

**Q.1) Which of the following factors can influence the distribution of the population?**

1. Mineral deposits
2. Availability of water
3. Topography
4. Urbanisation

Select the correct answer using the code given below:

- a) Only 1 and 2
- b) Only 2, 3 and 4
- c) Only 1, 3 and 4
- d) All of the above

Q.1) Solution: (d)

**Explanation:**

There are several factors that affect the population distribution:

- **Geographical Factors**
  - **Topography/Landforms-** More people live on plains than plateaus and mountains. This is because plains are better suited for agriculture. Plains are the most densely populated areas of the world.
  - **Climate-** People prefer staying in places with mild, equable climate. Places with both extreme heat or extreme cold are much less populated in comparison.
  - **Soil-** Agriculture being one of the oldest and most common occupations in most parts of the world, places with fertile soils have a greater population density than places with non-arable soil.
  - **Water-** Water is another essential natural resource and people are more likely to live in areas where freshwater is easily available. This is another reason why river valleys are densely populated.
  - **Social factors:** Population is higher in places with better housing, health facilities, educational institutions and transport systems etc.

- **Cultural factors:** Places which carry cultural or/and religious significance attract people, leading to a higher population.
- **Economic factors:** Economic factors such as the opportunities for employment and the cost-of-living expenses also influence the population density of a place.
  - **Urbanisation:** Cities offer better employment opportunities, educational and medical facilities, better means of transport and communication.
  - **Minerals-** Minerals are the raw materials for any form of industries. Thus Places with significant mineral deposits are places where industries grow, leading to an increase in the population around such areas.
  - **Industrialisation:** Industrial belts provide job opportunities and attract large numbers of people.

**Q.2) These settlements are fragmented into several units physically separated from each other. Locally known as para, palli, nagla etc in various parts of the country, they are often motivated by social and ethnic factors. Such types of settlements are frequently found in the lower valleys of the Himalayas and the middle and lower Ganga plain. Identify the type of human settlements from the passage given above.**

- a) Hamlet
- b) Semi-clustered
- c) Dispersed
- d) Clustered

Q.2) Solution: (a)

**Explanation:**

Types of settlements are determined by the extent of the built-up area and inter-house distance. In India, compact or clustered village of a few hundred houses is a rather universal feature, particularly in the northern plains. However, there are several areas, which have other forms of rural settlements. There are various factors and conditions responsible for having different types of rural settlements in India.

- These include
  - physical features – nature of the terrain, altitude, climate and availability of water
  - cultural and ethnic factors – social structure, caste and religion
  - security factors – defence against thefts and robberies.
- Rural settlements in India can broadly be put into four types:
  - **Clustered Settlements:** The clustered rural settlement is a compact or closely built-up area of houses. In this type of village, the general living area is distinct and separated from the surrounding farms, barns and pastures. The closely built-up area and its intervening streets present some recognizable patterns or geometric shapes, such as rectangular, radial, linear, etc. Such settlements are generally found in fertile alluvial plains and in the northeastern states. Sometimes, people live in compact villages for security or defence reasons, such as in the Bundelkhand region of central India and in Nagaland. In Rajasthan, scarcity of water has necessitated compact settlement for maximum utilization of available water resources.
  - **Hamleted Settlements:** Sometimes settlement is fragmented into several units physically separated from each other bearing a common name. These units are locally called panna, para, palli, nagla, dhani, etc. in various parts of the country. This segmentation of a large village is often motivated by social and ethnic factors. Such villages are more frequently found in the middle and lower Ganga plain, Chhattisgarh and lower valleys of the Himalayas. So, option (a) is correct.
  - **Dispersed Settlements:** Dispersed or isolated settlement patterns in India appear in the form of isolated huts or groups of few huts in remote jungles, or on small hills with farms or pastures on the slopes. Extreme dispersion of settlement is often caused by the extremely fragmented nature of the terrain and land resource base of habitable areas. Many areas of Meghalaya, Uttaranchal, Himachal Pradesh and Kerala have this type of settlement.
  - **Semi-Clustered Settlements:** Semi-clustered or fragmented settlements may result from the tendency of clustering in a restricted area of dispersed settlement. More often such a pattern may also result from the segregation or fragmentation of a large compact village. In this case, one or more sections of the village society choose or are forced to live a little away from the main cluster or village. In such cases, generally, the land-owning and the dominant community occupy the central part of the main village, whereas people of lower

strata of society and menial workers settle on the outer flanks of the village. Such settlements are widespread in the Gujarat plain and some parts of Rajasthan.

**Q.3) Both Indian Standard Meridian and Tropic of Cancer pass through which of the following states?**

1. Madhya Pradesh
2. Odisha
3. West Bengal
4. Chhattisgarh

Select the correct answer using the code given below.

