

# General Studies Paper I , 2013



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1. In the context of Indian economy 'open market operations' refers to :

- A** Borrowing by scheduled banks from RBI
- B** Lending by commercial banks to industries and trade
- C** purchase and sale of Govt securities by RBI
- D** None of the above

### Solution

- An Open Market Operation (OMO) is the buying and selling of government securities in the open market, hence the nomenclature.
- It is done by the central bank in a country (the RBI in India).
- When the central bank wants to infuse liquidity into the monetary system, it will buy government securities in the open market.
- This way it provides commercial banks with liquidity. In contrast, when it sells securities, it curbs liquidity.
- Thus, the central bank indirectly controls the money supply and influences short-term interest rates.
- In India, after the economic reforms of 1991, the OMO has gained more importance than the CRR (cash reserve ratio) in adjusting liquidity.
- Purchase and sale of Govt securities by RBI is known as open market operations.



2. Which of the following is likely to be most inflationary in its effect?

**A** Repayment of public debt

**B** Borrowing from public to finance a budget deficit

**C** Borrowing from banks to finance a budget deficit

**D** Creating new money to finance a budget deficit

### Solution

- When excess money is circulating in the market it leads to inflation.
- Creating new money means more money circulation in the market.
- It leads to inflation.
- Creation of new money to finance a budget deficit.

### 3. Priority sector lending by banks in India constitutes lending to

**A** Agriculture

**B** Micro and small enterprises

**C** Weaker sections

**D** All of the above

#### **Solution**

Priority sector lending by banks in India constitutes lending to

1. Agriculture
2. Micro, Small and Medium Enterprises
3. Export Credit
4. Education
5. Housing
6. Weaker sections etc

#### 4. Acid rain is caused by the pollution of environment by

- A** Carbon dioxide and Nitrogen
- B** Carbon dioxide and Carbon monoxide
- C** Ozone and Carbon dioxide
- D** Nitrous oxide and sulphur dioxide

#### Solution

- Acid rain is a rain or any other form of precipitation that is unusually acidic, meaning that it has elevated levels of hydrogen ions (low pH).
- It can have harmful effects on plants, aquatic animals and infrastructure.
- Acid rain is caused by emissions of sulfur dioxide and nitrogen oxide, which react with the water molecules in the atmosphere to produce acids.
- Acid rain has been shown to have adverse impacts on forests, freshwaters and soils, killing insect and aquatic life-forms, causing paint to peel, corrosion of steel structures such as bridges, and weathering of stone buildings and statues as well as having impacts on human health.

5. **Ball bearings are used in bicycles, cars, etc., because**

**A** The actual area of contact between the wheel and axel is increased

**B** The effective area of contact between the wheel and the axel is increased

**C** The effective area of contact between the wheel and the axel is reduced

**D** none of the above statements is correct

**Solution**

- Ball bearings are used to reduce friction between the surfaces.
- Ball bearings are spherical in shape. When these move they are not dragged, they roll in any direction.
- The friction force that causes these to move is **ROLLING** friction and is minimum as compared to static friction and dynamic friction.

**6. 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 the majority of the states
- C** with the consent of the states concerned
- D** without the consent of any states

### **Solution**

- The Preamble to the Constitution of India declares that India is the Sovereign Democratic Republic.
- Sovereignty has an internal as well as an external aspect.
- As regards external sovereignty, it has been said that "in consequence of its external independence, a State can unless restricted by treaty, manage its international affairs according to its discretion; in particular, it can enter into alliances and conclude other treaties, send and receive diplomatic envoys, acquire and cede territory, make war and peace".
- Parliament has power to make any law for the whole or any part of the territory of India for implementing treaty, agreement or convention with any other country or countries or any decision made at any international conference, association or other body."





7. 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

### Solution

- The Directive Principles of State Policy are guidelines for the framing of laws by the government.
- These provisions, set out in Part IV of the Constitution, are not enforceable by the courts, but the principles on which they are based are fundamental guidelines for governance that the State is expected to apply in framing and passing laws.

8. 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

### Solution

- Ecological niche is the term that describes not only the physical space occupied by an organism, but also its functional role in the community of organisms.
- The notion of ecological niche is central to ecological biogeography, which focuses on spatial patterns of ecological communities.
- "Species distributions and their dynamics over time result from properties of the species, environmental variation..., and interactions between the two—in particular the abilities of some species, especially our own, to modify their environments and alter the range dynamics of many other species."

9. Consider the following .

1. Star Tortoise.

2. Monilor lizard.

3. Pygmy hog.

4. Spider Monkey.

Which of the above found in India ?

**A** 1, 2 and 3

**B** Both 2 & 3

**C** Both 1 & 4

**D** All of them.

**Solution**

- Star tortoise is found in India in the dry and scrub forests.
- Pygmy Hog is an endangered species found in Assam.
- Only 150 animals are left.
- Monitor Lizard is found in India, Sri Lanka and Pakistan.
- Spider Monkey is the inhabitant of tropical forests of Central and South America.

**10. Consider the following animals:**

**1. Sea cow.**

**2. Sea horse.**

**3. Sea lion.**

**Which of the above is / are mammals. ?**

**A** 1 only

**B** 1 and 3 only

**C** 2 and 3 only

**D** All of the above

## Solution

- Sea cow is a mammal
- It is herbivore and it grows up to 9 meters.
- It looks like a large seal.
- Seahorse is the name given to 54 species of small marine fishes in the genus Hippo campus.
- Sea lion is a mammal.
- It is carnivore.
- It is also known as eared seal

11. Photo chemical smog is a resultant of the reaction among  $\text{_____}$ .

**A**  $(\text{NO}_2, \text{O}_3)$  and peroxyacetyl nitrate in the presence of sunlight.

**B**  $(\text{CO}, \text{O}_2)$  and peroxyacetyl nitrate in the presence of sunlight.

**C**  $(\text{CO}, \text{CO}_2, \text{NO}_2)$  at low temperature.

**D** High concentration of  $(\text{NO}_2, \text{O}_3, \text{CO})$  in the evening.

### Solution

- Photo chemical smog is a type of smog produced when ultraviolet light from the sun reacts with nitrogen oxides in the atmosphere.
- It is visible as a brown haze, and is most prominent during the morning and afternoon, especially in densely populated, warm cities.

