

Answer & Explanation for G.S. Test-1 on NCERT held on 10th December'2017

Q1. Consider the following statements regarding Harappan civilization:

1. All of the cities were divided into two or more parts.
2. In the divided cities usually, the part to the west was larger but at a lower elevation and called as the lower town.
3. In the divided cities usually, the part to the east was smaller but at a higher elevation and called as the citadel.

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

- A. 1 only
- B. 2 and 3 only
- C. 1, 2 and 3
- D. None of the above

Answer: C

Exp: Statement 1 is incorrect: Many but not all of the Indus valley cities were divided into two or more parts.

Statement 2 is incorrect: Usually, the part to the west was smaller but at a higher elevation and described as the citadel.

Statement 3 is incorrect: Generally, the part to the east was larger but at a lower elevation. This was the lower town.

Q2. Consider the following diseases:

1. Malaria
2. Hepatitis B
3. Dysentery

Which of the above disease(s) is/are caused by protozoans?

- A. 3 only
- B. 1 and 2 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: C

Exp: Malaria is a mosquito-borne infectious disease affecting humans and other animals caused by parasitic protozoans (a group of single celled microorganisms) belonging to the Plasmodium type. Malaria is a life-threatening disease caused by parasites and transmitted to people through the bites of infected female Anopheles mosquitoes.

Hepatitis B is a viral infection that attacks the liver and can cause both acute and chronic disease. The virus gets transmitted through contact with the blood or other body fluids of an infected person. An estimated 257 million people are living with Hepatitis B virus infection (defined as Hepatitis B surface antigen positive).

Dysentery is bloody diarrhoea, i.e. any diarrhoeal episode in which the loose or watery stools contain visible red blood. Dysentery is most often caused by *Shigella* species (bacillary dysentery) or *Entamoeba histolytica* (amoebic dysentery). It is caused by several types of infections such as bacteria, viruses, parasitic worms, or protozoa.

Q3. The terms Cirque, Aretes and Bergschrund are related to which geographical phenomena?

- A. Coastal landforms
- B. Wind erosion landforms
- C. Landforms of glaciation
- D. Running water landforms

Answer: C

Exp: A cirque is an amphitheatre-like valley formed by glacial erosion. An Aretes is a narrow ridge of rock which separates two valleys. It is typically formed when two glaciers erode parallel U-shaped valleys. Bergschrund are crevasse at the junction of a glacier or snowfield with a steep upper slope. These are landforms of glaciation.

Q4. Which of the following is the most appropriate description of *Species*?

- A. The assemblage of the population of plants, animals, bacteria and fungi that live in an area and interact with each other.
- B. A community of animals and plants inhabiting a particular area.
- C. Similar organisms having the potential for interbreeding and producing fertile offspring.
- D. Group of organisms co-dependent on each other for survival.

Answer: C

Exp: Assemblage of population of plants, animals, bacteria and fungi that live in an area and interact with each other is called "Biological Community".

- I. A community of animals and plants inhabiting a particular are are known as "Population."
- II. Similar organisms having the potential for interbreeding and producing fertile offspring are called "Species."
- III. Statement d is a generic statement.

Q5. The Indian Constitution provides certain fundamental rights only to citizens whereas certain fundamental rights are provided to citizens as well as foreigners. In this regard, which of the following fundamental rights are available to both citizens and foreigners?

- 1. Article 20
- 2. Article 21A

- 3. Article 19
- 4. Article 22
- 5. Article 25

Select the correct answer using the code given below:

- A. 1, 4 and 5 only
- B. 1, 2, 3 and 5 only
- C. 1, 2, 4 and 5 only
- D. 1, 2, 3, 4 and 5

Answer: C

Exp: Article 20 provides protection in respect of conviction for offences. Both citizens and foreigners enjoy this fundamental right.

Article 21A declares that the State shall provide free and compulsory education to all children between the age of 6 to 14 years in such a manner as the State may determine. It is also available to both citizens and foreigners.

Article 19 guarantees to all citizens the right to freedom of speech and expression; right to assemble peaceably and without arms; right to form associations or unions or co-operative societies; right to move freely throughout the territory of India; right to reside and settle in any part of the territory of India; and right to practice any profession or to carry on any occupation, trade or business. It is available only to citizens.

Article 22 provides protection against arrest and detention in certain cases. It is available to both foreigners and citizens.

Article 25 guarantees freedom of conscience and free profession, practice and propagation of religion. It is available to both citizens and foreigners (Foreigners do not include enemy aliens).

Q6. When a constitutional amendment aims to modify an article related to the distribution of powers between the States and the Union government, then which of the following type of majority is required to amend the Constitution?

- A. Simple majority in the Parliament with ratification by not less than half of the States.
- B. Special majority in the Parliament with ratification by not less than half of the States.
- C. Simple majority in the Parliament.
- D. Special majority in the Parliament.

Answer: B

Exp: There are three different ways of amending the Indian Constitution.

There are many articles in the Constitution which mention that these articles can be amended by a simple law of the Parliament. No special procedure for amendment (under Article 368) is required in such cases and there is no difference at all between an amendment and an ordinary law.

For amending the remaining parts of the Constitution, provision has been made in Article 368 of the Constitution.

One method is that amendment can be made by special majority of the two Houses of the Parliament. Amendment to the Constitution requires two different kinds of special majorities: in the first place, those voting in favour of the Amendment Bill should constitute at least half of the

total strength of that House. Secondly, the supporters of the Amendment Bill must also constitute two-thirds of those who actually take part in voting.

The other method requires special majority of the Parliament and consent of half of the State legislatures. Apart from the provisions related to federal structure, provisions about fundamental rights are also protected in this way.

Q7. Which of the following situations give rise to inflation?

1. When general level of prices of goods and services rises.
2. When general level of prices of goods and services falls.
3. When purchasing power of the currency decreases.
4. When purchasing power of the currency increases.

Select the correct answer using the code given below:

- A. 1 and 3 only
- B. 1 and 4 only
- C. 2 and 3 only
- D. 2 and 4 only

Answer: A

Exp: Inflation is the rate at which the general level of prices for goods and services is rising and, consequently, the purchasing power of the currency is falling.

Q8. Consider the following statements about a cave at Badami:

1. The cave is popularly known as Indra cave.
2. Paintings in the cave represent an extension of tradition from Ajanta caves.
3. Paintings in this cave depict palace scenes.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: C

Exp: Statement 1 is incorrect: The inscription in Cave No. 4 of Badami caves describes the beauty of the cave and includes the dedication of the image of Vishnu. Thus it may be presumed that the cave was excavated in the same era and the patron records his Vaishnava affiliation. Therefore, the cave is popularly known as the Vishnu cave and not Indra cave.

Statement 2 is correct: Stylistically, the painting represents an extension of the tradition of mural painting from Ajanta to Badami in South India. The sinuously drawn lines, fluid forms and compact composition exemplify the proficiency and maturity the artists had achieved in the sixth century CE. The gracefully drawn faces of the king and the queen remind us of the style of modelling in Ajanta.

Statement 3 is correct: Paintings in this cave depict palace scenes. For example- One shows Kirtivarman, the son of Pulakesin I and the elder brother of Mangalesha, seated inside the palace with his wife and feudatories watching a dance scene.

Q9. Consider the following statements regarding biodiversity hotspot:

1. A biodiversity hotspot is a biogeographic region that is both threatened with destruction and is a significant reservoir of biodiversity.
2. The German biologist Ernst Haeckel coined the term "biodiversity hotspot".

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: A

Exp: A biodiversity hotspot is a biogeographic region that is both a significant reservoir of biodiversity and is threatened with destruction.

The term biodiversity hotspot specifically refers to 25 biologically rich areas around the world that have lost at least 70 percent of their original habitat.

The remaining natural habitat in these biodiversity hotspots amounts to just 1.4 percent of the land surface of the planet, yet supports nearly 60 percent of the world's plant, bird, mammal, reptile, and amphibian species.

The British biologist Norman Myers coined the term "biodiversity hotspot" in 1988 as a biogeographic region characterized both by exceptional levels of plant endemism and by serious levels of habitat loss.

The word "Ecology" was given by a German biologist, Ernst Haeckel in 1869. Sir Arthur Tansley coined the term "Ecosystem" in 1935.

Q10. With reference to Mitochondria, consider the following statements:

1. They have their own DNA and ribosomes.
2. They are storage sacs of solid and liquid content.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: A

Exp:

- Mitochondria are known as the powerhouses of the cell. The energy required for various chemical activities needed for life is released by mitochondria in the form of ATP (Adenosine triphosphate) molecules. ATP is known as the energy currency of the cell. The body uses energy stored in ATP for making new chemical compounds and for mechanical work.

- Mitochondria are strange organelles in the sense that they have their own DNA and ribosomes. Therefore, mitochondria are able to make some of their own proteins. Vacuoles are storage sacs for solid or liquid contents. Vacuoles are small sized in animal cells while plant cells have very large vacuoles.

Q11. Which of the following is not one of the reason for the existence of informal sector in a developing country?

- A. Tertiary economies in the formal sector are not developed well enough to absorb all the economies of the informal sector.
- B. The quality of products and the quality of work in the informal sector are low.
- C. Informal-sector workers and businesses cannot afford permanent business sites.
- D. The government benefits from taxing informal-sector workers and their small businesses.

Answer: D

Exp: The informal sector or grey economy consists of workers who do not report their incomes or jobs to the government. The government cannot tax informal – sector workers because it does not know officially of their work activities, and the informal sector is not included in GDP calculations.

Q12. The Tropic of Cancer passes through India, dividing it into nearly two equal parts. Which of the following group of States does the Tropic of Cancer passes through?

- A. Gujarat, Uttar Pradesh, Bihar, Sikkim
- B. Gujarat, Madhya Pradesh, Chhattisgarh, Jharkhand
- C. Chhattisgarh, Jharkhand, Manipur, Tripura
- D. Jharkhand, Manipur, Tripura, Mizoram

Answer: B

Exp: Refer the image



Q13. Which of the following were the main causes responsible for the Battle of Buxar?

1. Illegitimate utilization of dastak for unaccounted profits.
2. Fortification of factories at Calcutta by East India Company.
3. Abolition of all duties on internal trade by Nawab Mir Qasim.