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

Q.3) Solution: (d)

**Explanation:**

- Indian Standard Meridian (82.5° E) passes through Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Odisha and Andhra Pradesh.
- Tropic of Cancer is an imaginary line, at an angle of 23.50 degrees North from the Equator, that passes through the middle of India. If you run this imaginary line around Earth, it passes through 17 countries, India being one of them. The Tropic of Cancer passes through eight states in India: Gujarat (Jasdan), Rajasthan (Kalinjarh), Madhya Pradesh (Shajapur), Chhattisgarh (Sonhat), Jharkhand (Lohardaga), West Bengal (Krishnanagar), Tripura (Udaipur) and Mizoram (Champhai).
- Hence option (d) is the correct answer.

**Q.4) Consider the following statements:**

1. Mahi River is the only river in India that cuts the Tropic of Cancer twice.
2. The Tropic of Cancer's position is not fixed, but constantly changes .

Which of the above statements is/are correct?

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

Q.4) Solution: (c)

**Explanation:**

Mahi River is the only river in India that cuts the Tropic of Cancer twice, first in Madhya Pradesh from where it flows towards Rajasthan and enters Gujarat where it cuts for the second time. Udaipur in Tripura is the city nearest to the Tropic of Cancer.

The Tropic of Cancer's position is not fixed, but constantly changes because of a slight wobble in the Earth's longitudinal alignment relative to the ecliptic, the plane in which the Earth orbits around the Sun. Earth's axial tilt varies over a 41,000-year period from 22.1 to 24.5 degrees, and as of 2000 is about 23.4 degrees, which will continue to remain valid for about a millennium. This wobble means that the Tropic of Cancer is currently drifting southward at a rate of almost half an arcsecond (0.468") of latitude, or 15 m (49 ft), per year. The circle's position was at exactly 23° 27'N in 1917 and will be at 23° 26'N in 2045.

**Q.5) Consider the following statements with respect to the Indian Peninsula:**

1. The Peninsula mostly consists of very ancient gneisses and granites.
2. The Peninsula mostly consists of relict and residual mountains.
3. The Thar desert is an extension of the peninsula region.

Which of the above statements is/are correct?

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

Q.5) Solution: (d)

**Explanation:**

- **Statement 1 is correct:** The Indian Peninsula was formed essentially by a great complex of very ancient gneisses and granites, which constitutes a major part of it. Since the Cambrian period, the Peninsula has been standing like a rigid block with the exception of some of its western coast which is submerged beneath the sea and some other parts changed due to tectonic activity without affecting the original basement.
- **Statement 2 is correct:** As a part of the Indo-Australian Plate, it has been subjected to various vertical movements and block faulting. The rift valleys of the Narmada, the Tapi and the Mahanadi, and the Satpura block mountains are some examples of it. **The Peninsula mostly consists of relict and residual mountains** like the Aravalli hills, the Nallamala hills, the Javadi hills, the Veliconda hills, the Palkonda range and the Mahendragiri hills, etc. The river valleys here are shallow with low gradients.
- **Statement 3 is correct:** The northern boundary of the Peninsular Block may be taken as an irregular line running from Kachchh along the western flank of the Aravalli Range near Delhi and then roughly parallel to the Yamuna and the Ganga as far as the Rajmahal Hills and the Ganga delta. Apart from these, the Karbi Anglong and the Meghalaya Plateau in the northeast and **Thar desert in Rajasthan are also extensions of this block.** The northeastern parts are separated by the Malda fault in West Bengal from the Chhotanagpur plateau. In Rajasthan, the desert and other desert-like features overlay this block.

**Q.6) Malda gap lies between:**

- a) Meghalaya and West Bengal
- b) Meghalaya and Assam
- c) Odisha and West Bengal
- d) Bihar and Odisha

Q.6) Solution: (a)

**Explanation:**

- The peninsular plateau extends beyond the Rajmahal hills to form the Meghalaya or the Shillong plateau.
- Garo-Rajmahal Gap also called the Malda Gap, separates this plateau from the main block.
- The Malda gap is located in West Bengal and separates the Meghalaya and Chhotanagpur plateau. This gap was formed by down-faulting. It was later filled by sediments deposited by the Ganga and Brahmaputra.