12. **The annual range of temperature in the interior of continents is high as compared to coastal areas. What is/are the reason?**

1. **Thermal difference between land and water.**
2. **Variation in altitude between continents and ocean.**
3. **Presence of strong winds in the interior.**
4. **Heavy rains in the interior compared to casts.**

**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

### **Solution**

- Water is bad conductor of heat. Due to this moderating effect of the sea, places near coast have low range of temperature and high humidity.
- The places in the interior of continent do not experience moderating effects of sea.
- These places have extreme temperature.



13. **With reference to food chains in ecosystems, consider the following statements:**

1. **A food chain illustrates the order in which a chain of organisms feed upon each other.**
2. **Food chains are found within the populations of a species.**
3. **A food chain illustrates the numbers of each organism which are eaten by others.**

**Which of the statements given above is / are correct?**

**A** 1 only

**B** 1 and 2 only

**C** 1, 2 and 3

**D** None of the above

### **Solution**

1. A food chain illustrates the order in which a chain of organisms feed upon each other. (True)
2. Food chains are found within the populations of a species. (Man won't eat man – so, false)
3. A food chain illustrates the numbers of each organism which are eaten by others (food web illustrates the number not the food chain).

#### 14. Quit India Movement was launched in response to

A Cabinet Mission Plan

**B Cripps Proposals**

C Simon Commission Report

D Wavell Plan

#### Solution

- When the Second World War broke out in 1939, Britain declared India a party to the war as part of the British Empire.
- This led to a massive uproar, as Viceroy Lord Linlithgow took this step without consultation with Indians. This major decision led to massive protests from the Congress Party, and as a result, party leaders, who were heading 7 provincial governments, resigned from their posts.
- The Muslim League celebrated it as Deliverance Day.
- The background that led to the series of events concerning the Cripps Mission was:
  - “India would be a dominion associated with the United kingdom”.

- It promised that immediately after the war is stopped, steps would be taken up to set up an elected body charged with the task of making the constitution for India and provisions would be made so that the Indian states could participate in the framing of the constitution.
- Important Facts on Cripps Mission
- Through the Cripps mission for the first time, British government recognized the “Right of Dominion’ for India.
- Indians were given promise of liberty to frame their own constitution.
- The Cripps mission which was a move to appease the Congress, Muslim League and Indian states at the same time was rejected by all of them.

15. Which among 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

### Solution

- There is strong evidence for the transmission of hepatitis B virus infection, hepatitis C virus infection, and syphilis by tattooing.
- Tattooing may also transmit the human immuno deficiency virus (HIV) although it still lacks having any convincing evidence

16. **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 Solution using the codes given below:**

**A** 1 only

**B** 2 and 3 only

**C** 1 and 3 only

**D** 1, 2 and 3

### **Solution**

- Using a mycorrhiza, fungus and plants develop a symbiotic relationship.
- Plants and their roots grow and develop as a result of this relationship.
- Mycorrhizal fungi function as a type of biofertilizer and support the chemistry and biology of the soil.
- These come in 2 types namely:
- Endomycorrhizae: An orchid example.

- Ectomycorrhizae: Pines, mushrooms, etc. as an example.

17. Consider the following:

1. Electromagnetic radiation

2. Geothermal energy

3. Gravitational force

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 only

B 1, 3, 5 and 6 only

C 2, 4, 5 and 6 only

D 1, 2, 3, 4, 5 and 6

### Solution

- The planet earth is facing some significant dynamic changes in a lot of ways Geothermal Energy Plate movements Rotation of the Earth Electromagnetic radiation Geothermal energy and the Revolution of the Earth play an active role in making this change happen .

- This is how seasons on earth change winds occur and much more.



**18. 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

**Solution**

- When images look different from the Real one, it is called 'optical illusion' (or visual illusion).
- In this process, any object or image seen by the human eye is interpreted by the brain in such a way that its appears different from the actual image.

- Optical Illusion can be of three main types - Verbal, physical and cognitive.
- They are often used as mental exercises for adults and children.

**19. The efforts to detect the existence of Higgs boson particle have become frequent news in the recent past. What is /are the importance/importance 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 to 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

### **Solution**

- The standard model of particle physics hypothesized about Higgs Boson in 1964.
- The discovery of Higgs particle was announced at CERN on 4 July 2012.

- The discovery has been called monumental because it appears to confirm the existence of the Higgs field, which is pivotal to the Standard Model and other theories within particle physics.

20. 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

### Solution

- Viruses are non-cellular, microscopic infectious agents that can only replicate inside a host cell.
- From a biological perspective, viruses cannot be classified either a living organism or non-living. '
- A virus can be an infectious agent which only replicates within a host organism.
- This is due to the fact that they possess certain defining characteristic features of living organisms and non-living entities.

- In a nutshell, a virus is a non-cellular, infectious entity made up of genetic material and protein that can invade and reproduce only within the living cells of bacteria, plants and animals.
- For instance, a virus cannot replicate itself outside the host cell.
- This is because viruses lack the required cellular machinery.

21. **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

## Solution

- Metabolic activity in fresh fruits and vegetables continues for a short period after harvest.
- The energy required to sustain this activity comes from the respiration process.
- Respiration involves the oxidation of sugars to produce carbon dioxide, water, and heat.
- The respiration rate of a product determines how fast the chemical process occurs.
- The higher the rate the faster glucose will be transformed and the faster all supplies will be depleted.
- Therefore, when it comes to the storage of fruits and vegetables
- we want to keep the respiration rates as low as possible without killing the produce.



22. **Many transplanted seedlings do not grow because**

**A** the new soil does not contain favorable 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

### **Solution**

- Transplantation is the process in which the plant is grown in other places by replacing it from its original place.
- In this process, most of the time root hairs are lost because dry soil present during transplantation takes away all the moisture from the plant. Hence option 3 is correct

23. 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

### Solution

- Deficit financing refers to the difference between expenditure and receipts. In public finance, it means the govt. is spending more than what it is earning.
- Deficit financing is a necessary evil in a welfare state as the states often fail to generate tax revenue which is sufficient enough to take care of the expenditure of the state.
- The basic intention behind deficit financing is to provide the necessary impetus to economic growth by artificial means.

