic manure as it enhances the macro and micronutrient content in the soil in an eco- friendly way and helps in optimum utilization of some of the chemical fertilizers.

2. If a wetland of international importance is brought under the 'Montreux Record', what does it imply?

- (a) Changes in ecological character have occurred are occurring or are likely to occur in the wetland as a result of human interference
- (b) The country in which the wetland is located should enact a law to prohibit any human activity within five kilometers from the edge of the wetland
- (c) The survival of the wetland depends on the cultural practices and traditions of certain communities living in its vicinity and therefore the cultural diversity therein should not be destroyed.
- (d) It is given the status of 'World Heritage Site'.

Ans. (a): The Montreux Record is a register of wetland sites on the list of wetlands of International Importance where changes in ecological character have occurred, or are occurring, or likely to occur as a result of technological developments, pollution as other human interference. It is maintained as part of the Ramsar List. Currently 48 sites are listed in the Montreux Record. Indian sites like Keoladeo National Park- Rajasthan, Loktak Lake-Manipur are included in Montreux Record.

3. Which one of the following pairs of islands is separated from each other by the 'Ten Degree Channel' ?

- (a) Andaman and Nicobar.
- (b) Nicobar and Sumatra.
- (c) Maldives and Lakshadweep.
- (d) Sumatra and Java.

Ans. (a): The entire group of Islands is divided into two broad categories - the Andaman in the north and the Nicobar in the South. They are separated by a water body which is called the Ten Degree Channel.

4. Consider the following pairs :

Programme/Project	Ministry
-------------------	----------

- | | |
|--|---|
| 1. Drought -prone Area :
Programme | Ministry of
Agriculture |
| 2. Desert Development/ :
Programme | Ministry of
Environment and
Forests |
| 3. National Watershed / :
Development Project | Ministry of Rural
Development |

Which of the above pairs is/are correctly matched?

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

Ans. (d): Drought prone Area Programme and Desert Development Programme are being run by the Department of Land Resources, Ministry of Rural Development. The National Watershed Development project for rainfed areas is being run by the Department of Agriculture with the cooperation of its various departments.

5. With reference to Bombay Natural History Society (BNHS), consider the following statements-

1. It is an autonomous organization under the Ministry of Environment and Forests.
2. It strives to conserve nature through action – based research, education and public awareness.
3. It organizes and conducts nature trails and camps for the general public.

Which of the statements given above is/are correct?

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

Ans. (c): The Bombay Natural History Society is one of the largest non-governmental organizations in India, established on 15 September, 1883 engaged in conservation and biodiversity research. It strives to conserve nature through action-based research education and public awareness.

6. With reference to 'Global Environment Facility', which of the following statements is/ are correct?

- It serves as financial mechanism for 'Convention on Biological Diversity' and 'United Nations Framework Convention on Climate Change'.
- It undertakes scientific research on environmental issues at global level.
- It is an agency under OECD to facilitate the transfer of technology and funds to underdeveloped countries with specific aim to protect their environment.
- Both (a) and (b)

Ans. (a): GEF is an independently operating financial organization, the GEF provides grants for projects related to biodiversity climate change, international waters land degradation, the Ozone layer and persistent organic pollutants.

7. With reference to technologies for solar power production, consider the following statements :

- 'Photovoltaics' is a technology that generates electricity by direct conversion of light into electricity, while, 'Solar Thermal' is a technology that utilizes the Sun's rays to generate heat which is further used in electricity generation process.
- 'Photovoltaics' generates Alternating Current (AC), while Solar Thermal generates Direct Current (DC).
- India has manufacturing base for Solar Thermal technology, but not for 'Photovoltaics'.

Which of the statements given above is/ are correct ?

- 1 only
- 2 and 3 only
- 1, 2 and 3
- None

Ans. (a): 'Photovoltaics' is a technology that generates electricity by direct conversion of light into electricity, while 'Solar Thermal' is a technology that utilizes the Sun's rays to generate heat which is further used in the electricity generation process. Both Photovoltaic cells and solar thermal generate Direct Current (DC). India has a manufacturing base for both.

8. Consider the following languages.

- Gujarati
- Kannada
- Telugu

Which of the above has/have been declared as 'Classical Language/ Languages' by the Government ?

- 1 and 2 only
- 3 only
- 2 and 3 only
- 1, 2 and 3

Ans. (c) : Tamil language has been conferred classical language status by the Government of India in 2004, Sanskrit language in 2005, Telugu, Kannada and Malayalam language in 2008. In February 2014, the Government of India also gave the status to Odia language. Now, all 6 languages have got the status of classical language.