**Q.7) The northern part of this plain adjoining Shiwalik hills has been intensively eroded by numerous seasonal streams called 'cho'. River courses have carved broad flood plains of khaddar flanked by bluffs locally known as dhayas. Which of the following plains has been described in the passage given above?**

- a) Rajasthan Plain
- b) Punjab–Haryana Plain
- c) Brahmaputra Plain
- d) Coastal plains

Q.7) Solution: (b)

**Explanation:**

- The great plains of North India is considered monotonous and characterized by its extreme horizontality and low elevation. This vast area exhibits distinctive fluvial patterns, directions of flow, and geomorphology. The great plain of India is divided into the following four regions: 1) The Rajasthan Plain 2) The Punjab–Haryana Plain 3) The Ganga Plain 4) The Bramhaputra Plain.
  - **Punjab–Haryana Plain:**
    - Part of the plain shows flat to slightly convex surface controlled by the subsurface Delhi–Aravalli ridge. Its eastern boundary in Haryana is formed by the river Yamuna. The rest of Haryana does not have any perennial rivers. It is called the Indo-Gangetic Divide and has reversal of slope. Punjab state is a part of the plain formed as a result of alluvial deposits by five rivers viz. Satluj, Beas, Ravi, Chenab and Jhelum.
    - Mass of alluvium has been broken by the river courses which have carved broad flood plains of khaddar flanked by bluffs locally known as dhayas.
    - These bluffs, as high as 3 m or more have been heavily gullied. The land between rivers here is called Doab.
    - The northern part of this plain adjoining Shiwalik hills has been intensively eroded by numerous seasonal streams called chos.
    - The area between the Ghaggar and the Yamuna rivers lies in Haryana and is often termed as 'Haryana Tract'. It acts as a water divide between the Yamuna and the Satluj River.
  - Hence option (b) is the correct answer.

**Q.8) With reference to coastal plains in India, consider the following statements:**

1. The western coastal plains are submerged coastal plains and the eastern coastal plains are emergent coastal plains.
2. The rivers flowing through the western coastal plain do not form any delta.

Which of the statements given above is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2



d) Neither 1 nor 2

Q.8) Solution: (c)

**Explanation:**

- **Statement 1 is correct:** The western coastal plains are an example of a submerged coastal plain. Because of this submergence, it is a narrow belt and provides natural conditions for the development of ports and harbours like Kandla, Mazagaon, JLN port Navha Sheva, Marmagao, Mangalore, Cochin, etc. The western coastal plains are narrow in the middle and get broader towards the north and south.
- The rivers flowing through the western coastal plain do not form any delta. Hence, **statement 2 is correct.**
- As compared to the western coastal plain, the eastern coastal plain is broader and is an example of an emergent coast. There are well-developed deltas here, formed by the rivers flowing eastward into the Bay of Bengal. These include the deltas of the Mahanadi, the Godavari, the Krishna and the Kaveri.

**Q9. Consider the following statements regarding the drainage patterns:**

1. The rivers of the northern plains have a dendritic drainage pattern.
2. When the rivers discharge their waters from all directions in a lake or depression, the pattern is known as radial.
3. When the rivers originate from a hill and flow in all directions, the pattern is known as centripetal.

How many of the statements given above is/are correct?

- a) Only 1 statement is correct.
- b) Only 2 statements are correct.
- c) All 3 statements are correct
- d) None of the statements are correct.

Q.9) Solution: (a)

**Explanation:**

- Drainage: The flow of water through well-defined channels is known as 'drainage' and the network of such channels is called a 'drainage system'.
- Drainage Pattern: It refers to the system of flow of surface water mainly through the forms of rivers and basins.
- The drainage system depends upon factors such as slope of land, geological structure, amount of volume of water and velocity of water.
- Types of Drainage Patterns:
  - The drainage pattern resembling the branches of a tree is known as "dendritic" the examples of which are the rivers of northern plain. Hence, **statement 1 is correct.**
  - When the rivers originate from a hill and flow in all directions, the drainage pattern is known as 'radial'. The rivers originating from the Amarkantak range present a good example of it. Hence, **statement 3 is incorrect.**
  - When the primary tributaries of rivers flow parallel to each other and secondary tributaries join them at right angles, the pattern is known as 'trellis'.
  - When the rivers discharge their waters from all directions in a lake or depression, the pattern is known as 'centripetal'. Hence, **statement 2 is incorrect.**

**Q.10) Pinjal River was seen in the news recently. Pinjal River flows through which state?**

- a) Punjab
- b) Maharashtra
- c) Gujarat
- d) Madhya Pradesh

Q.10) Solution: (b)

**Explanation:**

Pinjal is a river flowing in **Maharashtra**. It is a tributary of the river Vaitarna. There has been a proposal seeking to link Damanganga and Pinjal as part of the river inter-linking program. The D-P link envisages transfer of surplus flows from the Bhugad reservoir and the Khargihill reservoirs in the Damanganga basin to Mumbai via the Pinjal river in the Vaitarna basin.

**Q.11) Which of the following are right bank tributaries of river Indus?**

1. Shyok
2. Gilgit
3. Nubra
4. Jhelum

Select the correct answer from the codes given below:

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

Q.11) Solution: (c)

**Explanation:**

The Indus receives a number of Himalayan tributaries such as the **Shyok, the Gilgit, the Zaskar, the Hunza, the Nubra, the Shigar, the Gasting and the Dras**. It finally emerges out of the hills near Attock where it receives the Kabul river on its right bank. The other important tributaries joining the right bank of the Indus are the Khurram, the Tochi, the Gomal, the Viboa and the Sangar. They all originate in the Sulaiman ranges.