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: B

Exp: Statements 1 and 3 are correct: Causes of Battle of Buxar –

- Misuse of dastak.
- Tax evasion by private traders
- Sale of dastak to Indian merchants for illegal profits.
- Political and internal interference.
- Continuous unwanted surveillance by British resident.
- Modernization of army and establishment of modern arms factory at Mungher and many other places.
- Abolition of all duties on internal trade by Mir Qasim.

Statement 2 is incorrect: Fortification was the main cause for Battle of Plassey but not the Battle of Buxar.

Q14. In the Stupas of Mauryan period many inscriptional evidences are found. Which of the following was/were inscribed in those Stupas?

1. Name and profession of donors
2. Donations by the guilds
3. Name of the artisans

Select the correct answer using the code given below:

- A. 1 only
- B. 1 and 2 only
- C. 3 only
- D. 1, 2 and 3

Answer: D

Exp: In Mauryan period, from the second century BCE onwards, we get many inscriptional evidences through the mentioning of donors and, at times, their profession. The pattern of patronage was a collective one and there are very few instances of royal patronage. Patrons ranged from lay devotees to gahapatis and kings. Donations by the guilds are also mentioned at several sites. However, there are very few inscriptions mentioning the names of artisans such as Kanha at Pitalkhora and his disciple Balaka at Kondane caves.

Q15. The summation of the value of final goods and services produced in each sector of an economy during a particular year is:

- A. Net Domestic Product
- B. Gross National Product
- C. National Income
- D. Gross Domestic Product

Answer: D

Exp: The value of final goods and services produced in each sector during a particular year provides the total production of the sector for that year. And the sum of production in the three sectors gives what is called the Gross Domestic Product (GDP) of a country.

Gross national product (GNP) is an estimate of total value of all the final products and services produced in a given period by the means of production owned by a country's residents.

GDP takes into account all output produced within a country's borders regardless of who owns the means of production.

Q16. Epidermis on the aerial parts of the plant often secretes a waxy layer to protect against:

- A. Loss of water
- B. Mechanical injury
- C. Invasion by parasitic fungi
- D. All of the above

Answer: D

Exp: The outermost layer of cells is known as epidermis. The epidermis is usually made of a single layer of cells. In some plants living in very dry habitats, the epidermis may be thicker since protection against water loss is critical. The entire surface of a plant has this outer covering of epidermis. It protects all the parts of the plant.

Epidermal cells on the aerial parts of the plant often secrete a waxy, water-resistant layer on their outer surface. This aids in protection against loss of water, mechanical injury and invasion by parasitic fungi. Since it has a protective role to play cells of epidermal tissue form a continuous layer without intercellular spaces. Most epidermal cells are relatively flat. Often their outer and side walls are thicker than the inner wall.

We can observe small pores here and there in the epidermis of the leaf. These pores are called stomata. Stomata are enclosed by two kidney-shaped cells called guard cells. They are necessary for exchanging gases with the atmosphere. Transpiration (loss of water in the form of water vapour) also takes place through stomata.

Q17. Consider the following statements:

1. Highest peak in the Western Ghats is Anamudi.
2. The Aravalli range is an example of block mountain.

3. Guru Shikhar is the highest peak in the Abu hills.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. None of the above

Answer: C

Exp: Anamudi is a mountain located in the Indian state of Kerala. It is the highest peak in the Western Ghats and South India, at an elevation of 2,695 metres (8,842 ft). Aravalli ranges are an example of old fold mountains located in Rajasthan. Guru Shikhar, a peak in the Abu hills of Rajasthan rises to an elevation of 1,722 metres (5,650 ft).

Q18. Consider the following statements regarding the literary work Akbar Nama:

- 1. Ain-i-Akbari was written by Abul Fazl as part of Akbar Nama.
- 2. The first and third parts of Akbar Nama provide a historical narrative like birth of Akbar, the history of Timur's family and the reigns of Babur and Humayun and the Suri Sultans of Delhi.
- 3. Ain-i Akbari, the second part was organized as a compendium of imperial regulations and a gazetteer of the empire.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 and 3 only
- C. 3 only
- D. 1, 2 and 3

Answer: A

Exp: Statement 1 is correct: The Ain-i Akbari of Abu'l Fazl Allami was the culmination of a large historical, administrative project of classification undertaken by Abu'l Fazl at the order of Emperor Akbar. It was completed in 1598, the forty- second regnal year of the emperor, after having gone through five revisions. The Ain was part of a larger project of history writing commissioned by Akbar. This history, known as the Akbar Nama, comprised three books.

Statement 2 is incorrect: The first two parts of Akbar Nama provided a historical narrative and not the first and third part of it.

Statement 3 is incorrect: The Ain-i Akbari, the third book (Not the second), was organized as a compendium of imperial regulations and a gazetteer of the empire. The Ain gives detailed accounts of the organization of the court, administration and army, the sources of revenue and the physical layout of the provinces of Akbar's empire and the literary, cultural and religious traditions of the people.

Q19. Consider the following pairs:

	Ocean Current		Coast affected
1.	Humboldt	–	Brazil
2.	Agulhas	–	Africa
3.	Irminger	–	United States of America

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

- A. 1 and 2 only
- B. 2 and 3 only
- C. 2 only
- D. 1 and 3 only

Answer: C

Exp: Ocean currents are large masses of surface water that circulate in regular patterns around the oceans. Those that flow from equatorial region towards pole are warm currents as they have higher surface temperature. Those that flow from polar regions towards equator are cold currents as they have lower surface temperature.

The Humboldt Current, also called the Peru Current, is a major Eastern Boundary Upwelling Ecosystem that flows north along the western coast of South America. It is an eastern boundary current flowing in the direction of the equator, and extends 500-1,000 kilometers offshore. The Agulhas Current is the western boundary current of the southwest Indian Ocean. It flows down the east coast of Africa from 27°S to 40°S. It is narrow, swift and strong. The Irminger Current is a North Atlantic ocean current setting westward off the southwest coast of Iceland. It is composed of relatively warm and saline waters from the eastern North Atlantic that are fed by the North Atlantic Drift.

Q20. Which of the following is/are part of the foreign exchange reserves of India?

- 1. Foreign Currency Assets (FCAs)
- 2. Gold
- 3. Special Drawing Rights (SDRs)

Select the correct answer using the code given below:

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: D

Exp: Foreign exchange reserve is the foreign assets held by the central bank of the country. Key components of India's Foreign Exchange Reserves are Foreign Currency Assets (FCAs), Gold, Special Drawing Rights (SDRs) and RBI's Reserve position with International Monetary Fund (IMF). FCAs are the largest component of the Forex Reserves consisting of US dollar and other major non-US global currencies. Additionally, it also comprises investments in US Treasury bonds, bonds of other selected governments, deposits with foreign central and commercial banks. Gold reserve is the gold held by the Reserve Bank of India with the intention to serve as a guarantee to redeem promises to pay depositors, note holders (e.g. paper money), or trading peers, or to secure a currency. The SDR was created by the International Monetary Fund (IMF) as an international reserve asset in the year 1969 to supplement its member countries' official reserves. It is essentially an artificial currency used by the IMF and is a basket of national currencies.

Q21. Which of the following embellishments have been used for the interior and exterior surfaces of Taj Mahal?

1. Stone carvings in high and low relief on the walls.
2. Delicate carving of marble into jalis and graceful volute
3. Creation of arabesques with pietra dura
4. Art of calligraphy with the inlay of jasper to write Quranic verses.

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 1 and 3 only
- C. 1, 2 and 4 only
- D. 1, 2, 3 and 4

Answer: D

Exp: All the statements are true as four types of embellishments have been used with great effect for the interior and exterior surfaces of Taj Mahal.

1. Stone carvings in high and low relief on the walls,
2. The delicate carving of marble into jalis and graceful volutes (spiral ornament on the pillar),
3. The creation of arabesques with pietra dura (yellow marble, jade and jasper) on walls and tombstones and geometric designs with tessellation.
4. The art of calligraphy is used with the inlay of jasper in white marble to write Quranic verses. Calligraphy provided a decorative element on the walls and a continuous connection with the Almighty.

Q22. Which of the following are the features of Parliamentary Form of Government?

1. Presence of nominal and real executives

2. Membership of Ministers in the Legislature
3. Leadership of the Prime Minister or the Chief Minister
4. Fixed tenure of the Legislature

Select the correct answer using the code given below:

- A. 1, 2 and 3 only
- B. 1, 2 and 4 only
- C. 2, 3 and 4 only
- D. 1, 2, 3 and 4

Answer: A

Exp: The features of Parliamentary system, also known as 'Westminster' model of government are:

1. Presence of nominal and real executives like the Prime Minister and the President.
2. Majority Party Rule
3. Collective Responsibility of the Executive to the Legislature.
4. Political homogeneity as usually members of the Council of Ministers belong to the same political party, hence they share the same political ideology.
5. Double membership, one as the Minister other as the Member of Legislature.
6. Leadership of Prime Minister or the Chief Minister.
7. Dissolution of the lower house (Lok Sabha or Legislative Assembly) and not a fixed tenure for the Legislature.
8. The Ministers operate on the principle of secrecy of procedure.

Q23. Which of the following pairs is not correctly matched?

Enzyme Produced in

- A. Trypsin – Pancreas
- B. Pepsin – Stomach
- C. Salivary Amylase – Saliva
- D. Lipase - Liver

Answer: D

Exp: The stomach is a large organ which expands when food enters it. The muscular walls of the stomach help in mixing the food thoroughly with more digestive juices. These digestion functions are taken care of by the gastric glands present in the wall of the stomach. These release hydrochloric acid, a protein digesting enzyme called pepsin, and mucus. The hydrochloric acid creates an acidic medium which facilitates the action of the enzyme pepsin.

The saliva contains an enzyme called salivary amylase that breaks down starch which is a complex molecule to give sugar. The food is mixed thoroughly with saliva and moved around the mouth while chewing by the muscular tongue.

The pancreas secrete pancreatic juice which contains enzymes like trypsin for digesting proteins and lipase for breaking down emulsified fats. The walls of the small intestine contain glands which secrete intestinal juice. The enzymes present in it finally convert the proteins to amino acids, complex carbohydrates into glucose and fats into fatty acids and glycerol.