24. 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

E All the above

### Solution

- Thermal power plants use water to turn into steam (heat energy) to generate electricity (electrical energy).
- The Industrial water consumption is about 10-15% of the total.
- If we do not consider agriculture as an industry then the highest water consumer are Thermal Power Plants which comprise of 87% of the total industrial water usage or about 8-12% of the total water consumption.

25. **The Narmada river flows to the west, while most other large peninsular river 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

### **Solution**

- The land slopes west ward from central india due to deposition of alluvial fan.
- The rift valley which is occupied by the Narmada is one of the reasons of Narmada flowing to the west.
- The rift is formed due to complex natural processes leading to either subsidence or upliftment of the earth's surface.
- The area is seismically active and has seen major upheavals.
- Such movements reshape the landscape.

- There is readjustment of slopes and rivers either start bringing more material or change course.

26. 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

### Solution

- Guru Nanak Dev was born in 1469.
- Babur defeated Ibrahim Lodi in 1526.
- When Babur took over and established the Mughal dynasty, Nanak was travelling to different parts of India and preaching Sikhism.
- Babur once met Guru Nanak during one of his travels.

27. **Variations in the length of daytime and nighttime from season to season are due to:**

**A** The earth's rotation on its axis.

**B** The earth's revolution around the sun in an elliptical manner.

**C** Latitudinal position of the place.

**D** Revolution of the earth on a tilted axis.

### **Solution**

- Rotation of earth on its axis causes day and night but the revolution of earth in an elliptical manner around the sun causes seasons, equinoxes and solstices.
- When one hemisphere of the Earth is tilted towards the Sun, it experiences longer daylight hours, and the opposite hemisphere, tilted away from the Sun, has shorter daylight hours.
- The spring equinox and the autumn equinox are the only two times of the year when the earth's axis is neither towards nor away from the sun.

28. **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 groundwater**

**D** Exists as soil moisture

### **Solution**

- The percentage of freshwater that exists on earth is 3% out of which almost 70% is icecaps and glaciers.
- And the remaining 30% is the groundwater. Lakes, rivers and swamps are approximately 10% of that 30% of ground water.



29. "Climate is extreme, rainfall is scanty and the people used to be nomadic herders". This statement best describes which of the following regions?

A African Savannah

B Central Asian Steppe

C North American Priarie

D Siberian Tundra

### Solution

The central asian steppes run through Kazakhstan, Turkmenistan, Uzbekistan and Mongolia. The climate here is harsh with dust storms, little to no rainfall and temperature ranging from -4 to 50 degree celsius.

30. Which of the following adds/add nitrogen to the soil?

1. Burning of coal by man
2. Death of vegetation
3. Excretion of urea by animals

Select the correct answer using the codes given below.

A 3 only

B 1 and 3 only

C 2 and 3 only

D 1, 2 and 3

### Solution

- Burning of coal by man is the main source of atmospheric carbon dioxide. It has nothing to do with adding nitrogen to the soil.
- Nitrogenous waste products of living organisms such as urea and dead remains of organisms are converted back into inorganic ammonia by the bacteria.

31. RBI regulates the commercial banks in the 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** 2,3,4 only

**C** 1,2 and 3 only

**D** All the above

### Solution

- RBI is called the banker's bank and regulates the banking sector in India.
- By using mechanisms like CRR, SLR etc, it keeps a check on liquidity of assets of the banks.
- Moreover, RBI also sets rules and regulations concerning merger of banks, their winding-up operations and branch expansion.

32. **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

### **Solution**

**Demographic dividend:** The economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population is larger than the non-working-age share of the population.

1. Promoting skill development : It can help harvest the benefits of Demographic dividend (DD).
2. Introducing more social security schemes - can improve the Social security of poor and downtrodden but it doesn't have any direct effect on DD.
3. Reducing infant mortality rate: It can help improve the condition of new borns.

4. Privatization of higher education: It can help build more robust and resilient infrastructure but doesn't directly effect DD.

**33. 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 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 only

**D** 1, 2 and 3

### **Solution**

- In India, Members of the cabinet are members of the parliament unlike UK parliament.
- Ministers hold the office till they enjoy confidence in the parliament. ( Executive is responsible to the legislature).
- The Head of the state is President and he / she does not head the cabinet.

34. Which one of the following is the correct sequence of ecosystem in the order of decreasing productivity?

**A** Oceans, mangroves, lakes, grassland

**B** Mangroves, oceans, grassland, lakes

**C** Mangroves, grasslands, lakes, oceans

**D** Oceans, lakes, grassland, mangroves

### Solution

- Mangroves, oceans, grassland, lakes are the following is the correct sequence of ecosystem in the order of decreasing productivity.

35. 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 above

### Solution

- They worshipped both male and female deities.
- The concept of temples were not noticed during that period and the people of IVC were not aware of horse chariots.



36. Consider the following statements :

1. National Development Council is an organ of the Planning Commission.
2. The Economic and Social Planning is kept in the Concurrent List in the Constitution of India.
3. The Constitution of India prescribes that Panchayats should be assigned the task of preparation of plans for economic development and social justice.

Which of statements is\are correct?

A 1 only

B 2 and 3 only

C 1 and 3 only

D 1, 2 and 3

### Solution

(b) Current list item number 20 deals with economic and social planning. Seventy-Third Amendment Act, 1992 empowers the Panchayats to make plans for economic development and social justice.

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

### Solution

- Nirvana is a Sanskrit word that means 'extinction' or 'blowing out'.
- In Buddhism, it refers to the state of perfect peace and freedom from suffering that is achieved through the complete elimination of desire.
- Desire is seen as the root of all suffering in Buddhism.
- Nirvana is the state of being free from all attachment and desire.