Shyok, Gilgit and Nubra are right bank, while Jhelum is left bank tributary.

**Q.12) With reference to monsoon depressions in India, consider the following statements:**

1. These can originate over water bodies only.
2. Due to the high vertical wind shear present during the Southwest monsoon season, monsoon depressions generally do not intensify into cyclonic storms.

Which of the statements given above is/are correct?

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

Q.12) Solution: (b)

**Explanation:**

- The depressions which form during the monsoon season are called the monsoon depressions. These are low-pressure areas which cause most of monsoon rains. These can be of **Bay of Bengal origin, Land origin or Arabian Sea origin**. Hence, **statement 1 is incorrect**.
- Their shape is roughly elliptical and their horizontal extension is about 1000's Kms of the surface. Its vertical extension is about 6-9 km.
- The Maximum wind strength and intensity can be noticed at the levels of 0.9km or 1.5 km. Due to the **high vertical wind shear present during the Southwest monsoon season, monsoon depressions generally do not intensify into cyclonic storms**. The depressions forming in pre-monsoon season and post-monsoon season intensifies into cyclonic storm. Hence, **statement 2 is correct**.

**Q.13) Consider the following pairs:**

Sr.no.	Type of forestry	Description
1.	Agro-Forestry	Raising of trees and agricultural crops on the same land
2.	Farm Forestry	Raising trees for commercial and non-commercial purposes on their farmlands.
3.	Urban Forestry	Raising of trees on public and privately owned lands in and around urban centres.

Which of the pairs given above are correctly matched?

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

Q.13) Solution: (d)

**Explanation:**

- Social forestry means the management and protection of forests and afforestation on barren lands with the purpose of helping in environmental, social, and rural development.
- The National Commission on Agriculture(1976) has classified social forestry into three categories viz. Urban forestry, Rural forestry and Farm forestry.
  - **Urban forestry** pertains to the raising and management of trees on public and privately owned lands in and around urban centres such as green belts, parks, roadside avenues, industrial and commercial green belts, etc. Hence, 3 is correctly matched.
  - **Rural forestry** lays emphasis on the promotion of agro-forestry and community-forestry.
  - **Agro-forestry** is the raising of trees and agriculture crops on the same land inclusive of the waste patches. Hence, 1 is correctly matched.
  - **Community forestry** involves the raising of trees on public or community land such as the village pasture and temple land, roadside, canal bank, strips along railway lines, and schools, etc. It aims at providing benefits to the community as a whole.

- **Farm forestry** means the process under which farmers grow trees for commercial and non-commercial purposes on their farmlands. Hence, 2 is correctly matched.

**Q.14) It is a part of the Western ghats. It is also known as the gateway to Kerala. The Bharathapuzha river originates here. It is said to be older than the Himalayas. Some geologists argue that it is here that the Madagascar separated from the Indian plate. The wet southwest monsoons as well as storms from the Bay of Bengal cross the mountains through the opening.**

The above passage is a description for which of the following places?

- Palakkad Gap
- Munnar hill region
- Kottayam Backwaters
- Malabar coast

Q.14) Solution: (a)

**Explanation:**

- **Palakkad gap**, also known as Palghat Gap, is a **major break in the Western Ghats Mountain** range. It is located between the Nilgiri Hills to the north and the Anaimalai Hills to the south and straddles the Kerala–Tamil Nadu border, serving as a major communication route between these two states.
- Highways and rail lines through the gap connect Palghat in Kerala with Coimbatore and Pollachi in Tamil Nadu. Hence, it is called as the **gateway to Kerala**.
- **Older than the Himalayas**, many geological theories reinforce the formation of the gap. One of the theories postulates that it is here that Madagascar separated from the Indian plate forming a wide gap. The **Angavo entrapment in Madagascar and Palakkad gap fit into each other perfectly**.
- Palghat Gap also influences southern India's climate; the wet southwest monsoons as well as storms from the Bay of Bengal cross the mountains through this opening.

**Q.15) Arrange the following vegetation found in the Himalayas according to the ascending order of elevation of occurrence:**

1. Temperate grasslands
2. Deciduous forests
3. Alpine forests

Select the correct answer using the codes given below.

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

Q.15) Solution: (a)

**Explanation:**

The Himalayan ranges show a succession of vegetation from the tropical to the tundra, which changes in with altitude. **Deciduous forests are found in the foothills** of the Himalayas. It is **succeeded by the wet temperate type** of forests between an altitude of 1,000-2,000 m. In the higher hill ranges of north-eastern India, hilly areas of West Bengal and Uttaranchal, evergreen broad-leaf trees such as oak and chestnut are predominant.