Paragraph: DIRECTIONS for Question No. 24: The following question consists of two statements, one labelled 'Assertion' (A) and the other labelled 'Reason' (R). Examine these two statements carefully and decide if the Assertion and the Reason are individually true and if so, whether the Reason is a correct explanation of the Assertion. Select your answer using the code given below:

- (a) If both A and R are true and R is the reason.
- (b) If both A and R are true and R does not explain A.
- (c) If A is true and R is false
- (d) If A is false and R is true.

PQ24. Assertion (A): The material of the wire used in electric fuses contain low melting point materials.

Reason (R): A fuse is used as a safety device to prevent damages to electrical circuits when excessive electricity passes through it.

- A.
- B.
- C.
- D.

Answer: A

Exp: The fuse elements are made of low melting point materials, e.g. tin (Sn) or zinc (Zn) and alloys thereof. In all buildings fuses are inserted in all electrical circuits. There is a maximum limit to the current which can safely flow through a circuit. If by accident the current exceeds the safe limit, the wires may become overheated and may cause fire. If a proper fuse is there in the circuit, it will blow off and break the circuit. A fuse is thus a safety device which prevents damages to electrical circuits and possible fires.

Q25. Match List-I with List-II and select the correct answer using the code given below:

	List-I		List-II
A.	Narmada valley	1.	The first big kingdom
B.	Garo hills	2.	Earliest cities
C.	Indus and its tributaries	3.	Hunting and gathering
D.	Magadha	4.	Early agriculture

- A. 4:a 3:b 2:c 1:d
- B. 3:a 4:b 2:c 1:d
- C. 2:a 3:b 4:c 1:d
- D. 3:a 2:b 4:c 1:d

Answer: B

Exp: Narmada valley: People have lived along the banks of this river for several hundred thousand years. Some of the earliest people who lived here were skilled gatherers, that is, people who gathered their food. They also hunted animals.

Garo Hills: These were some of the areas where agriculture developed. The places where rice was first grown are to the north of the Vindhyas and Garo hills in North-east.

Indus and its tributaries: About 4700 years ago, some of the earliest cities flourished on the banks of these rivers.

Magadha: In ancient times the area along south of the Ganga river was known as Magadha. It was the first big kingdom in ancient India. Its rulers were very powerful, and set up a large kingdom. Kingdoms were set up in other parts of the country as well.

Q26. Which of the following statements regarding Mughal Architecture is/are correct?

1. The Chahar Bagh system in the Mughal Architecture was first introduced by Babur in India.
2. The Pishtaq or Central Towering Dome became one of the most important aspects of Mughal Architecture.
3. Humayun's Tomb was built in the tradition known as 'HashtBihisht'.

Select the correct answer using the code given below:

- A. 1 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: D

Exp: Statement 1 is correct: In his autobiography, Babur described his interest in planning and laying out formal gardens, placed within rectangular walled enclosures and divided into four quarters by artificial channels. These gardens were called Chahar Bagh, four gardens, because of their symmetrical division into quarters. Beginning with Akbar, some of the most beautiful chaharbaghs were constructed by Jahangir and Shah Jahan in Kashmir, Agra and Delhi.

Statement 2 correct: The Central Towering Dome and the Tall Gateway (pishtaq) became important aspects of Mughal architecture, first visible in Humayun's Tomb.

Statement 3 correct: Humayun's Tomb was placed at the centre of a huge formal chaharbagh and built in tradition known as "eight paradises" or hasht-bihisht – a central hall surrounded by eight rooms. The building was constructed with red sandstone, edged with white marble.

Q27. Consider the following:

1. Land
2. Labour
3. Capital
4. Entrepreneurship

Which of the above items are factors of production?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1, 2 and 3 only
- D. 1, 2, 3 and 4

Answer: D

Exp: Factors of production is an economic term that describes the inputs that are used in the production of goods or services in order to make an economic profit. The factors of production include land, labour, capital and entrepreneurship. These production factors are also known as management, machines, materials and labour, and knowledge has recently been talked about as a potential new factor of production.

Q28. Which among the following countries is/are landlocked?

1. Rwanda
2. North Korea
3. Iraq
4. Djibouti

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 1 only
- C. 2 and 3 only
- D. 1 and 4 only

Answer: B

Exp: Rwanda is a landlocked country with its capital at Kigali. It was in news because of the meeting held on Montreal Protocol at Kigali.

North Korea is not landlocked and has sea openings in the form of the Yellow Sea and Korea Bay to its west, and the Sea of Japan to its east.

Iraq has a small sea opening via the Gulf of Oman. Umm Qasr port is Iraq's deep-water port.

Djibouti is a country located in the Horn of Africa. It has an opening in the Red sea. Djibouti was in news recently as China established its first overseas military base in Djibouti.

Q29. With reference to Monsoon, consider the following statements:

1. Seasonal reversal of wind accompanied by corresponding changes in precipitation.
2. Monsoon climate is found in Indian subcontinent only.
3. Jet stream plays significant role in Indian Monsoon.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: B

Exp: In monsoon seasonal reversing of wind accompanied by corresponding changes in precipitation occurs. The major monsoon systems of the world consist of the West African and Asia-Australian monsoons. The inclusion of the North and South American monsoons with incomplete wind reversal has been also debated among experts. Jet streams are high altitude (9000-12000 m) Westerly winds between middle latitudes (summer 35°N, winter 20°N-35°N) in the Northern hemisphere. Recent researches have shown that these winds exert considerable impact on surface weather conditions. The tropical Easterly jet stream extends far to the North of Tibet and the air flow is roughly along the Kolkata- Bangalore axis. These upper air Easterlies descend into the permanent high-pressure area formed over the southern Indian Ocean, which naturally intensifies the high pressure already present there.

It is from this high-pressure cell that the onshore winds start blowing towards the thermally induced low pressure area, developed in the Northern part of the Indian sub-continent. After crossing the equator such winds become South-Westerly and are known as the South-Westerly Summer Monsoons.

These surface winds have vast potentiality for South-Westerly summer monsoon and precipitation. It is therefore, clear that the strength of the Easterly jet stream is directly related to the intensification of permanent high formed over Southern Indian Ocean. Since this high pressure makes the pressure gradient steeper, so it is the main causative factor for determining the vigour of the summer monsoon.

Q30. Consider the following statements:

1. The image formed by a plane mirror is always virtual and erect.

2. An image formed by a convex mirror is always virtual, erect and diminished.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: C

Exp: The image formed by a plane mirror is always virtual (meaning that the light rays do not actually come from the image), upright, and of the same shape and size as the object it is reflecting. A virtual image is a copy of an object formed at the location from which the light rays appear to come. The convex mirrors only produce virtual images. The image of an object is found to be upright and reduced in size. Only a concave mirror is capable of producing a real image and this only occurs if the object is located a distance greater than a focal length from the mirror's surface.

Q31. With reference to the features of a perfectly competitive market, consider the following statements:

- 1. All firms in the market produce certain heterogeneous goods/services.
- 2. In such a market buyers must accept the prevailing prices but the sellers have the freedom to influence the prices.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: D

Exp: A perfectly competitive market structure is approximated by a market satisfying the following conditions:

- 1. There exist a very large number of firms and consumers of the commodity, such that the output sold by each firm is negligibly small compared to the total output of all the firms combined, and similarly, the amount purchased by each consumer is extremely small in comparison to the quantity purchased by all consumers together.
- 2. All firms in the market produce a certain homogeneous good.
- 3. Each buyer and seller in the market is a price-taker. A price-taker is an individual or a company that must accept prevailing prices in a market, lacking the market share to influence market price on its own.
- 4. Firms are free to start producing the commodity or to stop production.
- 5. Consumers and firms have perfect knowledge of the output, inputs and their prices.

Q32. Consider the following statements regarding the Speaker of the Lok Sabha:

1. He prorogues the House in the absence of quorum.
2. He presides over a joint sitting of the Houses, addressed by the President.
3. He decides whether a bill is a Money bill or not and his decision in this regard is final.
4. He never votes in the House, to maintain his impartiality.

Which of the statements given above is/are correct?

- A. 1, 2 and 3 only
- B. 1 and 3 only
- C. 1, 3 and 4 only
- D. 3 only

Answer: D

Exp: The options 1, 2, and 4 are incorrect.

As the Presiding Officer of the House, the Speaker has power to adjourn (not prorogue, as it is the President who prorogues the Houses) the sitting until there is quorum (The minimum number of members of the House of Parliament required to be present for a parliamentary proceeding to start is called Quorum, which is not less than 1/10 of the total strength of the House).

The Speaker presides over the joint sitting, which is summoned by the President to settle the deadlock between the Houses of Parliament. However, when the President addresses the House in a joint sitting, he himself presides it over, not the Speaker of the Lok Sabha.

Even though the Speaker of the Lok Sabha does not vote in the first instance, he can still exercise his vote in order to resolve a deadlock, thus the Speaker has a casting vote. This makes the position of the Speaker impartial.

Q33. Which of the following statement(s) is/are true about Tawarikh?

1. These are the "histories", written in Persian language.
2. The authors of Tawarikh were learned men who were secretaries, administrators, poets and courtiers.
3. These authors advised rulers on the need to preserve an "ideal" social order based on birth right and gender distinctions.

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 1 and 3 only
- C. 3 only
- D. 1, 2 and 3

Answer: D

Exp: Statement 1 is correct: Although inscriptions, coins and architecture provide a lot of information about Delhi sultanate, especially valuable are “histories”, tarikh (singular)/ tawarikh (plural), written in Persian, the language of administration under the Delhi Sultans.

Statement 2 is correct: The authors of tawarikh were learned men: secretaries, administrators, poets and courtiers, who both recounted events and advised rulers on governance, emphasizing the importance of just rule.

Statement 3 is correct: The authors of tawarikh lived in cities (mainly Delhi) and hardly ever in villages. They often wrote their histories for Sultans in the hope of rich rewards. These authors advised rulers on the need to preserve an “ideal” social order based on birth right and gender distinctions.