38. Consider the following statements:

1. Inflation benefits the debtors.
2. Inflation benefits the bond-holders.

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

**A** Only 1

**B** Only 2

**C** Both 1 and 2

**D** Neither 1 nor 2

### Solution

- Inflation benefits the debtors, Inflation allows debtors pay lenders back with money that is worth less than it was when it was originally borrowed.
- Inflation can have negative implications for bond-holders, especially those holding fixed-rate bonds.
- Some bonds, such as inflation-linked bonds or TIPS (Treasury Inflation-Protected Securities), are designed to mitigate the impact of inflation.

39. **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 intermediary goods produced.

### **Solution**

- National income of a country means the sum total of incomes earned by the citizens of that country during a given period, over a year.
- Final goods are those goods which are available for final consumption.
- Intermediary goods are not entertained while calculating the national Income.
- National income accounting refers to the set of methods and principles that are used by the government for measuring production and income, or in other words economic activity of a country in a given time period.

40. **Supply of money remaining the same when there is an increase in demand for money, there will be:**

**A** a fall in the level of prices.

**B** an increase in the rate of interest.

**C** a decrease in the rate of interest.

**D** an increase in the level of income and employment.

### **Solution**

- If increase in demand for money, people will deposit less money in banks. Hence, banks will increase rate of interest to attract people to deposit money in bank.

41. **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

### **Solution**

- Internally capital formation takes place when a country does not spend all its current income and consumption, but saves a part of it and uses it for investment for increasing further production.
- This act of saving and investment is described as capital accumulation or capital formation.
- The amount invested by the owner in a business is called capital. Capital is used to acquire fixed assets or for operational purposes such as purchase of raw materials.

42. **With reference to the food chains in ecosystems, which of the following kinds of an 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

### **Solution**

Bacteria and Fungi both are known as decomposer organisms.

- Bacteria are important decomposers; they can break down any kind of organic matters.
- Fungi are primary decomposers, they not only decompose the surface organisms but can also penetrate deep into the organic matters.
- Hence option B is correct.





43. 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 codes given below.

A 1 and 2 only

B 2 only

C 1 and 3 only

D 1,2 and 3

### Solution

The correct answer is 1, 2 and 3 .

### CONSTITUTIONAL BODIES:

1. The bodies/institutions that find a place in the Constitution of India, are termed as Constitutional Bodies.

### NON-CONSTITUTIONAL BODIES:

- The institutions that do not find place in the Constitution and are established after passing an act of Parliament. -Following are the Non-Constitutional Bodies:
- Central Bureau of Investigation
- Central Information Commission
- Central Vigilance Commission
- Lokpal and Lokayuktas
- NITI Aayog
- National Development Council
- National Disaster Management Authority
- National Human Right Commission
- National Investigation Agency
- State Human Right Commission
- Zonal Councils

44. 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

### Solution

- Laterites are soil types **rich in iron and aluminium**, formed in hot and wet tropical areas. Nearly all laterites are rusty-red because of iron oxides.
- It forms in tropical and subtropical regions where the climate is humid.
- Tapioca and cashew nuts grow well on these soils.

45. 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** Only 2

**C** 1, 3 and 4

**D** All of these

### Solution

- Lion-tailed macaque is found in Western Ghats of India.
- It is an endangered species which is mostly found in Kerala, Karnataka and the border region of Tamil Nadu.

46. 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 codes given below:

**A** 1 and 3

**B** 2, 4 and 5

**C** 1, 3 and 5

**D** All of these

### Solution

- Water pollution is a major environmental issue in India.
- The largest source of water pollution in India is untreated sewage.
- The groundwater contains arsenic, fluoride and uranium consumed by 85% of the population.
- A substantial quantity of Uranium had been found in the tested sample of groundwater in Punjab.
- Hence, option (c) is the correct answer.



47. **Improper handling and storage of cereal grains and oilseeds result in the production of toxins known as aflatoxins, which are not destroyed by the normal cooking process? Aflatoxins are produced by:**

**A** Bacteria

**B** Protozoa

**C** Moulds

**D** Viruses

### **Solution**

- Aflatoxins are poisonous and cancer-causing chemicals produced by certain moulds which grow in soil, decaying vegetation and grain.
- They are regularly found in improperly stored staple commodities such as cassava, chilli peppers, corn, cottonseed, millet, peanuts, rice, wheat etc.

48. **In the grassland, trees do not replace the grasses as 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

### **Solution**

- Ecological succession is the gradual process by which ecosystems change and develop over time.
- In 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 the pioneer population, which is then replaced by grass.
- The grass, however, absorbs most of the water before it reaches the roots of the shrubs.
- Thus, the ecological succession does not occur beyond the grass.



49. Consider the following pairs:

**National Park River flowing through the park**

1. Corbett National Park : Ganga
2. Kaziranga National Park : Manas
3. Silent Valley National Park : Kaveri

Which of the above pairs is/are correctly matched?

A 1 and 2

B 3 only

C 1 and 3

D None of these

### Solution

- Ramganga and Kosi rivers flow through Corbett National Park but river Ganga does not flow through Corbett National Park.
- Brahmaputra, Diphlu, Mora Diphlu and Mora Dhansiri are the rivers which flow through Kaziranga National Park.
- Kunthipuzha river flows through Silent Valley National Park.
- Hence none of them is correctly matched.

50. Which of the following is/are unique characteristic/characteristics of equatorial forests?

1. The presence of tall, closely set trees with crowns forming a continuous canopy.
2. Co-existence of a large number of species.
3. The presence of numerous varieties of epiphytes.

Select the correct answer using codes given below:

A Only 1

B 2 and 3

C 1 and 3

D 1,2,3

### Solution

- Equatorial forests are found in such temperate zones which receive more than 200 cm rainfall.
- Tall, closely set trees forming canopy is a characteristic of these forests.
- The upper portion of canopy often supports rich epiphytes.
- About 80% of the world's biodiversity is found in equatorial forests.

51. **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

### **Solution**

- As per the recommendations proposed by cabinet Mission (1946), members of Constituent Assembly were elected by the members of the Provincial Legislative Assemblies.
- The Cabinet Mission Plan formulated a scheme by which the formation of the Constituent Assembly was held in November 1946.
- The Constituent Assembly's total strength was 389, out of which 296 seats have been allocated to British India and ninety-three seats to the princely states.
- Seats allotment in every province and the princely kingdom turned out to be completed according to their respective population.