- Between 1,500-1,750 m, **pine forests** are also well-developed in this zone, with Chir Pine as a very useful commercial tree. Deodar, a highly valued endemic species grows mainly in the western part of the Himalayan range. Deodar is a durable wood mainly used in construction activities. Similarly, the chinar and the walnut, which sustain the famous Kashmir handicrafts, belong to this zone.
- Blue pine and spruce appear at altitudes of 2,225-3,048 m. At many places in this zone, **temperate grasslands** are also found.
- But in the higher reaches, there is a transition to **Alpine forests and pastures**. Silver firs, junipers, pines, birch, rhododendrons, etc. occur between 3,000-4,000 m. Thus, the correct order is 2-1-3.

**Q.16) What do you understand by the term 'Bugyals' in the context of Indian Geography?**

- a) Winter Grasslands in the Terai region of Himalayan rivers
- b) Summer Grasslands in the valleys at lower elevations in Himalayas
- c) Summer Grasslands at higher elevations in Himalayas
- d) Private farms at higher elevations of Himalayas

Q.16) Solution (c)

**Explanation:**

The term "Bugyals" in the context of Indian geography refers to option a) Summer Grasslands at higher elevations in the Himalayas. Bugyals are vast meadows or alpine grasslands that are found in the higher reaches of the Himalayan mountain range, particularly in the states of Uttarakhand and Himachal Pradesh. These grasslands are characterized by lush greenery and a variety of wildflowers during the summer months. They serve as grazing grounds for livestock and are often visited by trekkers and nature enthusiasts due to their scenic beauty.

**Q.17) Which of the following statements best describes transhumance?**

- a) It is the transition of fallow land into cultivable land.
- b) It is a practice of moving from plains to mountains and vice-versa in a seasonal cycle.
- c) It is the migration of people from rural to urban centres.
- d) It is the transition of population within rural areas.

Q.17) Solution: (b)

**Explanation:**

- The process of migration from plain areas to pastures on mountains during summers and again from mountain pastures to plain areas during winters is known as **transhumance**.



- In mountain regions, such as the Himalayas, Gujjars, Bakarwals, Gaddis, and Bhotiyas migrate from the plains to the mountains in summers and to the plains from the high-altitude pastures in winters.
- Similarly, in the tundra regions, the nomadic herders move from south to north in summer and from north to south in winter. Hence option (b) is the correct answer.

**Q.18) Which of the following is/are the characteristics of a Census Town?**

1. A population density of at least 500 people per square kilometre.
2. At least 75% of the male working population engaged in non-agricultural pursuits.
3. Minimum population of 10,000.

Select the correct answer from the code given below:

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

**Q.18) Solution: (c)**

**Explanation:**

According to the Census definition, an urban area is either a census town (CT) or a statutory town (ST).

- **Statutory Town:** Any place with a municipal corporation, municipal council, or cantonment board.
- **Census Town:** It can be a place with “urban characteristics”, a **population of more than 5,000**, a population **density of more than 400** people per sq. km., and more than **75% of the male population not engaged in agriculture** for their livelihood. Hence, option (c) is the correct answer.

**Q. 19) The process of 'sub-urbanisation' is related to:**

- a) Mushrooming of slums in urban areas.
- b) Construction of planned gated communities within urban areas for middle- and upper-class people.
- c) People moving away from congested urban areas to cleaner areas outside the city for better quality of living.
- d) Emergence of mega cities or megalopolis.

Q.19) Solution: (c)

**Example:**

- Sub-Urbanisation is a new trend of people moving away from congested urban areas to cleaner areas outside the city in search of a better quality of living. Important suburbs develop around major cities and everyday thousands of people commute from their homes in the suburbs to their work places in the city. Like in case of Delhi, people residing in Gautam Buddha Nagar (Noida) and commuting everyday to work in their offices based in Delhi. Mumbai has an entire region called Mumbai Sub-urban.
- Megalopolis: This Greek word meaning “great city” signifies ‘super- metropolitan’ region extending, as union of conurbations. The urban landscape stretching from Boston in the north to south of Washington in U.S.A. is the best known example of a megalopolis.

**Q.20) Consider the following statements with regard to millets grown in India:**

1. Jowar can be grown in a variety of soils including loamy and sandy soils.
2. Jowar is sown in both Kharif and rabi seasons in northern states while it is only a kharif crop in southern states.
3. Bajra grows well on sandy soils and shallow black soil.

Which of the statements given above is/are correct?

- a) 1 and 2 only

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

Q.20) Solution: (d)

**Explanation:**

The coarse cereals together occupy about 16.5% of the total cropped area in the country and are the main food crop in semi-arid areas of central and southern India.