9. Consider the following pairs:

- Dampa Tiger Reserve : Mizoram
- Gumti Wildlife Sanctuary : Sikkim
- Saramati Peak : Nagaland

Which of the above pairs is/are correct matched?

- 1 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Ans. (c): Dampa Tiger Reserve is located in Mizoram. The Gumti Wildlife Sanctuary is in Tripura, while the Saramati peak extends from the state of Nagaland in India to the Sagaing region of Burma.

10. With reference to a conservation organization called 'Wetlands International', Which of the following statements is/ are correct?

- It is an inter-governmental organization formed by the countries which are signatories of Ramsar Convention.
- It works at the field level to develop and mobilize knowledge, and use the practical experience to advocate for better policies.

Select the correct answer using the code given below;

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Ans. (b): Wetlands International is a non-profit and non-governmental organisation working to protect and enhance wetlands and its resources. Its headquarter is located in the Netherlands and the organization operates in over 100 countries.

11. With reference to a grouping of countries known as BRICS, consider the following statements :

- The first Summit of BRICS was held in Rio de Janeiro in 2009.
- South Africa was the last to join the BRICS grouping.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Ans. (b): BRICS is the acronym for an association of the five major emerging national economies : Brazil, Russia, India, China and South Africa. The grouping was originally known as "BRIC" before the inclusion of South Africa in 2010. The BRIC first formal summit held in Yekaterinburg (Russia) commenced on 16th June 2009.

12. Consider the following diseases :

- Diphtheria
- Chickenpox
- Smallpox

Which of the above diseases has/have been eradicated in India ?

- 1 and 2 only
- 3 only
- 1, 2 and 3
- None

Ans. (b): India was declared smallpox free in April 1977. In February 2000, India was declared a disease-free country by Guinea worm by the World Health Organization and on 27th March 2014 was granted the status of a polio-free country.

13. Which of the following phenomena might have influenced the evolution of organisms?

1. Continental drift
2. Glacial cycles

Select the correct answer using the code given below :

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

Ans. (c): Both continental drift and Glacial cycles influenced the evolution of organisms. One of the most prominent examples of the effect of continental drift on the evolution of organisms is the unique primates found in Australia and South America. The final stages of the revolution of Genus Homo occur in the last there glacial cycles.

14. Other than poaching, what are the possible reasons for the decline in the population of Ganges River Dolphins?

1. Construction of dams and barrages on rivers.
2. Increase in the population of crocodiles in rivers.
3. Getting trapped in fishing nets accidentally.
4. Use of synthetic fertilizers and other agricultural chemicals in crop-fields in the vicinity of rivers.

Select the correct answer using the code given below:

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

Ans. (c): The Ganga River Dolphin is found in the Ganges-Brahmaputra-Meghna (GBM) and Karnaphuli-Sangu rivers of India and Bangladesh. The population of the Ganges Rivers Dolphin has declined to less than 1800 from 6000 Since 1982 due to construction of dams and water pollution caused by pesticides, fertilizers and industrial effluents. The crocodile population has nothing to do with the decline in population of dolphins.

15. The Radcliffe Committee was appointed to-

- (a) solve the problem of minorities in India
- (b) give effect to the Independence Bill
- (c) delimit the boundaries between India and Pakistan
- (d) enquire into the riots in East Bengal

Ans. (c) On 17th August 1947, the Radcliffe Line was declared as the boundary between India and Pakistan, following the Partition of India. In June 1947, Britain commissioned Sir Cyril Radcliffe to head the two Boundary (one for Punjab and the other for Bengal), to determine which territories will be assigned to which nation. The boundary commission was asked to demarcate areas in Punjab based on religious majority.

16. Brominated flame retardants are used in many household products like mattresses and upholstery. Why is there some concern about their use?

1. They are highly resistant to degradation in the environment.
2. They are able to accumulate in humans and animals.

Select the correct answer using the code given below:

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

Ans. (c): Brominated flame retardants (BFRs) have routinely been added to customer products to make it more difficult for a material to ignite or reduce the spread of fire. But due to their chemical structure, they are highly resistant to degradation in the environment, due to which they can accumulate in humans and animals if entered into the digestive system.

17. Consider the following :

1. Bats
2. Bears
3. Rodents

The phenomenon of hibernation can be observed in which of the above kinds of animals?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1,2 and 3
- (d) Hibernation cannot be observed in any of the above

Ans. (c) : Hibernation is a state of inactivity and metabolic depression in endotherms. There are several animals that hibernate-skunks, bees, snakes, and groundhogs , but bears and bats are the most well-known. Rodents also undergo hibernation.