**52. 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

### **Solution**

- All these are adaptation to harsh conditions of desert to provide minimum water loss.
- Plants have few or no leave and foilage is either vaxy hairy or needle shaped to prevent water loss.

53. **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

### **Solution**

- Recombinant DNA technology is that where individual genes get transferred from one organism to another across different species. see that on transferring carrot genes to rice, we get Golden rice.
- Recombinant DNA technology applied for producing transgenic organisms applies to plants, animals, and bacteria. As per research, movement of genetic material DNA taken from plant or animal can be placed in any and vice versa.

- Transferring genes from bacteria to man or man to bacteria or from bacteria to plant is possible.

54. **With reference to the history of philosophical thought in India, consider the following statements regarding Samkhya School**

**1. Sankhya does not accept the theory of rebirth or transmigration of the soul.**

**2. Sankhya 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

### **Solution**

- The Sankhya School is a part of six orthodox schools of Indian philosophy.
- Sankhya philosophy accepts the theory of rebirth or transmigration of the soul.
- Nescience is the cause of sorrow and self-enlightenment by knowledge is the solution of liberation from them.

- Sankhya held that it is the self-knowledge that leads to liberation and not any exterior influence or agent.



55. 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

C 1, 2 and 3

D None

### Solution

- The evidence of mural painting in Ajanta and Lepakshi temple is clearly visible, but it is not evident in Sanchi Stupa.
- The nucleus of Sanchi Stupa was a simple hemispherical brick structure built over the relics of the Buddha.
- It was crowned by the Chhatra, a parasol-like structure symbolising high rank, which was intended to honour and shelter the relics.

56. **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**

### **Solution**

- Contour Bunding is one of the simple method of soil and water conservation. This technique is used at places where the land is sloppy.
- Due to slope, soil and nutrients erode fast which makes agriculture on this land very uneconomical.
- To adopt this technique the agriculture fields contours are marked and then the bunds are taken along the contours.

57. In the context of the cultural history of India, a pose in dance and dramatics called Tribhanga has been a favourite of Indian artists from ancient times till today. Which one of the following statements best describes this pose?

**A**

One leg is bent and the body is slightly but oppositely curved at waist and neck

**B**

Facial expressions, hand gestures and make-up are combined to symbolize certain epic or historical characters

**C**

Movements of body, face and hands are used to as express oneself or to tell a story

**D**

A little smile, slightly curved waist and certain hand gestures are emphasized to express the feelings of love or eroticism.

### **Solution**

Tribhanga (tri-bent pose) is a standing body position or stance used in the traditional Indian sculpture, art and Indian classical dance form. Tribhanga is literally meaning three parts break, consists of three bends in the body; at the neck, waist and knee which gives it a gentle 'S' shape. Hence option (a) is the correct answer.

58. **Annie Besant was**

- 1. responsible for starting the Home Rule Movement**
- 2. the founder of the Theosophical Society**
- 3. Once the President of the Indian National Congress**

**Select the correct statement using the codes given below?**

**A** 1 only

**B** 2 and 3 only

**C** 1 and 3 only

**D** 1, 2 and 3

### **Solution**

Annie Besant was a British socialist, educationist and women's rights activist known for her role in fostering the Home Rule Movement in India.

As an educationist, her contributions include being one of the founders of the Banaras Hindu University. Annie Besant promoted studies of ancient Indian religions, philosophies and doctrines. She also established the Central Hindu School to encourage education.

59. Consider the following pairs:

1. Nokrek Bio-sphere 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

### Solution

- Nokrek Biosphere Reserve is situated in Garo Hills in Meghalaya. Pair 1 is correct .
- Loktak Lake is in Manipur. pair 2 is incorrect.
- Barail Range is in Assam.
- Though Namdapha National Park and Dafla Hill both are in Arunachal Pradesh, the two are separate entities. Pair 3 is incorrect.

**60. 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

### **Solution**

1. Gram Sabha is the authority for Scheduled Tribes and Other Traditional Forest Dwellers within the local limits of its jurisdiction.
2. It receives claims, consolidates and verifies them, prepares a map delineating the area of each recommended claim in such manner as may be prescribed for the exercise of such rights.
3. It then passes a resolution to the effect, and thereafter forwards a copy of the same to the SubDivisional Level Committee.

### **STATE LEVEL MONITORING COMMITTEE:**

According to Section 6(7) of FRA, the State Level Monitoring Committee has to perform the following functions:

1. Monitor the process of recognition and vesting of forest rights.
2. Submit to the Nodal Agency, the returns and reports demanded by it.

#### NODAL AGENCY:

According to Section 11 of the FRA, the following may be the Nodal Agency:

1. Ministry of Tribal Affairs
2. Any officer or authority authorized by the Central Government on this behalf.

The State Governments/UTs ensure that no eligible claim is rejected.

61. 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



## Solution

- International Union for Conservation of Nature (IUCN) enlisted some species as endangered species.
- Endangered species can be defined as those species which are under risk or threat of being extinct.
- In other words, species which are about to extinct. Many factors are responsible for this which may be natural or man-made.
- Endangered species, sooner or later enter the extinction phase. In order to prevent this, necessary actions have to be taken.

62. **‘Economic Justice’ as one of the objectives of the Indian Constitution has been provided in ?**

**A** The Preamble and the Fundamental Rights.

**B** The Preamble and the Directive Principles of State Policy.

**C** The Fundamental Rights and the Directive Principles of State Policy.

**D** None of these

### **Solution**

- ‘Economic, Justice’, as one of the objectives of the Indian Constitution, has been provided in the Preamble and Directive Principles.
- The term ‘justice’ in the Preamble embraces three distinct forms— social, economic and political, secured through various provisions of Fundamental Rights and Directive Principles.
- Economic justice denotes the non-discrimination between people on the basis of economic factors. It involves the elimination of glaring inequalities in wealth, income and property.

- A combination of social justice and economic justice denotes what is known as 'distributive justice'. The concept of Economic Justice is also mentioned under the Directive Principles of State Policy.