Q34. Match List-I with List-II and select the correct answer using the code given below:

	List-I (Port)		List-II (Purpose)
A.	Port of Call	1.	An intermediate stop for a ship
B.	Packet Station	2.	Trans-shipment port
C.	<u>Entrepot</u> Port	3.	Ferry Port

A. a:1 b:2 c:3

B. a:1 b:3 c:2

C. a:2 b:1 c:3

D. a:2 b:3 c:1

Answer: B

Exp: Ports of Call: These are the ports which originally developed as calling points on main sea routes where ships used to anchor for refuelling, watering and taking food items. Later on, they developed into commercial ports. Aden, Honolulu and Singapore are good examples.

Packet Station: These are also known as ferry ports. These packet stations are exclusively concerned with the transportation of passengers and mail across water bodies covering short distances.

Entrepot Ports: These are collection centres where the goods are brought from different countries for export. Singapore is an entrepot for Asia.

Q35. Which of the following functions in plants is/are done through transpiration?

1. supplies water for photosynthesis.

2. transports minerals from the soil to all parts of the plant.

3. maintains the shape and structure of the plants by keeping cells turgid.

Select the correct answer using the code given below:

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: D

Exp: Transpiration has more than one purpose; it

- creates transpiration pull for absorption and transport of plants
- supplies water for photosynthesis
- transports minerals from the soil to all parts of the plant
- cools leaf surfaces, sometimes 10 to 15 degrees, by evaporative cooling
- maintains the shape and structure of the plants by keeping cells turgid

An actively photosynthesizing plant has an insatiable need for water. Photosynthesis is limited by available water which can be swiftly depleted by transpiration. The humidity of rainforests is largely due to this vast cycling of water from root to leaf to atmosphere and back to the soil.

Q36. Consider the following statements regarding ecological niche:

- A. It represents the range of conditions an organism can tolerate in the ecological system.
- B. It represents the resources an organism utilizes in the ecological system.
- C. It represents the functional role of an organism in the ecological system.
- D. No two species are believed to have the exactly same niche.

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

- A. 3 only
- B. 1, 2 and 4 only
- C. 3 and 4 only
- D. 1, 2, 3 and 4

Answer: D

Exp: The ecological niche of an organism represents the range of conditions that it can tolerate, the resources it utilises and its functional role in the ecological system. Each species has distinct niche and no two species are believed to have the exactly same niche.

Q37. Which of the statements given below is/are correct?

1. The Constitution authorises the President to decide other place or places as seat of the Supreme Court.
2. The Chief Justice of India can appoint a judge of a High Court as an ad hoc judge of the Supreme Court for a temporary period.

Select the correct answer using the code given below:

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

Exp: The Constitution of India authorises the Chief Justice of India to appoint other place or places as seat of the Supreme Court. He can take decision in this regard only with the approval of the President. So, first option is not correct.

The Chief Justice of India can appoint a judge of a High Court as an ad hoc judge of the Supreme Court for a temporary period. He can do so only after consultation with the Chief Justice of the High Court concerned and with the previous consent of the President. So, second option is correct.

Q38. Consider the following statements regarding the state of agriculture in 18th century Bengal:

1. The East India Company introduced the system of revenue-farming in India for the first time.
2. Khalisah were the agricultural loans granted to poor cultivators.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: D

Exp: Statement 1 is incorrect: Murshid Quli Khan effected economies in administration and reorganized the finances of Bengal by transferring large parts of jagir lands into Khalisah lands by carrying out a fresh revenue settlement, and by introducing the system of revenue-farming. He recruited revenue farmers and officials from local zamindars and merchant-bankers.

Statement 2 is incorrect: He also granted agricultural loans (taccavi) to the poor cultivators to relieve their distress as well as to enable them to pay land revenue in time. Khalisah were not loans but type of land.

Q39. Which of the following phenomenon/phenomena can help in studying the Earth's interior?

1. Volcanic eruptions
2. Meteors
3. Earthquakes

Select the correct answer using the code given below:

- A. 1 only

- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: D

Exp: Volcanoes provide direct samples of the Earth's interior from much greater depths which is at least 100 km, and, perhaps, as deep as the core-mantle boundary.

P waves can travel through both liquid and solid material, but S waves can only travel through solids. The variability in seismograph reading and shadow zones tell about the core of Earth. So, using seismograph we can get to know about interior of earth.

The study of meteorites helps scientists study the interior of the Earth because it is believed that meteorites are made up of the same material as the Earth. Chemical make-up of meteorites has helped scientists work out when the Earth formed its layers. By measuring the amount of the rare elements hafnium and lutetium in the mineral zircon in a meteorite that originated early in the solar system, we get information about Earth's interior.

Q40. With reference to "Cornwallis Code", consider the following statements:

1. It divested the Collector of all judicial and magisterial powers and left him with the administration of revenues.
2. 'Cornwallis Code' was compiled in 1793 by Sir George Barlow.
3. It created a new class of officer called the District Judge to preside over District Civil Court.
4. It was based on the concept of 'Separation of powers'.

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 2, 3 and 4 only
- C. 1, 3 and 4 only
- D. 1, 2, 3 and 4

Answer: D

Exp: All the statements are correct. It was a comprehensive code covering the fields of administration, judiciary, police, commercial and fiscal areas. Cornwallis made all the officers answerable to the courts.

Q41. In economics, one often encounters the concept of opportunity cost. What does opportunity cost means?

- A. It is the gain foregone from the second best activity.
- B. It is the sum total of all gains foregone from all other activities.
- C. It is associated with reduction in employment in economy.

D. It is the loss occurred due to failure of business activity.

Answer: A

Exp: Opportunity cost: Opportunity cost of some activity is the gain foregone from the second best activity. Suppose you have Rs 1,000 which you decide to invest in your family business. What is the opportunity cost of your action? If you do not invest this money, you can either keep it in the house-safe which will give you zero return or you can deposit it in either bank-1 or bank-2 in which case you get an interest at the rate of 10 per cent or 5 per cent respectively. So the maximum benefit that you may get from other alternative activities is the interest from the bank-1. But this opportunity will no longer be there once you invest the money in your family business. The opportunity cost of investing the money in your family business is therefore the amount of forgone interest from the bank-1.

Q42. Which of the following factors influence Jet Streams?

1. Coriolis force
2. Landmasses
3. Earth's rotation
4. Air masses

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 4 only
- D. 1, 2, 3 and 4

Answer: D

Exp: High above the surface, near the tropopause, there is little friction to slow down airflow and wind speeds often exceed 100 mph. Sometimes wind speeds exceed 200 mph. This rapidly flowing current of air located 10-15 km (6-9 miles) above the surface, is called the jet stream.

The Coriolis force which is caused by the planet's rotation also plays an important role. Landmasses interrupt the flow of the jet stream through friction and temperature differences. The landmass changes the meandering pattern of jet stream. It can even bifurcate jet stream (For eg. the Himalayas)

A jet stream forms high in the upper troposphere between two air masses. It is the zone of formation of geostrophic wind. The greater the temperature difference between the air masses, the faster the wind blows in the jet stream.

Q43. Arrange the following sources of energy in the increasing order of their calorific value:

1. Coal
2. Petrol

3. LPG
4. CNG
5. Hydrogen

Select the correct answer using the code given below:

- A. 1, 2, 3, 4 and 5
- B. 1, 2, 4, 3 and 5
- C. 5, 4, 3, 2 and 1
- D. 1, 4, 3, 2 and 5

Answer: B

Exp: The calorific value is the energy contained in a fuel or food, determined by measuring the heat produced by the complete combustion of a specified quantity of it. This is now usually expressed in joules per kilogram.

The increasing order of calorific value of fuels is

- Coal – 25000-33000 kJ/kg
- Petrol – 45000 kJ/kg
- CNG- 50000 kJ/kg
- LPG 55000 kJ/kg
- Hydrogen – 150000 kJ/kg.

Q44. Which of the following is/are the feature/s of Local Self Government under the 73rd Constitutional Amendment Act?

1. Uniform three tier Panchayati Raj structure.
2. All the levels of Panchayati Raj institutions are elected directly by the people.
3. One third of the positions in all Panchayats are reserved for persons belonging to the Scheduled Castes and Scheduled Tribes.

Select the correct answer using the code given below:

- A. 1 only
- B. 1 and 2 only
- C. 1, 2 and 3
- D. None of the above

Answer: B

Exp: The changes brought about by the 73rd amendment in Panchayati Raj institutions are as follows:

1. Three Tier Structure: All States now have a uniform three tier Panchayati Raj structure. At the base is the 'Gram Panchayat'. A Gram Panchayat covers a village or group of villages. The intermediary level is the Mandal (also referred to as Block or Taluka). These bodies are called Mandal or Taluka Panchayats. The intermediary level body need not be constituted in smaller

States. At the apex is the Zilla Panchayat covering the entire rural area of the District. The amendment also made a provision for the mandatory creation of the Gram Sabha. The Gram Sabha would comprise of all the adult members registered as voters in the Panchayat area.

2. Elections: All the three levels of Panchayati Raj institutions are elected directly by the people. The term of each Panchayat body is five years. If the State government dissolves the Panchayat before the end of its five-year term, fresh elections must be held within six months of such dissolution.

3. Reservations: One third of the positions in all panchayat institutions are reserved for women. Reservations for Scheduled Castes and Scheduled Tribes are also provided for at all the three levels, in proportion to their population. If the States find it necessary, they can also provide for reservations for the other backward classes (OBCs).

Q45. The word "Vish" used in Rigveda, referred to:

- A. People who performed various rituals
- B. The trading community of Vaishyas
- C. People or community as a whole
- D. People who did not perform sacrifices

Answer: C

Exp: Option (a) is incorrect: People who performed rituals were priests, sometimes called as Brahmins.

Option (b) is incorrect: The trading community Vaishyas was derived from the word Vish in the Later Vedic period but in Rigvedic period the term 'Vish' was not used for Vaishyas,

Option (c) is correct: Two words were used to describe the people or the community as a whole. One was the word jana, which we still use in Hindi and other languages. The other was vish.

Option (d) is incorrect: The people who did not perform sacrifices, and probably spoke different languages were referred to as Dasas or Dasyus.

Q46. Which of the following statement is correct with respect to the "profundal zone" in a lake?