18. Which one of the following is the largest Committee of the Parliament ?

- (a) The Committee on Public Accounts
- (b) The Committee on Estimates
- (c) The Committee on Public Undertaking
- (d) The Committee on Petitions

Ans. (b): The Estimates Committee is the largest committee of the parliament. It consists of 30 members, all are appointed from the Lok Sabha. The function of this committee is to report on expenditures and the economy and suggest measures to boost the economy and related policies. It works continuously throughout the year.

19. Which of the following add/adds carbon dioxide to the carbon cycle on the planet Earth ?

1. Volcanic action
2. Respiration
3. Photosynthesis
4. Decay of organic matter

Select the correct answer using the code given below

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

Ans. (c): Activities such as volcanic activity, respiration and decay of organic matter etc, contribute carbon dioxide to the carbon cycle on the Earth's surface. In the process of photosynthesis, oxygen is released by plants by consuming carbon dioxide.

20. If you walk through countryside, you are likely to see some birds stalking alongside the cattle to seize the insects disturbed by their movement through grasses. Which of the following is/are such bird/ birds?

1. Painted Stork
2. Common Myna
3. Black-necked Crane

Select the correct answer using the code given below :

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

Ans. (b): Common Myna are the birds stalking alongside the cattle to seize the insects disturbed by their movement through grasses. The common Myna is readily identified by the brown body, black hooded head and the bare yellow patch behind the eye.

21. In medieval India, the designations 'Mahattara' and 'Pattakila' were used for-

- (a) military officers
- (b) village headman
- (c) specialist in Vedic rituals
- (d) chiefs of craft guilds

Ans. (b): In medieval India, the designations 'Mahattara' and 'Pattakila' were used for village headmen. The Headmen is the leader of the community in that village, who owned most of the land.

22. Lichens, which are capable of initiating ecological succession even on a bare rock, are actually a symbiotic association of -

- | | |
|------------------------|----------------------|
| (a) algae and bacteria | (b) algae and fungi |
| (c) bacteria and fungi | (d) fungi and mosses |

Ans. (b): Lichen grows mainly on rock, ground, old walls and leaves and bark of trees. In fact, lichen, algae and fungi are symbiotic associations.

23. If you travel through the Himalayas, you are likely to see which of the following plants naturally growing there ?

- | | |
|---------------|-----------------|
| 1. Oak | 2. Rhododendron |
| 3. Sandalwood | |

Select the correct answer using the code given below:

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

Ans. (a): Sandalwood trees are found in the foothills of the Himalayas. The moist deciduous forests are more pronounced in the regions which record rainfall between 100-200 cm. These forests are found in the northeastern states along the foothills of Himalayas, eastern slopes of the Western Ghats and Odisha. Teak, sal, Shisham, Hurra, Mahua, Amla, Semul, Kusum and sandalwood etc. are the main species of these forests.

24. Which of the following are some important pollutants released by steel industry in India ?

- | | |
|----------------------|-----------------------|
| 1. Oxides of sulphur | 2. Oxides of nitrogen |
| 3. Carbon monoxide | 4. Carbon dioxide |

Select the correct answer using the code given below :

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

Ans. (d): In a steel furnace, coke reacts with iron ore, releasing iron and generating CO and CO₂ gases. Due to the use of coal, pollutants such as SO_x and NO_x are released; thus all the options are correct.

25. Which of the following Kingdoms were associated with the life of the Buddha ?

- | | |
|-----------|-------------|
| 1. Avanti | 2. Gandhara |
| 3. Kosala | 4. Magadha |

Select the correct answer using the code given below:

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

Ans. (c): Both the kingdoms of Magadha and Kosala were related to Gautama Buddha's life. His mother was a princess from the Kosala dynasty. Both the kingdoms of Avanti and Gandhara were not directly related to the life of Buddha.

26. Every year a month long ecologically important campaign/festival is held during which certain communities/ tribes plant saplings of fruit-bearing trees. Which of the following are such communities/tribes ?

- (a) Bhutia and Lepcha
- (b) Gond and Korku
- (c) Irula and Toda
- (d) Sahariya and Agariya

Ans. (b): Every monsoon, the Gond and Korku tribes of Madhya Pradesh's Betul and Harda districts celebrate Hari Jiroti. It is a month-long festival of greenery, during which the tribals plant saplings of fruit-bearing trees.

27. The sales tax you pay while purchasing a toothpaste is a -

- (a) tax imposed by the Central Government.
- (b) tax imposed by the Central Government but collected by the State Government.
- (c) tax imposed by the State Government but collected by the Central Government.
- (d) tax imposed and collected by the state Government.