63. 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 the 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 the peasants debts

### Solution

- The demand in the Tebhaga movement was the reduction of the share of the landlords from one-half to one-third.
- Tebhaga movement (1946–1947) was significant peasant agitation, initiated in Bengal by the All India Kisan Sabha of peasant front of the Communist Party of India.
- During the Bengal Famine of 1943 the Communist Party of India provided relief to the peasantry of the Sundarbans area.
- In September 1946 Bangiya Pradeshik Kisan Sabha decided to launch the Tebhaga movement.
- The peasant movement broke out in Kakdwip, Sonarpur, Bhangar and Canning. Kakdwip and Namkhana were the storm centres of the

movement.

64. **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** The Simon Commission recommended Dyarchy in the provinces

**C** **There was no Indian member in the Simon Commission**

**D** The Simon Commission suggested the partition of the country

### **Solution**

- The Indian Statutory Commission also known as Simon Commission, was a group of seven Members of Parliament under the chairmanship of Sir John Simon.
- The commission arrived in British India in 1928 to study constitutional reform in Britain's largest and most important possession.
- One of its members was the future leader of the Labor Party Clement Attlee, who became committed to self-government for India

65. 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 fresh water into the sea.

**C** Warm and cold ocean currents meet.

**D** Continental shelf is undulating.

### Solution

- The most important fishing grounds in the world are located in shallow water close to the land where there is the mixing of cold and warm currents from different regions.
- Major fishing grounds of the world is found in the North-West Pacific Regions.

66. **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** 1,2 and 4 only

**C** 1 and 2 only

**D** All the above

### **Solution**

- The continents get heated faster and get cooled faster in comparison to the Oceans. This is the reason that the temperatures of the Oceans are moderate while that of continents is extreme.
- The moderating effect on the temperature of the land due to the proximity of the seas is called Maritime influence.



67. 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

### Solution

- A capital account is a general ledger account that is used to record the owners contributed capital and retained earnings.
- The capital account constitutes foreign loans, foreign direct investment, and portfolio investment.

68. 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 General of India.

Which of the statements given above is/are correct?

A 1 only

B 2 and 3 only

C 3 only

D All the above

**Solution**

- At present, it consists of 22 members (15 from the Lok Sabha and 7 from the Rajya Sabha).
- The term of office of the members is one year.
- The Committee on Public Accounts is constituted by Parliament each year for examination of accounts .

- It showing the appropriation of sums granted by Parliament for expenditure of Government of India,

69. 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 sees 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

### Solution

- An amendment to the constitution of India is introduced as a bill in the Parliament.
- It then must be approved by both the houses of Parliament.
- The amendments must then be ratified by the legislatures of at least one half of the states (not all the states).
- Once all these stages are complete the amendment is bound to receive the assent of the President of India.

70. 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

### **Solution**

- Article 76 of the constitution mentions that he/she is the highest law officer of India.
- As a chief legal advisor to the government of India, he advises the union government on all legal matters.
- He also is the primary lawyer representing Union Government in the Supreme Court of India.

- The Attorney General, like an Advocate General of a State, is not supposed to be a political appointee, in spirit, but this is not the case in practice.

### 71. The Ilbert Bill controversy was related to the

**A** Imposition of certain restriction to carry by the Indians

**B** Imposition of restrictions on newspapers and magazines published in Indian language

**C** **Removal of disqualifications imposed on the Indian Magistrates about the trial of the Europeans**

**D** Removal of duty on imported cotton cloth

### Solution

- Ilbert bill was drafted by Sir Courtenay Ilbert on 9th February 1883 during the viceroyship of Lord Rippon.
- The main objective behind the introduction of this bill is to allow Indian judges to try cases in session courts involving Britishers.
- The introduction of the bill had roused anger and resentment among people especially in English women and British tea and indigo planters in Bengal.

72. Consider the following liquid assets and arrange them in descending order of liquidity.

1. Demand deposits with the banks.
2. Time deposits with the banks
3. Savings deposits with the banks
4. Currency

Select the correct answer using the codes given below:

A 1-4-3-2

B 4-3-2-1

C 2-3-1-4

D 4-1-3-2

### Solution

- Currency is most liquid because you can use it as and when you want.
- A time deposit with the bank (e.g. fixed deposit), are the least liquid compared to a savings/demand deposit with banks and currency.
- That means decreasing order of liquidity will be 4---1. and Demand deposit with bank >more liquid> savings deposit
- Hence final order is 4-1-3-2 Hence the correct option is 4.



73. **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

### **Solution**

Chaitya is a place of worship, while Vihara is the dwelling place of the monks.

Both early Chaityas and Viharas were made by woods and later stone-cut Chaityas and Viharas were made.

74. **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 below.**

**A** 1 and 3

**B** 2 and 3

**C** Only 1

**D** All of these

### **Solution**

- The tradesmen had to pay light duties at ferries and barriers.
- After paying the revenue they could go to and fro to barter their merchandise.

- The punishment for social offences according to the traveller's account, were to cut off the nose, or an ear or a hand.
- Minor offences were dealt with fines. And to determine guilt or innocence, ordeals by fire, water and poison were the instruments which were used.
- During the period of Hiuen Tsang's visit the city most famous for the production of cotton cloth was Mathura. \*

**75. 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

### **Solution**

#### **PESA Act:**

- Enacted in 1996 to empower local self-governance in India's Scheduled Areas
- Recognizes unique cultural and linguistic identities of tribal communities
- Acknowledges tribal rights over natural resources
- Mandates establishment of Gram Sabhas for:
  - Managing natural resources
  - Resolving disputes
  - Overseeing development programs

- Reserves a minimum of 50% seats in Panchayati Raj Institutions for Scheduled Tribe members
- Promotes representation and decision-making power for tribal communities
- Decentralizes authority and fosters grassroots democracy
- Aims to address historical marginalization of tribal populations and promote inclusive development

76. **'Balance of Payments' of a country is a systematic record of?**

**A**

**All import and export transactions of a country during a specified time, usually in a year**

**B**

Goods exported by a country in a year

**C**

Economic transaction between the government of one country and the government of another country

**D**

The operation of capital from one country to another

### **Solution**

- Balance of payments can be defined as the record of all monetary transactions between a country's residents and other countries within a certain period of time.
- The details of transactions made by companies, individuals and government are contained in the Balance of Payments statement.