- A. The rooted vegetation is found in this zone.
- B. Sediments and organisms like slug and snails are found here.
- C. The sunlight does not reach this zone.
- D. The phytoplankton grows in abundance in this zone.

Answer: C

Exp: The dark zone where sunlight does not reach in an aquatic system is known as the Profundal zone. Rooted vegetation is found in the Littoral zone and phytoplankton grows in abundance in the Limnetic zone. The bottom of the aquatic body where sediments and organisms like slug and snails are found is known as the Benthic zone.

Q47. Which of the following statements is/are correct regarding a "Unit tax"?

- A. It is a tax levied on shares and debentures of a company.
- B. It is the tax imposed on the value of a product at a certain rate of percentage.
- C. It is tax imposed on per unit sale of output at certain rate.
- D. It is a tax imposed on luxury goods.

Answer: C

Exp: A Unit Tax is a tax that the government imposes per unit sale of output. For example, suppose that the unit tax imposed by the government is Rs 2. Then, if the firm produces and sells 10 units of the good, the total tax that the firm must pay to the government is $10 \times \text{Rs } 2 = \text{Rs } 20$. On the other hand, "ad-valorem" tax is imposed on the value of product. For example, if a product has final value of Rs 100, then, tax will be levied on Rs 100 at a certain percentage.

Q48. Which of the following statements is/are true about Khilafat Movement?

- 1. Khilafat Movement demanded that the Khalifa must be left with sufficient territory to enable him to defend the Islamic faith.
- 2. The Khilafat Movement was a movement of Indian Muslims, led by Muhammad Ali and Shaukat Ali.
- 3. The Congress did not support the Khilafat Movement but Mahatma Gandhi sought to conjoin it to the Non-cooperation Movement.

Select the correct answer using the code given below:

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: B

Exp: Statement 1 is correct: They demanded the following: The Turkish Sultan or Khalifa must retain control over the Muslim sacred places in the erstwhile Ottoman empire; the Jazirat-ul-Arab (Arabia, Syria, Iraq, Palestine) must remain under Muslim sovereignty; and the Khalifa must be left with sufficient territory to enable him to defend the Islamic faith.

Statement 2 is correct: The Khilafat Movement (1919-1920) was a movement of Indian Muslims, led by Muhammad Ali and Shaukat Ali.

Statement 3 is incorrect: The Congress supported the movement and Mahatma Gandhi sought to conjoin it to the Non-cooperation Movement.

Q49. Consider the following animals:

- 1. Snails

2. Prawns
3. Crabs
4. Mussels

Which of these animals belong to the arthropoda group?

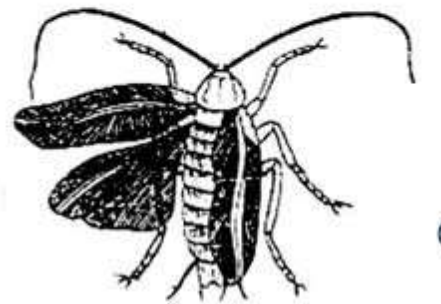
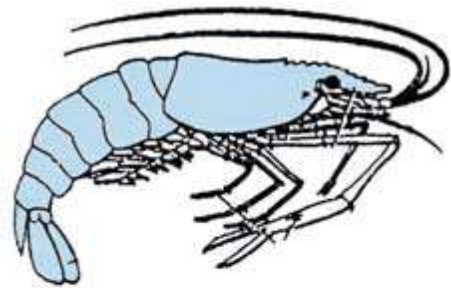
- A. 1 and 2 only
- B. 2 and 3 only
- C. 2, 3 and 4 only
- D. 1, 2, 3 and 4

Answer: B

Exp: Arthropoda is probably the largest group of animals, who are bilaterally symmetrical and segmented. There is an open circulatory system, and so the blood does not flow in well-defined blood vessels. The coelomic cavity is blood-filled. They have jointed legs (the word 'arthropod' means 'jointed legs'). Some familiar examples are prawns, butterflies, houseflies, spiders, scorpions and crabs.

Prawn and Cockroach

Snails and Mussels belong to Mollusca group. They have an open circulatory system and kidney-like organs for excretion. There is a foot that is used for moving around.



Q50. Which of the following is not a Directive Principle of State Policy in the Indian Constitution?

1. Raise the level of nutrition and the standard of living.
2. Protection of monuments and places and the objects of national importance.
3. Separation of powers between judiciary, executive and legislature.
4. Prohibition of traffic in human beings and forced labour.

Select the correct answer using the codes given below.

- A. 1 and 3 only
- B. 2 and 3 only

C. 1, 3 and 4 only

D. 3 and 4 only

Answer: D

Exp: Statement 1 is correct- Article 47 directs the state to raise the level of nutrition and the standard of living of people and to improve public health and to prohibit the consumption of intoxicating drinks and drugs which are injurious to health.

Statement 2 is correct- Article 49 directs the state to protect monuments, places and objects of artistic or historic interest which are declared to be of national importance.

Statement 3 is incorrect- As article 50 direct only to separate the judiciary from the executive in the public services of the State. Executive and legislature are inseparable in India.

Statement 4 is incorrect- As the statement is about fundamental right against exploitation under article 23.

Q51. The Bharat Stage Emission Norms (BS Norms) are in news, consider the following statements regarding these norms:

1. BS Norms are based on emission norms of the United States.
2. BS Norms are uniformly applied across the country.
3. Currently BS-V norms are applicable in India
4. These norms apply to regulate the output of air pollutants from internal combustion engines only.

Which of the above statement is/are *incorrect*?

- A. 1 and 2 only
- B. 1, 2 and 3 only
- C. 2 and 4 only
- D. All of the above

Answer: B

Exp:

- I. The Bharat Stage Emission Norms are inspired form Euro Norms applicable in European countries.
- II. These define the maximum limit of pollutants that can be emitted from internal combustion engines used in vehicles.
- III. The norms are not evenly applied across India, currently BS-IV norms are followed by major cities and BS-III norms are applicable to rest of the country.

- IV. The Government of India has an ambitious plan of skipping BS-V norms and directly enacting BS-VI norms.

Q52. Consider the following statements regarding the Peshwas:

1. They encouraged science and technology and took active interest in trade and industry.
2. They radically transformed the revenue system of the Mughals.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: D

Exp: Statement 1 is incorrect: Maratha sardars failed to encourage science and technology or to take much interest in trade and industry.

Statement 2 is also incorrect: Their revenue system was similar to that of the Mughals as also was their administration. Like the Mughals, the Maratha rulers were also mainly interested in raising revenue from the helpless peasantry.

Q53. Consider the following statements:

1. Southern slopes of the Himalayas are covered with thick vegetation cover as compared to their northern slopes.
2. Eastern slopes of the Western Ghats are covered with thick vegetation cover as compared to their western slopes.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: A

Exp: The growth of vegetation depends upon the amount of sunlight and rainfall received. The southern slopes of the Himalayas receive more rain due to the south west monsoon winds which travel west along the southern slopes. The northern slopes do not receive any such rainfall. So, the southern slopes are covered with thick vegetation as compared to the northern

slopes.

Western slopes of the Western Ghats are covered with thick vegetation cover as compared to their eastern slopes because western slopes of Western Ghats are on windward side. Hence, they receive heavy rainfall and cause thick vegetation to grow extensively whereas the Eastern slopes come under rain-shadow zone.

Q54. Consider the following statements regarding “Consumers International”:

1. It is a not-for-profit company working as a consumer protection watchdog.
2. It is one of the specialized agencies of the United Nations.
3. Its headquarters is at The Hague, Netherlands.

Which of the above statements is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: A

Exp: Consumers International (CI) is the world confederation of consumer groups. Founded on 1 April 1960, it has over 250-member organisations in 120 countries. Its head office is based in London, England. It is a not-for-profit company working as a consumer protection watchdog.

It is not a specialized agency of the United Nations.

Specialized agencies of UN

The UN Charter stipulates that each primary organ of the United Nations can establish various specialized agencies to fulfil its duties. Some best-known agencies are the International Atomic Energy Agency, the Food and Agriculture Organization, UNESCO (United Nations Educational, Scientific and Cultural Organization), the World Bank, and the World Health Organization (WHO). The UN performs most of its humanitarian work through these agencies.

Q55. During the medieval times, the word ‘Mandapika’ was used to refer:

- A. A town market
- B. A temple courtyard
- C. King’s court
- D. Village allotted to a temple

Answer: A

Exp: From the eighth century onwards, the subcontinent was dotted with several small towns. These probably emerged from large villages. They usually had a mandapika (or mandi of later times) to which nearby villagers brought their produce to sell. They also had market streets called hatta (haat of later times) lined with shops. Besides, there were streets for different kinds of artisans such as potters, oil pressers, sugar makers, toddy makers, smiths, stonemasons, etc. While some traders lived in the town, others travelled from town to town. Many came from far and near to these towns to buy local articles and sell products of distant places like horses, salt, camphor, saffron, betel nut and spices like pepper.

Q56. Consider the following statements regarding the preservatives added to food:

1. The preservatives are used to increase the shelf life of the baked foods.
2. They enhance the taste of the foods.
3. Aspartame is a popular food preservative used in soda and other packaged foods.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: A

Exp: A *preservative* is a substance or a chemical that is added to products such as *food*, beverages, pharmaceutical drugs, paints, biological samples, cosmetics, wood, and many other products to prevent decomposition by microbial growth or by undesirable chemical changes. They increase the shelf life of the foods. Eg: Benzoates (such as sodium benzoate, benzoic acid) Nitrites (such as sodium nitrite) Sulphites (such as sulphur dioxide)

Potassium sorbate is a popular food preservative used to inhibit molds and yeasts in many foods, such as cheese, wine, yogurt, dried meats, apple cider, soft drinks and fruit drinks, and baked goods.

Aspartame is one of the most common artificial sweeteners in use today and not a preservative.

Q57. Consider the following statements:

1. The ceiling fan moves in a periodic motion
2. The falling of a stone when thrown up is rectilinear motion.

Which of the above statements is/are correct?

- A. 1 only

- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

Exp: Rectilinear motion is another name for straight-line motion. This type of motion describes the movement of a particle or a body. A body is said to experience rectilinear motion if a body moves in which the direction of the velocity remains constant and the path is a straight line.