- Jowar is grown both as a Kharif and as a rabi crop. **Jowar is sown in both Kharif and rabi seasons in southern states. But it is a Kharif crop in northern India** where it is mostly grown as a fodder crop. Hence, **statement 2 is incorrect.**
- As a Kharif crop, it grows in areas having a mean monthly average temperature of 26°C to 33°C. It requires rainfall of about 30cm during the growing season.
- Jowar can be grown in a variety of soils including loamy and sandy soils. The clayey, regur, and alluvium are most suitable for Jowar cultivation.
- South of Vindhya, jowar is a rainfed crop and its yield level is very low in this region. Hence, **statement 1 is correct .**
- Bajra is sown in hot and dry climatic conditions in the northwestern and western parts of the country. It is a hardy crop that resists frequent dry spells and drought in this region.
- It is grown in areas with rainfall of about 40-50 cm and temperatures of about 25°C -30°C.
- **Bajra grows well on sandy soils and shallow black soil.** Hence **statement 3 is correct.**
- Leading producers of bajra are the states of Maharashtra, Gujarat, Uttar Pradesh, Rajasthan, and Haryana. Being a rainfed crop, the yield level of this crop is low in Rajasthan and fluctuates a lot from year to year.

**Q.21) Consider the following statements about Urban Infrastructure Development Fund**

1. It was established through priority sector lending shortfall.
2. It is managed under the aegis of National Housing Bank.

3. It will be used by public agencies to create urban infrastructure in Tier 1 cities only.

Choose the correct statements:

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

Q.21) Solution (a)

**Explanation:**

- Union Budget 2023-24 has announced the setting up of the Urban Infrastructure Development Fund (UIDF).
- It was **established through priority sector lending shortfall. Hence statement 1 is correct.**
- It will be **managed by the National Housing Bank. Hence statement 2 is correct.**
- It will be **used by public agencies to create urban infrastructure in Tier 2 and Tier 3 cities. Hence statement 3 is not correct.**
- Tier II cities are those which have a population range of 50,000 to 100,000
- Tier III cities are classified as those with a population of 20,000 to 50,000.

Source: [CLICK HERE](#)

Q.22) Which of the following pairs is/are correctly matched?

Painting	State
Warli Paintings	Maharashtra
Cheriyal Scroll Paintings	Jharkhand
Basholi Paintings	Odisha
Madhubani Paintings	Bihar

Choose the correct code:

[www.iasbaba.com](http://www.iasbaba.com)

- a) One pair only
- b) Two pairs only
- c) Three pairs only
- d) All the pairs

Q.22) Solution (b)

**Explanation:**

- **Warli is a traditional art form of Maharashtra.** Its roots can be traced to as early as the 10th century A.D. These paintings are distinctive with their vivid contrast expressions. These paintings are mainly dominated by basic geometric shapes like circles, triangles and squares. People and animals are represented by two inverted triangles joined together, where the upper triangle is the torso and the lower triangle is the pelvis.
- **Cheriyal Scroll Painting is a stylized version of Nakashi art, rich in the local motifs peculiar to the Telangana.** They are at present made only in Hyderabad, Telangana, The scrolls are painted in a narrative format, much like a film roll or a comic strip, depicting stories from Indian mythology, and intimately tied to the shorter stories from the Puranas and Epics. Painted in vivid hues, mostly primary colors, with a predominance of red in the background, the paintings are characterised by the unbridled imagination of the local artisans.
- **Basholi paintings originated in the Basholi region of Jammu and Kashmir.** It is a reputed school of miniature paintings known for its vivid, evocative colours, bold lines, and deep-set facial patterns. It is considered the first school of Pahari paintings.
- **Madhubani painting originated in a small village, known as Maithili, of the Bihar.** Initially, the womenfolk of the village drew the paintings on the walls of their home, as an illustration of their thoughts, hopes and dreams. With time, the paintings started becoming a part of festivities and special events, like marriage. Slowly and gradually, the Madhubani painting of India crossed the traditional boundaries and started reaching connoisseurs of art, both at the national as well as the international level. The traditional base of freshly plastered mud wall of huts has now been replaced by cloth, handmade paper and canvas.

Source: [CLICK HERE](#)

**Q.23) Consider the following statements about Supercapacitors**

1. Supercapacitors are electronic devices which are used to store extremely large amounts of electrical charge.
2. Supercapacitor has high power density and long durability compared to Lithium-Ion batteries.

Choose the correct statements:

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

Q.23) Solution (c)

**Explanation:**

- **Capacitors, while storing electric charge for much longer, cannot discharge energy constantly.**
- Supercapacitors overcome these shortfalls by combining the properties of capacitors and batteries into one device.
- **Supercapacitors - Supercapacitors are electronic devices which are used to store extremely large amounts of electrical charge. Hence statement 1 is correct.**
- It has significant advantages such as **high power density, long durability, and ultrafast charging characteristics as compared to conventional capacitors and Lithium-Ion batteries (LIB). Hence statement 2 is correct.**

Source: [CLICK HERE](#)

**Q.24) Consider the following statements**

1. A curative petition is the last judicial corrective measure which can be pleaded in any judgment or decision passed by the Supreme Court.
2. A mercy petition is the last alternative available to the convict after exhausting all legal remedies.