77. 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 and 2

**B** 2 and 3

**C** 1 and 3

**D** None of the above

### Solution

- Thunderstorms result from the rapid upward movement of warm moist air.
- They can occur inside warm moist air masses and at fronts. As the warm moist air moves upward it cools condenses and forms cumulonimbus clouds that can reach heights of over 20 km 12.45 miles.
- The thunderstorms are associated with the cumulonimbus clouds. These clouds normally form on warm sunny days but they can also be found on cold front.

- The lightning generates between 100 million and 1 billion volts of electricity and can heat the air to around 50K°F. The rapid expansion causes the shock waves.
- Thunder happens because the lightning would heat the air at huge temperatures and the air expands so fast that it make a loud clap of thunder.



78. Consider the following statements: (2013)

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

### Solution

- Gondwana is famous for coal fields not natural gas.
- Dharwar has minerals like iron, manganese but not petroleum.
- Mica occurs extensively in Kodarma, Jharkhand.

79. 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

Select the correct answer using the codes given below.

**A** 1 and 2

**B** 2 and 3

**C** 1 and 3

**D** All of the above

### Solution

- Indian coals by their very nature are high in ash content but low in sulphur content.
- Indian coal has its high fusion temperature of about  $1,500^{\circ}\text{C}$ .

80. Consider the following crops:

1. Cotton
2. Groundnut
3. Rice
4. Wheat

Which of these are Kharif crops?

A 1 and 4 only

B 2 and 3 only

C 1, 2 and 3

D 2, 3 and 4

### Solution

- Rabi Crops- Wheat, barley, mustard, sesame and peas
- Major Kharif Crops- Millets, paddy, Maize, Moong, Groundnuts etc
- Zaid Crops- vegetables, muskmelon and watermelon

81. **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

### **Solution**

- When a money bill returns to the Loksabha with amendments made by the Rajyasabha, it is open to Loksabha to accept or to reject any or all of the recommendations.
- When the Loksabha chooses to accept or decline the money bill with or without the recommendation, the money bill is "deemed passed in both houses.

**82. 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

**Solution**

- The Governor's appointment, his powers and everything related to the office of Governor have been discussed under Article 153 to Article 162 of the Indian Constitution.
- The Governor performs the same duties as of President, but for the State.
- Governor stands as executive head of a State and the working remains the same as of the office of President of India.
- It is stated that the Governor has a dual role.

- He is the constitutional head of the state, bound by the advice of his council of ministers.
- He functions as a vital link between the Union Government and the State Government.

83. 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

**Solution**

- Atlas mountain ranges are situated in the north-western part of Africa.
- They extend almost 2000km
- They passes through Morocco,Algeria,Tunisia

84. 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 3 only

D 1, 2 and 3

### Solution

- The Barabar rock cut caves are the oldest rock cut caves.
- They were originally made for the Ajivikas during the Mauryan period (322-185 BCE).
- The Ellora caves were built between 5th century and 10th century.
- There were 34 caves out of which 12 were Buddhist caves, 17 were Hindu caves and 5 were Jain caves at Elora.



- The proximity of the caves clearly demonstrates the religious harmony prevalent at that period of time.

85. 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

### Solution

- Bagasse can be used as a primary fuel source as it produces sufficient heat energy.
- Molasses can be used for the production of ethanol.
- Molasses cannot be used as one of the feedstocks for the production of synthetic chemical fertilizers as molasses contain calcium

.magnesium and iron were as synthetic fertilizers are comprised ofn  
NPK

**86. 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 Solution using the codes given below.**

**A** 1 and 2 only

**B** 2 and 3 only

**C** 1 and 3 only

**D** 1, 2 and 3

## Solution

- When sunlight falls on the drops of rain formation of a Rainbow occurs in the sky.
- These droplets work as a prism for the rays coming from the sun. When the sunlight gets through these droplets, it results in refraction and dispersion in seven colors known as VIBGYOR.
- Then it goes to total internal reflection.
- This happens due to combined phenomena of Dispersion, Refraction, and Total Internal reflection in the atmosphere.

87. Which one of the following groups of items is included in India's foreign exchange reserves?

A

Foreign-currency assets, Special Drawing Rights (SDRs) and loans from foreign countries

B

Foreign-currency assets, gold holdings of the RBI and SDRS

C

Foreign-currency assets, loans from the World Bank and SDRS

D

Foreign-currency assets, gold holdings of the RBI and loans from the World Bank

### Solution

- Foreign-exchange reserves are those reserves which a country's central bank keeps, generally in the form of US dollars.

### Benefits/ Objectives:

1. It provides financial back up to a nation's currency at times of devaluation.
2. It attracts foreign investment.
3. Helps in meeting the country's foreign obligations and liabilities.
4. The supply of foreign currency by the central bank makes the market steady.

## 5. Maintain the country's good image in international forums.

**88. A rise in general level of prices may be caused by**

- 1. An increase in the money supply.**
- 2. A decrease in the aggregate level output.**
- 3. An increase in the effective demand.**

**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

### **Solution**

- All three lead to inflation.
- factors like an increase in the money supply, a decrease in the aggregate level of output, an increase in the effective demand, an increase in income, the rapid growth of population, etc.



89. consider the following pairs:

**Tribe - State**

1. Limboo (Limbu): Sikkim
2. Karbi: Himachal Pradesh
3. Dongaria Kondh: Odisha
4. Bonda : Tamil Nadu

Which of the above pairs are correctly matched?

**A** 1 and 3 only

**B** 2 and 4 only

**C** 1, 2 and 4 only

**D** 1, 2, 3 and 4

**Solution**

- Dongaria - Odisha is easy as dangaria kondh tribe was in news due to the POSCO
- Bonda is the most primitive tribal groups in Odisha.
- Tamang and the Limbu communities of Sikkim have been placed in the ST
- category. Hence the correct answer is 1.