Periodic Motion is a motion that is regular and repeating. Most objects that vibrate do so in a regular and repeated fashion. Examples include Child on a swing, pendulum etc.

Q58. Which of the following is/are not one of the characteristics of El Nino?

- A. Increased surface pressure over the Indian Ocean, Australia and Indonesia
- B. Rise in warm air near Peru
- C. Fall in air pressure over eastern and central Pacific Ocean and Tahiti.
- D. Below-average sea surface temperatures across the east-central Equatorial Pacific.

Answer: D

Exp: El Nino is a weather phenomenon caused when warm water from the western Pacific Ocean flows eastward. There is rise in surface temperature near Peruvian coast. Increased surface pressure over the Indian Ocean, Australia and Indonesia and fall in air pressure over eastern and central Pacific Ocean and Tahiti occurs. Below-average sea surface temperature across the east-central Equatorial Pacific is associated with La Nina.

Paragraph: DIRECTIONS for Question No. 59: The following question consists of two statements, one labelled 'Assertion' (A) and the other labelled 'Reason' (R). Examine these two statements carefully and decide if the Assertion and the Reason are individually true and if so, whether the Reason is a correct explanation of the Assertion. Select your answer using the code given below:

- (a) If both A and R are true and R is the reason.
- (b) If both A and R are true and R does not explain A.
- (c) If A is true and R is false
- (d) If A is false and R is true.

PQ59. Assertion (A): Indian agriculture is characterised by the predominance of food crop cultivation.

Reason (R): Indian agriculture pays minimum attention towards fodder crops (4% of cropped area).

- A.
- B.
- C.
- D.

Answer: B

Exp: Indian agriculture has the predominance of the cultivation of food grains which occupy 76% of the total cropped area and account for 80% of the total agricultural production of the country. These cereals include rice, wheat, millet, gram, maize and pulses which are grown to meet the food requirements of India's vast population. Indian agriculture puts minimum attention on fodder crops (4% of cropped area). This together with lack of good pastures has detrimental effect over the development of dairy farming. Hence, although both the statements are true but R is not the explanation of A.

Q60. Demand of a product/service is generally dependent upon which of the following factor/factors?

1. Price of that product/service
2. Price of alternative products
3. Increase in consumers' income
4. Change in consumers' tastes and preferences

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1, 2 and 3 only
- D. All of the above

Answer: D

Exp: The amount of a good that a consumer would optimally choose is likely to increase when the price of the good falls and it is likely to decrease with a rise in the price of the good. Similarly, except some exceptions, demand of a product increases or decreases with impact on prices of alternative product, change in consumers' income and change in consumers' tastes and preferences. All these factors may work individually or in combination to affect the demand of a particular product.

Q61. Algae can be used as

1. Food
2. Biofuel
3. Manure
4. Pharmaceutical Ingredient

Which of the items given above is/are correct?

- A. 1 and 3 only
- B. 1, 2 and 3 only
- C. 2, 3 and 4 only
- D. All of the above

Answer: D

Exp: Algae are one of the important living resources. Algae like Laminaria is used both as human and animal food. Marine algae are used as manure due to high nutrient content. Red algae are used in pharmaceutical industry. Several algae also produce energy rich oils which can replace liquid fossil fuel, but their commercial viability is challenge so far.

	Harappan site		Known for
(1)	Mohenjo-daro	–	Great Bath
(2)	Lothal	–	Dockyard
(3)	Harappa	–	Dancing girl
(4)	Kalibangan	–	Fire Altars

Q62. Which of the pairs given below are correctly matched?

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 1, 2 and 4 only
- C. 1, 2 and 3 only
- D. 1, 2, 3 and 4.

Answer: B

Exp: The dancing girl figurine was found in Mohenjo-daro. All other pairs are correctly matched.

The evidence of fire worship has also been found at some sites such as Kalibangan and Lothal. At Kalibangan, a series of raised brick platforms with pits containing ash and animal bones have been discovered. These are identified by many scholars as fire altars.

Q63. Asexual reproduction takes place through spore formation in

- A. Rhizopus
- B. Yeast
- C. Leishmania
- D. Bryophyllum

Answer: A

Exp: The tiny blob-on-a-stick structures are involved in reproduction. The blobs are sporangia, which contain cells, or spores, that can eventually develop into new Rhizopus individuals. The spores are covered by thick walls that protect them until they come into contact with another moist surface and can begin to grow.

In Bryophyllum, reproduction takes place through vegetative propagation method.

Yeast, on the other hand, can put out small buds that separate and grow further.

In Leishmania (which cause kala-azar), which have a whip-like structure at one end of the cell; binary fission occurs in a definite orientation.

Q64. Consider the following statements about Directive Principles of State Policy:

1. It has been borrowed from the Irish Constitution, which had copied it from the Spanish Constitution.
2. These are the constitutional instructions to the State on legislative matters only.
3. They seek to establish political democracy in the country.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: A

Exp: Statement 1 is correct- Directive principles were borrowed by the framers of the Indian Constitution from the Irish Constitution of 1937, which had copied it from the Spanish Constitution.

Statement 2 is incorrect- It is not only for the legislative matters but also for the executive and administrative matters. The phrase 'Directive Principles of State Policy' denotes the ideals that the State should keep in mind while formulating policies and enacting laws. These are the constitutional instructions or recommendations to the State on legislative, executive and administrative matters.

Statement 3 is incorrect- Directive Principles of State Policy seek to establish social and economic democracy, while Fundamental Rights seek to establish political democracy by giving rights to citizens against arbitrary actions of state. DPSPs aims at realizing the high ideals of justice, liberty, equality and fraternity as outlined in the Preamble to the Constitution. They embody the concept of a 'welfare state' and not that of a 'police state', which existed during the colonial era. In brief, they seek to establish economic and social democracy in the country.

Q65. Consider the following statements regarding 'Footloose Industries':

1. The important factor in their location is accessibility by road network.
2. They are not dependent on any specific raw material, weight losing or otherwise.
3. These are generally non-polluting industries.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: D

Exp: Footloose industries can be located in a wide variety of places. They are not dependent on any specific raw material, weight losing or otherwise. They largely depend on component parts which can be obtained anywhere. They produce in small quantity and also employ a small labour force. These are generally non-polluting industries. The important factor in their location is accessibility by road network. Examples – Diamond cutting, Computer chips etc.

Q66. Which of the following can be considered as pioneer community in ecological succession?

- A. Shrubs
- B. Herbs
- C. Lichens
- D. Forest

Answer: C

Exp: The plants that invade a bare land initially are called pioneer species and their assemblage is called pioneer community. Lower plants like Lichens, form a crust over the bare rocks and begin to form soil from their organic remains and by simulating chemical breakdown

of the rocks. The accumulation of soil particles then provides suitable condition for the establishment of communities like herbs, shrubs, and forests dominated by trees.

Q67. In the demographic transition model which of the following stages is/are considered as “homeostatic” stage/s?

- A. Stages 1 and 3
- B. Stages 2 and 3
- C. Stages 1 and 4
- D. Stage 4

Answer: C

Exp: Stage 1 is characterized by high crude birth and death rates, leading to equilibrium and nearly a natural rate of increase of nearly zero, which is equilibrium. Stage 2 is when the crude death rate begins to fall as a result of technological improvements in health care, causing the rate of natural increase to rise from its zero position in stage 1. Once a country reaches stage 3 in its demographic transition, the crude birth rate falls toward the death rate, and they finally meet again in stage 4, when the “forces of change,” birth rate and death rate, are again equal, or at equilibrium.

Q68. Consider the following statements:

1. Chemical coordination is limited to the plants only.
2. The nervous system of human body uses electrical impulses to transmit messages.

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

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

Exp: In plants information transmission takes place by 2 methods. One is electric impulse other is through chemical compound. If, instead of generating an electrical impulse, stimulated cells release a chemical compound, this compound would diffuse all around the original cell. If other cells around have the means to detect this compound using special molecules on their surfaces, then they would be able to recognize information, and even transmit it. This will be slower, of course, but it can potentially reach all cells of the body, regardless of nervous connections.

In animals also chemical coordination takes place. For example-Adrenaline is secreted directly into the blood and carried to different parts of the body. The target organs or the specific tissues on which it acts include the heart. As a result, the heart beats faster, resulting in supply of more oxygen to our muscles.

In animals, such control and coordination are provided by nervous and muscular tissues. Information, acquired at the end of the dendritic tip of a nerve cell sets off a chemical reaction that creates an electrical impulse. This impulse travels from the dendrite to the cell body, and then along the axon to its end. At the end of the axon, the electrical impulse sets off the release of some chemicals. These chemicals cross the gap, or synapse, and start a similar electrical impulse in a dendrite of the next neuron. This is a general scheme of how nervous impulses travel in the body.

Q69. In the context of marginal products consider the following statements:

1. Marginal products are reductions to total products.
2. Marginal product is the change in output per unit of change in input when all other inputs are held constant.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

Exp: Marginal products are additions to total product. For any level of employment of an input, the sum of marginal products of every unit of that input up to that level gives the total product of that input at that employment level. So, total product is the sum of marginal products.

Marginal product of an input is defined as the change in output per unit of change in the input when all other inputs are held constant. Since inputs cannot take negative values, marginal product is undefined at zero level of input employment.

Q70. Consider the following statements:

1. In the case of disagreement between two Houses over a Money bill, the President can summon a joint sitting of the two Houses to resolve the deadlock.
2. The joint sitting of the two houses does not require quorum as is required for the normal sitting of the Houses.
3. A joint sitting of the Houses is governed by the Rules of Procedure of the Lok Sabha

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

- A. 1 and 2 only
- B. 2 only
- C. 1, 2 and 3
- D. 2 and 3 only

Answer: A

Exp: The minimum number of members of the House of parliament required to be present for a parliamentary proceeding to start is called Quorum.

The Presiding Officer has power to adjourn a sitting in case of absence of quorum or suspend the sitting until there is quorum.

It is 1/10th of the total membership of the House. In case of joint sitting it is 1/10th of total membership of two houses.

Quorum is also required for the joint sitting of the Houses. The joint sitting is governed by the Rules of Procedures of the Lok Sabha.