3. The President and the Governor power to grant mercy is derived from Article 72 and Article 161 of the Constitution of India respectively.

Choose the correct statements:

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

Q.24) Solution (c)

**Explanation:**

- **Curative petition:** The concept of the curative petition was first evolved by the Supreme Court of India in the matter of **Rupa Ashok Hurra vs. Ashok Hurra and Anr. (2002)** where the question was whether an aggrieved person is entitled to any relief against the final judgement/order of the Supreme Court, after the dismissal of a review petition.
- A curative petition is the **last judicial corrective measure which can be pleaded in any judgment or decision passed by the Supreme Court which is normally decided by Judges in-chamber. Hence statement 1 is correct.**
- A mercy petition is a plea made by a convict who has been sentenced to death or life imprisonment to seek mercy from the President or the Governor of the state. It is the **last alternative available** to the convict after exhausting all legal remedies. **Hence statement 2 is correct.**
- **The power to grant mercy is derived from Article 72 and Article 161 of the Constitution of India, which vest this prerogative in the President and the Governor respectively. Hence statement 3 is correct.**

Source: [CLICK HERE](#)

**Q.25) Which of the following adopted a law on online safety, content moderation known as 'Digital Services Act (DSA)'**

- a) United States of America
- b) United Kingdom
- c) South Korea
- d) European Commission

Q.25) Solution (d)

**Explanation:**

Digital Services Act (DSA) is an EU regulation which came into force in EU law in November 2022 and will be directly applicable across the EU. The act aims to address several issues related to digital services, including online safety, content moderation, and the responsibilities of online platforms. The legislation includes new rules for large online platforms, such as social media networks and online marketplaces, to ensure greater accountability and transparency in their operations.

**Source:** [CLICK HERE](#)

**Directions for the following 3 (three) items:**

*Read the information given below and answer the six items that follow.*

A, B, C, D, E, F, G and H are sitting around a circle facing the centre but not necessarily in the same order. Each of them has a relationship with A.

G is sitting second to the left of father of A. F is immediate neighbour of A. D, mother of A is sitting opposite to the sister of A. B is sitting to the immediate right of wife of A. E who is a male is sitting second to the right of mother of C. Brother of A is sitting third to right of B. Daughter of A is sitting to third to right of sister of A. A is sitting second to the right of daughter of E. E is sitting to the immediate left of sister of A.



**Q.26) Who is the mother of H?**

- a) D
- b) C
- c) G
- d) F

**Q.27) Who is sitting to the immediate right of F?**

- a) A
- b) G
- c) D
- d) H

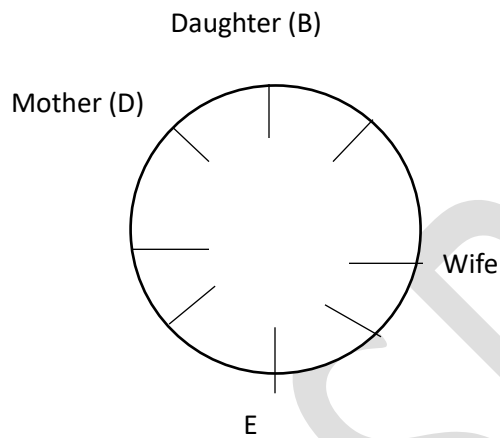
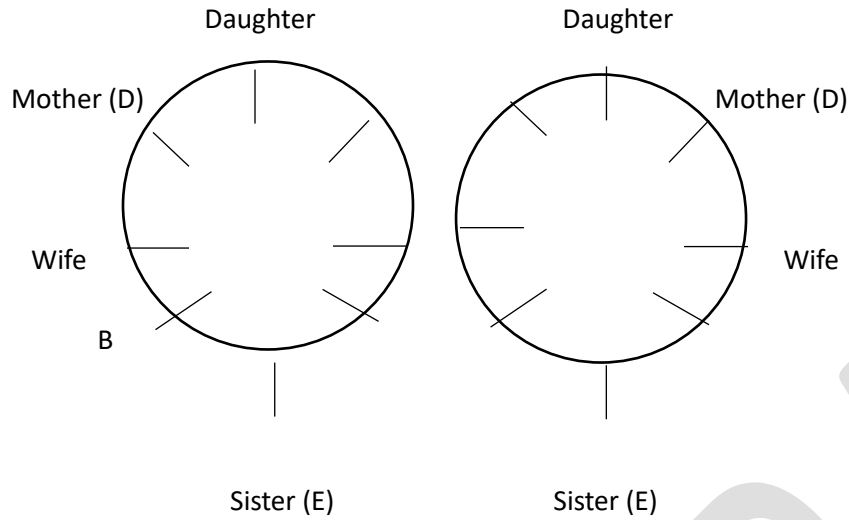
**Q.28) What is the position of G's daughter with respect to D's daughter?**