90. Consider the following statements:

1. The Chairman and the Deputy Chairman of the Rajya Sabha are not the members of that House.
2. 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

### Solution

- The first statement is not correct because it talks about the chairman as well as the deputy chairman.
- The Vice-President of India is ex-officio Chairman of Rajya Sabha.
- Rajya Sabha also chooses from amongst its members, a Deputy Chairman.
- Hence statement 1 is not correct.
- President: Elected members of parliament (MPs from Lok Sabha as well as Rajya

- Elected members of State legislative members, including that of NCT of Delhi and Pondicherry.
- Vice President: Vice President is elected indirectly, by an electoral college consisting of members of both houses of the Parliament.
- Hence statement 2 is correct.

91. **With reference to National Legal Services Authority, consider the following statements:**

- 1. Its objective is to provide free and competent legal services to the weaker sections of the society on the basis of equal opportunity.**
- 2. 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 and 2

### **Solution**

- The National Legal Services Authority (NALSA) has been constituted under the Legal Services Authorities Act, 1987.
- It to provide free Legal Services to the weaker sections of the society and to organize Lok Adalats for amicable settlement of disputes.

- In every state, State Legal Services Authority has been constituted to give effect to the policies and directions of the NALSA .
- To give free legal services to the people and conduct Lok Adalats in the State.

## 92. Disguised unemployment generally means

**A** large number of people remain unemployed

**B** alternative employment is not available

**C** marginal productivity of labour is zero

**D** productivity of workers is low

### Solution

- Disguised Unemployment is a kind of unemployment in which there are people who are visibly employed but are actually unemployed.
- This situation is also known as Hidden Unemployment. In such a situation more people are engaged in a work than required.

93. Consider the following statements:

1. The council of ministers in the centre shall be collectively responsible to the Parliament.
2. The Union Ministers shall hold the office during the pleasure of the President of India.
3. 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

### Solution

- The council of ministers shall be collectively responsible to the Lok Sabha .
- The ministers shall hold office during the pleasure of the President.
- Article 74 makes the advice of Council of Ministers binding on the President.
- Minister enters upon his office, the President shall administer to him the oaths of office and of secrecy according to the forms set out for



the purpose in the Third Schedule.

**94. 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

**Solution**

- Iron is present in the muscle in the form of myoglobin.
- Myoglobin has the capacity to store oxygen.
- This oxygen is used for muscle contraction and for other immediate needs of the muscle.
- Hence statement 1 is correct.
- Calcium is the most common and abundant mineral in the body.
- It is important for healthy bones and teeth, helps the muscle relax and contract. important in nerve functioning, blood clotting etc.

- Hence statement 2 is correct.
- Sodium is needed for proper fluid balance, nerve transmission, and muscle contraction

**95. 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

### **Solution**

- The National Development Council (NDC) was established in August 1952 by an executive resolution of the Government of India on the recommendation of the First Five Year Plan (draft outline).
- Like the erstwhile Planning Commission, it is neither a constitutional body nor a statutory body. Composition
- The NDC is composed of the following members.

- The Prime Minister of India (as its chairman/head).
- All Union Cabinet Ministers (since 1967).17
- The Chief Ministers of all the states.
- The Chief Ministers/administrators of all union territories.
- Members of the Planning Commission (now NITI Aayog).

96. 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

### Solution

- The short-term cooperative credit structure operates with a three-tier system - Primary Agricultural Credit Societies (PACS) at the village level, Central Cooperative Banks (CCBs) at the district level, and State Cooperative Banks (StCBs) at the State level.
- PACS are outside the purview of the Banking Regulation Act, 1949 and hence not regulated by the Reserve Bank of India.  
StCBs/DCCBs are registered under the provisions of the State

Cooperative Societies Act of the State concerned and are regulated by the Reserve Bank

- Powers have been delegated to the National Bank for Agricultural and Rural Development (NABARD) under Section 35 (6) of the Banking Regulation Act (As Applicable to Cooperative Societies) to conduct an inspection of State and Central Cooperative Banks.

97. Consider the following organisms:

1. Agaricus
2. Nostoc
3. Spirogyra

Which of the above is/are used as biofertilizer/biofertilizers?

A 1 and 2

B 2 only

C 2 and 3

D 3 only

### Solution

- Agaricus:- Agaricus is a genus of mushrooms containing both edible and poisonous species, with possibly over 300 members worldwide.
- Nostoc:- Bioinoculants are the microbial preparations that enhance the uptake of nutrients by plants from the soil, increase the availability of the nutrients and stimulate plant growth. There are two types of organisms which are used as inoculants:
- symbiotic organisms (such as Rhizobium, Synorhizobium, Bradyrhizobium, Nostoc, Anabaena, etc.) and non-symbiotic organisms (such as Azotobacter, Azospirillum, Beijerinckia, etc.).



- **Spirogyra:-** Spirogyra is a genus of filamentous green algae of the order Zygnematales, named for the helical or spiral arrangement of the chloroplasts that is diagnostic of the genus.

98. 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.

Select the correct answer using the codes given below:

A 1 only

B 2 and 3 only

C 1 and 3 only

D 1,2,3

### Solution

- All phenomena are linked in a universal chain of cause and effect, according to Jain doctrine. Every occurrence has a specific cause.
- Each soul is pure by nature, with infinite knowledge, bliss, and power; however, these faculties are limited throughout time due to the soul's contact with matter.
- The surest way of annihilating Karma is to practice penance.
- Karma is the bane of the soul and must be ended

99. Due to improper/indiscriminate disposal of hold and used computers or their parts, which of the following are released into the environment as e waste?

1. Beryllium
2. Cadmium
3. Chromium
4. Heptachlor
5. Mercury
6. Lead
7. Plutonium

Select the correct answer using the codes given below:

**A** 1, 3, 4, 6 and 7 only

**B** 1, 2, 3, 5 and 6

**C** 2, 4, 5 and 7 only

**D** 1, 2, 3, 4, 5, 6 and 7

### Solution

- Beryllium is used in circuit 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 ,Laptop 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.
- If initially we are sure about Heptachlor then we can easily eliminate A,C and D. So correct answer is B.

**100. 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

**Solution**

- Statement 1 - Same person can be appointed as Governor of two or more states at the same time.
- Statement 2 - Judges of HC are also appointed by President
- Statement 4 - In case of UTs, CM is appointed by President.



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