The provision of joint sitting is applicable to Ordinary bills or Financial bills only and not to Money bills or Constitutional Amendment bills. In the case of Money bills the Lok Sabha has overriding powers while a Constitutional Amendment bill must be passed by each House separately.

Q71. The excavation of which of the following cities of Indus Valley Civilization suggests that river water was stored in gigantic reservoirs around the city walls?

- A. Lothal
- B. Kalibangan
- C. Rakhigarhi
- D. Dholavira

Answer: D

Exp: The excavation site at Dholavira suggests that river water was stored in gigantic reservoirs around the city walls. Sixteen reservoirs have been discovered at Dholavira, seven of which are still intact and can be entered via brick stairs along the walls.

Q72. Under the original jurisdiction of Supreme Court (Article 131), the jurisdiction of Supreme Court extends to:

1. Disputes between States involving a question (whether of law or fact) on which the existence or extent of a legal right depends.
2. Inter State water disputes.
3. Disputes of commercial nature between the Centre and States.

Select the correct answer using the code given below:

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. All of the above

Answer: A

Exp: Under the original jurisdiction, SC decides the disputes between different units of the Indian Federation i.e. between the Centre and one or more States, between the Centre and any State or States on one side and one or more States on the other or between two or more States. But disputes between States must involve a question (whether of law or fact) on which the existence or extent of a legal right depends and any suit brought before the SC by a private citizen against the Centre or a State cannot be entertained under this jurisdiction. So first option is correct.

It does not extend to Inter State water disputes, Disputes of commercial nature between the Centre and States, matters referred to the Finance Commission, Recovery of damages by a State against the Centre, etc. So second and third option is not correct.

Q73. Which of the following gases is used to disinfect the drinking water?

- A. Hydrogen
- B. Oxygen
- C. Fluorine
- D. Chlorine

Answer: D

Exp: As a halogen, chlorine is a highly efficient disinfectant, and is added to public water supplies to kill disease-causing pathogens, such as bacteria, viruses, and protozoans, that commonly grow in water supply reservoirs, on the walls of water mains and in storage tanks.

Q74. Which of the following is/are the characteristics of Mammals?

- 1. Warm blooded animals.
- 2. Don't lay eggs.
- 3. Have mammary glands for the production of milk.

Select the correct answer using the code given below:

- A. 3 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer: B

Exp: Mammals are warm-blooded animals with four-chambered hearts. They have mammary glands for the production of milk to nourish their young. Their skin has hairs as well as sweat and oil glands. Most mammals familiar to us produce live young ones. However, a few of them, like the platypus and the echidna lay eggs, and some, like kangaroos give birth to very poorly developed young ones.

Q75. Consider the following statements with respect to the 'Basic Needs Approach':

- 1. This approach was initially proposed by the International Labour Organisation (ILO).

2. The question of human choices is ignored in this approach.
 3. This approach looks at human beings as beneficiaries or targets of all development activities.
- Which of the statement(s) given above is/are correct?

- A. 1 and 2 only
- B. 2 only
- C. 1 and 3 only
- D. 1 only

Answer: A

Exp: Welfare Approach looks at human beings as beneficiaries or targets of all development activities. People are not participants in development but only passive recipients. Whereas, in the Basic Needs Approach, the emphasis is on the provision of basic needs of defined sections ignoring the question of human choices. This approach was initially proposed by the International Labour Organisation (ILO). Six basic needs i.e.: health, education, food, water supply, sanitation, and housing were identified.

Q76. Consider the following statements regarding rural society during 18th century India:

1. The distinction between artisans and peasants in village society was rigid and no group performed the task of the other.
2. 'Jajmani System' was the method of remuneration in which artisans received a piece of land in lieu of their services.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: D

Exp: Statement 1 is incorrect: Marathi documents and village surveys made in the early years of British rule have revealed the existence of substantial numbers of artisans, sometimes as high as 25 per cent of the total households in the villages. At times, however, the distinction between artisans and peasants in village society was a fluid one, as many groups performed the tasks of both. Cultivators and their families would also participate in craft production – such as dyeing, textile printing, baking and firing of pottery, making and repairing agricultural implements.

Statement 2 is incorrect: Eighteenth-century records tell of zamindars in Bengal who remunerated blacksmiths, carpenters, even goldsmiths for their work by paying them “a small daily allowance and diet money.” This later came to be described as the jajmani system. The piece of land was not given in lieu of services.

Q77. Under the advisory jurisdiction of Supreme Court (Article 143), the SC must tender its opinion to the President:

1. On any question of law or fact of public importance which has arisen or which is likely to arise.
2. On any dispute arising out of any pre-constitutional treaty, agreement, covenant, engagement, Sanad or other similar instruments.

Which of the statements given above is/ are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

Exp: Under the advisory jurisdiction of SC, the SC may tender or may refuse to tender its opinion to the President in matters belonging to any question of law or fact of public importance which has arisen or which is likely to arise. So, the first option is not correct.

But it must tender its opinion to the President in matters belonging to any dispute arising out of any pre-constitutional treaty, agreement, covenant, engagement, sanad or other similar instruments. So, second option is correct.

Q78. In the socio economic and caste census, which of the following households are given highest priority for inclusion in the BPL list?

1. Households without shelter
2. destitute/living on alms
3. Manual scavengers
4. Primitive Tribal Groups
5. Legally released bonded labourers

Select the correct answer using the code given below:

- A. 1, 3, 4 and 5 only
- B. 1, 2, 4 and 5 only
- C. 2, 3 and 5 only
- D. 1, 2, 3, 4 and 5

Answer: D

Exp: Socio economic and caste census is being conducted for the first time in India. It will be undertaken through a comprehensive door to door enumeration across the country to enumerate castes along with socio-economic data. SECC paves the way to identify the households living below the poverty line in rural and urban areas of the country. The following households will have the highest priority for inclusion in the BPL list.

- (a) Households without shelter
- (b) destitute/living on alms

- (c) Manual scavengers
- (d) Primitive Tribal Groups
- (e) Legally released bonded labourers.

Q79. Consider the following statements:

1. Acid turns blue litmus red.
2. Bases turn red litmus blue.
3. A salt is always neutral in nature.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 3 only
- C. 1, 2 and 3
- D. None of the Above

Answer: A

Exp: Acid turns blue litmus red. Bases turn red litmus blue.

An acid and a base neutralise each other and form a salt. A salt may be acidic, basic or neutral in nature.

Q80. Which of the following statements are correct?

1. The writ of Habeas Corpus can be issued against both public authorities as well as private individuals.
2. The writ of Prohibition can be issued against Judicial bodies, Legislative bodies and Administrative Authorities.
3. The writ of Certiorari cannot be issued against Administrative Authorities and Legislative bodies.
4. Anyone can exercise the writ of Quo-warranto

Select the correct answer using the code given below:

- A. 1, 2 and 4 only
- B. 1, 2 and 3 only
- C. 1 and 4 only
- D. 1, 3 and 4 only

Answer: C

Exp: Habeas Corpus– It is an order issued by the court to a person who has detained another person, to produce the body of the latter before it. It can be issued against both public authorities as well as private individuals.

Prohibition - It means 'to forbid'. It is issued by a higher court to a lower court or tribunal to prevent the latter from exceeding its jurisdiction or usurping a jurisdiction that it does not

possess. It can be issued only against judicial and quasi-judicial authorities. It cannot be issued against legislative bodies and administrative authorities.

Certiorari – It means ‘to be certified’ or ‘to be informed’. It is issued by a higher court to a lower court or tribunal either to transfer a case pending with the latter to itself or to quash the order of the latter in a case. It can be issued only against judicial and quasi-judicial authorities and administrative authorities. It cannot be issued against legislative bodies and private individuals or bodies.

Quo-Warranto – It means ‘by what authority or warrant’. It is issued by the court to enquire into the legality of claim of a person to a public office. It can be exercised by any interested person, not only the aggrieved person.

Q81. Consider the following statements regarding the difference between CPI and GDP deflator:

1. CPI covers more goods and services as compared to GDP deflator.
2. GDP deflator does not include prices of imported goods.
3. The weights are constant in CPI – but they differ according to production level of each good in GDP deflator.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. All of the above

Answer: C

Exp: CPI may differ from GDP deflator because

1. The goods purchased by consumers do not represent all the goods which are produced in a country. GDP deflator takes into account all such goods and services.
2. CPI includes prices of goods consumed by the representative consumer, hence it includes prices of imported goods. GDP deflator does not include prices of imported goods.
3. The weights are constant in CPI – but they differ according to production level of each good in GDP deflator.

Q82. Which of the following bank/banks accept(s) deposit(s) from and lend(s) money to public?

1. Cooperative Bank
2. Payment Bank
3. Small Bank
4. NABARD

Select the correct answer using the code given below:

- A. 1 and 2 only

- B. 1 and 3 only
- C. 3 only
- D. All of the above

Answer: C

Exp: Cooperative banks accept deposits from and lend money only to their members.

Payment banks can't lend money.

Small bank can perform both functions.

NABARD cannot do these functions with the general public.

Q83. Consider the following statements:

1. The stone statues of Indus Valley Civilization show that the artists were capable of handling three dimensional volumes.

2. Compared to the stone and bronze statues the terracotta representations of human form are more refined in the Indus Valley.

Which of the statements given above is are *incorrect*?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

Exp: Statement 1 is correct: The stone statues found at Harappa and Mohenjodaro are excellent examples of handling three dimensional volumes. In stone are two male figures – one is a torso in red sandstone and the other is a bust of a bearded man in steatite.

Statement 2 is incorrect: The Indus Valley people made terracotta images but compared to the stone and bronze statues the terracotta representations of human form are crude and not refined in Indus Valley.

Q84. Under the Right to Freedom of Speech and expression, which of the following rights are not explicitly mentioned, but are implicit?

- 1. Freedom of silence
- 2. Right to Strike
- 3. Right against Bundh called by a political party or organization
- 4. Freedom of Press

Select the correct answer using the code given below:

- A. 1 and 4 only
- B. 1, 2 and 4 only
- C. 1, 3 and 4 only
- D. All of the above

Answer: C

Exp: Right to freedom of speech implies that every citizen has the right to express his views, opinion, belief and convictions freely by word of mouth, writing, printing, picturing, or in any other manner. The SC held that the freedom of speech and expression includes all the rights mentioned in the question except the right to strike. It provides only the right to demonstration or picketing.