Ans. (d): Taxes on toothpaste comes under CST Act, which is administered by the state Government. Sales Tax is paid to the Sales Tax Authority in the state form where the goods are moved, i.e., the state from where the movement of goods begins.

28. What does venture capital mean ?

- (a) A short-term capital provided to industries.
- (b) A long-term start-up capital provided to new entrepreneurs.
- (c) Funds provided to industries at times of incurring losses.
- (d) Funds provided for replacement a renovation of industries.

Ans. (b): Venture Capital (VC) is a long term financial capital provided to early-stage high potential growth startup companies on new companies.

- 29. The main objective of the 12th five year Plan was-**
- inclusive growth and poverty reduction.
 - inclusive and sustainable growth.
 - sustainable and inclusive growth to reduce unemployment.
 - faster, sustainable and more inclusive growth.

Ans. (d): The objective of the 12th Five Year Plan (2012-17) was faster, sustainable and more inclusive growth. Five-Year Plans (FYPs) were centralised economic and social growth programs.

- 30. With reference to Balance of Payments, which of the following constitutes/constitute the Current Account ?**

- Balance of trade
- Foreign assets
- Balance of invisibles
- Special Drawing Rights

Select the correct answer using the code given below

- 1 only
- 2 and 3
- 1 and 3
- 1, 2 and 4

Ans. (c): Current account includes the balance of trade (exports-imports), net remittances, trade-in services.

- 31. The terms ‘Marginal Standing Facility Rate’ and ‘Net Demand and Time Liabilities’, sometimes appearing in news, are used in relation to**

- Banking operations
- Communication networking
- Military strategies
- Supply and demand of agricultural products.

Ans. (a): MSF came into effect from 9th May 2011. MSF scheme is provided by RBI by which the banks can borrow overnight upto 1 percent of their Net Demand and Time Liabilities (NDTL) i.e., 1 percent of the aggregate deposits and other liabilities of the banks.

- 32. What is/are the facility /facilities the beneficiaries can get from the services of Business Correspondent (Bank Saathi) in branchless areas ?**

- It enables the beneficiaries to draw their subsidies and social security benefits in their villages.
- It enables the beneficiaries in the rural areas to make deposits and withdrawals.

Select the correct answer using the code below:

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Ans. (c): Business correspondents (BCs) are retail agents engaged by banks for providing banking services at locations other than a bank branch/ATM. BCs enable a bank to provide its limited range of banking services at a low cost. Hence they are instrumental in promoting financial inclusion.

- 33. In the context of Indian economy, which of the following is/are the purpose/purposes of ‘Statutory Reserve Requirements’?**

- To enable the Central Bank to control the amount of advances the banks can create.
- To make the people’s deposits with banks safe and liquid.
- To prevent the commercial banks from making excessive profits.
- To force the banks to have sufficient vault cash to meet their day to day requirements.

Select the correct answer using the code below:

- 1 only
- 1 and 2 only
- 2 and 3 only
- 1, 2, 3 and 4

Ans. (a): The statutory reserve requirements is a banking sector arrangement under which all banks have to keep a certain percentage of their total deposits in the form of liquidity. Its purpose is basically to curb the lending tendency of banks.

- 34. Recently a series of uprisings of people referred to as ‘Arab Spring’ originally started from ?**

- Egypt
- Lebanon
- Syria
- Tunisia

Ans. (d): Arab Spring was a series of anti-government protests, uprisings, and armed rebellions that spread across much of the Arab world in the early 2010s. Arab Spring began with the overthrow of ruler of Tunisia, Ben Ali who fled to Saudi Arabia.

- 35. Consider the following countries :**

- Denmark
- Japan
- Russian Federation
- United Kingdom
- United States of America

Which of the above are the members of the ‘Arctic Council’ ?

- 1, 2 and 3
- 2, 3 and 4
- 1, 4 and 5
- 1, 3 and 5

Ans. (d): The Arctic council is a high-level inter-government forum that addresses issues faced by the Arctic government and the indigenous people of the Arctic. It has eight member countries Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States.

- 36. Consider the following pairs :**

Region often in news	Country
1. Chechnya	: Russian Federation
2. Darfur	: Mali
3. Swat Valley	: Iraq

Which of the above pairs is/are correctly matched?

- 1 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Ans. (a): Chechnya is a republic of Russia, which was formed on 10th January, 1993. It is 100 km from the Caspian Sea in the southern part of Eastern Europe in the North Caucasus. Darfur is located in western Sudan, while Swat valley is located in the Khyber Pakhtunkhwa province of Pakistan.