- a) 1<sup>st</sup> to the left
- b) 3<sup>rd</sup> to the left
- c) 2<sup>nd</sup> to the left
- d) 3<sup>rd</sup> to the right

Q.26) Solution (a)

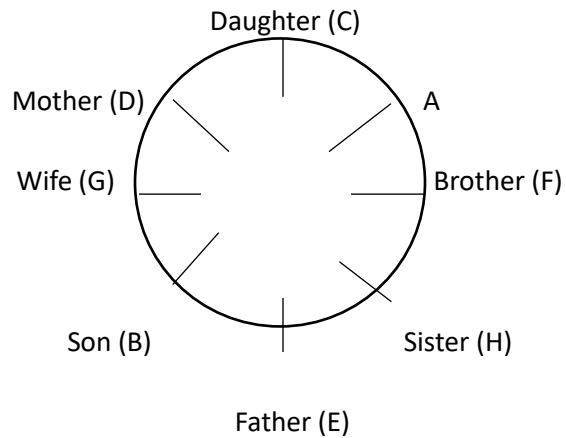
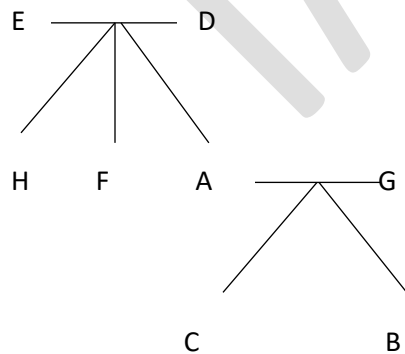
**Explanation**

Let us start with D, the mother of A is sitting opposite the sister of A. The daughter of A is sitting third to the right of the sister of A. E is sitting to the immediate left of the sister of A. Following these arguments, now we have B sitting to the immediate right of the wife of A, and also E is male.



Brother of A is sitting third to right of B. Next, we have only 1 position left for placing A in all 3 arrangements

Now B or E can be father of A. G is sitting second to the left of the father of A. So this gives that E is the father of A, thus B is his son



Q.27) Solution (a)

A is sitting to the immediate right of F

Q.28) Solution (d)

G's daughter is C and D's daughter is H

So, clearly G's daughter is 3rd to the right of D's daughter H

**Q.29) Eight persons from A to H sit around a circular table facing towards the centre such that:**

- 1) C is second to the left of E.
- 2) A is third to the right of the one who sits diagonally opposite to D.
- 3) F sits opposite to the one who is on the immediate left of B.
- 4) Neither F nor G is adjacent to C. H sits second to the right of B.

On the basis of above information, which of the following must be true?

1. D is seated on the immediate right of C
2. A and H are separated by 2 seats
3. B is seated next to C

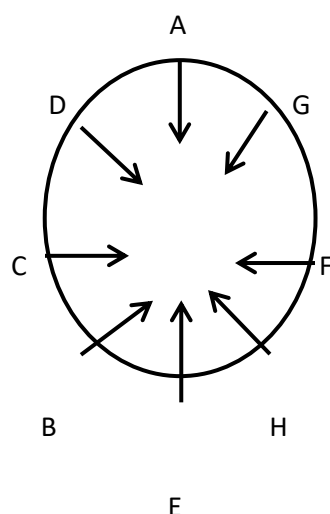
Select the correct answer using the codes given below

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

Q.29) Solution (b)

**Explanation:**

Based on the given arrangement, the final seating arrangement looks as given below



D is seated on the immediate left of C. Hence, statement 1 is incorrect

The other 2 statements are correct.

**Read the following passage and answer the item that follow. Your answer to these items should be based on the passages only**

**Passage 1**

Many pathogens that cause foodborne illnesses are unknown. Food contamination can occur at any stage from farm to plate. Since most cases of food poisoning go unreported, the true extent of global foodborne illnesses is unknown. Improvements in international monitoring have led to greater public awareness, yet the rapid globalization of food production increases consumers' vulnerability by making food harder to regulate and trace. "We have the world on our plates", says an official of WHO.

**Q.30) Which of the following is the most logical corollary to the above passage?**

- a) With more options for food come more risks
- b) Food processing is the source of all foodborne illnesses.
- c) We should depend on locally produced food only.

d) Globalization of food production should be curtailed

Q.30) Solution (a)

**Explanation:**

The passage talks about 2 things i.e. 1) food poisoning and 2) globalization of food production

The fourth line of the passage says “yet the rapid globalization of food production increases consumers’ vulnerability by making food harder to regulate and trace” which means option A is the most apt one

Options b and c are incorrect as they are nowhere mentioned in the passage

Option d can be rejected on the grounds that the passage does not intend to curtail globalization it only explains the nature of food in the present day.