Q85. Which among the following is the reservoir of largest amount of freshwater?

- A. Groundwater
- B. Lakes and Rivers
- C. Soil Moisture
- D. Atmosphere

Answer: A

Exp: Out of the total water present on earth, 97.5% is in saline condition and only 2.5% is fresh water. The largest reservoir of freshwater on earth are icecaps (1.97%), after which the groundwater (0.5%) holds second largest amount of freshwater. Rivers and lakes holds 0.02% freshwater and soil moisture contains nearly 0.01% freshwater, remaining 0.0001% freshwater is present in the atmosphere. Hence, as Ice caps are not included in the options, option A is the correct answer.

Q86. Arrange the following islands from north to south:

1. Reunion Islands
2. Mauritius
3. Seychelles
4. Comoros Island

Select the correct order from the following:

- A. 1-2-3-4
- B. 3-4-2-1
- C. 3-2-1-4
- D. 2-1-3-4

Answer: C

Exp:

D. Neither 1 nor 2

Answer: D

Exp: Cash Reserve Ratio (CRR) The fraction of their deposits which the commercial banks are required to keep with RBI. Statutory Liquidity Ratio (SLR) The fraction of their total demand and time deposits which the commercial banks are required by RBI to invest in specified liquid assets.

Q89. M3, which is also known as “Broad Money”, consists of which of the following?

1. Currency notes and coins held by public.
2. Net demand deposit held by public.
3. Savings deposits with Post Office Savings Banks.
4. Net time deposits of Commercial Banks.

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 2 and 4 only
- C. 1, 2 and 3 only
- D. 1, 2 and 4 only

Answer: D

Exp: The RBI publishes figures for four alternative measures of money supply, viz. M1, M2, M3 and M4. They are defined as follows:

M1 = CU + DD;

M2 = M1 + Savings deposits with Post Office savings banks;

M3 = M1 + Net time deposits of commercial banks;

M4 = M3 + Total deposits with Post Office savings organisations (excluding National Savings Certificates).

where, CU is currency (notes plus coins) held by the public and DD is net demand deposits held by commercial banks. M1 and M2 are known as narrow money. M3 and M4 are known as broad money. These gradations are in decreasing order of liquidity. M1 is most liquid and easiest for transactions whereas M4 is least liquid of all. M3 is the most commonly used measure of money supply. It is also known as aggregate monetary resources.

Q90. The United Nations Human Development Index is based on the assumption that a country’s development is:

- A. Directly related to its position in the core or periphery.
- B. A function of social, demographic, and economic factors.
- C. Dependent upon liberalization of trade policies by a country.
- D. Indicated most accurately by its Gross Domestic Product

Answer: B

Exp: The United Nations (UN) measures countries' development with its Human Development Index (HDI), ranking countries up to 1.0, or 100 percent. The equation for the index includes social, demographic, and economic factors, such as literacy rate and amount of education, life expectancy, and gross domestic product. (a) relates to core periphery models. (c) is one side of the economic globalization debate. (d) captures too narrowly the meaning of HDI, because the intent of the UN equation was to broaden analysis of development beyond gross domestic product.

Q91. The word "Dirty Floating" which sometimes appears in the news means-

- A. Manipulation in Stock Market by SEBI.
- B. Manipulation in Stock Market by Government of India.
- C. Manipulation in Currency exchange rate by RBI.
- D. Manipulation in Currency exchange rate by Government of India.

Answer: C

Exp: Managed floating exchange rate system or 'dirty floating' is a mixture of a flexible exchange rate system (the float part) and a fixed rate system (the managed part). Under this system central banks intervene to buy and sell foreign currencies in an attempt to moderate exchange rate movements whenever they feel that such actions are appropriate.

Q92. Consider the following statements:

- 1. Iron is the most abundant metal in the Earth's crust.
 - 2. Oxygen is the second most abundant element in the Earth's crust.
- Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: D

Exp: Aluminium is the most abundant metal in the earth's crust, Iron is the second most abundant metal.

Oxygen is the most abundant element in the Earth's crust, Silicon is the second most abundant element in the Earth's crust.

Q93. Consider the following statements regarding ecological pyramids:

- 1. In all the ecosystems, pyramid of biomass is always upright.

2. The pyramid of energy flow is always upright.

3. The pyramid of numbers can be inverted.

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

A. 1 only

B. 1 and 3 only

C. 2 and 3 only

D. All of the above

Answer: C

Exp: In most of the ecosystems the pyramid of biomass and numbers are upright, i.e., with successive trophic level the numbers and biomass comes down. However, in certain ecosystems the pyramid of biomass (e.g., in deep water bodies) and the pyramid of numbers (e.g. tree dominated ecosystems) can be inverted. Hence the first statement is incorrect and the third statement is correct.

The amount of energy flow further decreases with successive trophic level, thus a pyramid of energy will be always upright.

Q94. Consider following pairs of acids and substances they are found in:

(Acid)	(Found in)
(1) Acetic Acid	: Ant's Sting
(2) Formic Acid	: Vinegar
(3) Oxalic Acid	: Spinach
(4) Ascorbic Acid	: Citrus Fruits

Which of the above pairs is/are correctly matched?

A. 1 and 2 only

B. 2 and 3 only

C. 3 and 4 only

D. 1, 3 and 4 only

Answer: C

Exp:

- Acetic acid is found in Vinegar
- Formic acid is found in Ant's sting
- Citric acid is found in Citrus fruits such as oranges, lemons, etc.

- Lactic acid in Curd; Oxalic acid in Spinach; Ascorbic acid in Amla and other Citrus fruits; Tartaric acid in Tamarind, grapes, unripe mangoes, etc.

Q95. Consider the following statements regarding appointments of judges of higher judiciary in India.

1. The judges of Supreme Court are appointed by the President while judges of the High Court are appointed by the Governor of the respective State.
2. The Legislature is not involved in the process of appointments of judges.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

Exp: The Judges of the Supreme Court and the High Court are appointed by the President after 'consulting' the CJI. The Supreme Court has established the principle of collegiality in making recommendations for appointments. At the moment therefore, in matters of appointment the decision of the group of senior judges of the Supreme Court carries greater weight. Overall, in matters of appointment to the judiciary, the Supreme Court and the Council of Ministers play an important role.

The second statement is correct as the legislature is not involved in the process of appointments of judges. The legislature plays important role in removal of the judges. A judge of the Supreme Court or High Court can be removed only on the ground of proven misbehaviour or incapacity. A motion containing the charges against the judge must be approved by special majority in both Houses of the Parliament.

Q96. Due to which of the following phenomenon, the temperature rises in a Greenhouse?

- A. Outgoing solar radiation
- B. Convection
- C. Radiation
- D. Trapping of long-wave radiation

Answer: D

Exp: The greenhouse effect is the trapping of long-wave radiation by gases in the atmosphere. The Natural greenhouse effect are caused by the natural gases in the atmosphere which keep the Earth at its current temperature, without which the Earth would be much colder. In green house the short-wave penetrates the glass but after reflection its wavelength increases and it is unable to cross the glass, causing the heating of the green house.

Q97. Which of the following statements is/are incorrect regarding the Dual system of administration prevalent in Bengal in the 18th century:

1. The Nawab controlled the defence of Bengal, while the East India Company controlled its finances.
 2. The system was advantageous to the East India Company as it had power without responsibility.
 3. The weaving industry of the Bengal mostly suffered due to the dual system of the administration.
 4. The separation of power resulted in efficient administration and checked the drain of wealth
- Select the correct answer using the code given below:

- A. 4 only
- B. 1 and 4 only
- C. 1, 2 and 3 only
- D. 1, 3 and 4 only

Answer: B

Exp: Statement 1 and 4 are not correct - The East India Company's army was in sole control of its defence and the supreme political power was also in its hands. The Nawab depended for its internal and external security on the British. Statements 2 and 3 are correct. The consequences for the people were disastrous as the Company's servants had now the whole Bengal to themselves and the oppression of the people increased greatly. The Company used political power to discourage the silk industry in Bengal, for the silk fabrics of Bengal competed with those manufactured in England in the England markets.

Q98. The fundamental rights were embodied in the Constitution to ensure the philosophy of:

1. Secularism
2. Democratic Government
3. Individual Liberty
4. Democratic Socialism

Which of the statements given above is/are correct?

- A. 2, 3 and 4 only
- B. 1, 2 and 3 only
- C. 2 and 3 only
- D. All of the above

Answer: B

Exp: Though the word secular was added to our preamble by 42nd constitutional amendment act, 1976 but there can be no doubt that our constitution makers wanted to establish such a state as article 25 to 28 were included.

Democratic government means the government based on the doctrine of popular sovereignty. Individual Liberty is secured to all of the citizens of India in the form of liberty of thought, belief,

expression, faith and worship through FR. Because in case of violation, it is enforceable in courts.

Democratic socialism is a political ideology that advocates political democracy alongside social democracy that is a way of life that recognizes equality, liberty and fraternity. It is envisioned under Directive Principles of State Policy.

Q99. Consider the following with respect to energy flow in an ecosystem:

1. The energy flow is bi-directional throughout the trophic levels.
2. The amount of energy flow decreases with successive trophic level.

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

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: A

Exp: The energy flow in an ecosystem is unidirectional, i.e., it cannot be transferred in a reversed direction. Hence, the first statement is incorrect.

Producers capture a very small fraction of solar energy; the amount of energy flow further decreases with successive trophic level in a food chain. Hence, the second statement is correct.

Q100. With reference to 'light' consider the following statements:

1. The bending of a beam of light when it passes obliquely from one medium to another is known as deviation
2. The change of direction of light by a mirror is called the refraction of light.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: D

Exp: Refraction is the change in direction of wave propagation due to a change in its transmission medium. The phenomenon is explained by the conservation of energy and the conservation of momentum.

The angle equal to the difference between the angle of incidence and the angle of refraction of a ray of light passing through the surface between one medium and another of different refractive index is called deviation.

The change of direction of light is called the reflection of light.

