

# 30 Days Revision Module Day 24 - Indian Geography (UPSC Prelims 2021)

- 1) Consider the following about the Western Ghats:
  - 1. It is traversing the states of Tamil Nadu, Kerala, Karnataka, Goa, Maharashtra and Gujarat.
  - 2. The Western Slope is steep while the Eastern slope is gentle.
  - 3. It is lack of minerals due to its high erosion and thick vegetation.
  - 4. It is a kind of Block mountain formed due to the down warping of a part of the land into the Arabian Sea.

Which of the statements given above are correct?

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

### Answer: b

- The Western Ghats spread over six states viz Gujarat, Maharashtra, Goa, Karnataka, Kerala and TamilNadu.
- The Western Ghats with their steep seaward slopes are deeply dissected by streams and canyon like valleys, but on the landward side their slopes are gentle
- Major rocks found in the region include Basalt, Charnockites, granite gneiss, khondalites, leptynites, metamorphic gneisses with detached occurrences of crystalline limestone, iron ore, dolerites and anorthosites.
- There are two views regarding the geology of the western ghats.one view says the mountains of the western ghats are block mountains formed due to the down warping of a part of land into the Arabian sea.
- 2) Why the Bay of Bengal has low salinity when compared to the Arabian Sea?
  - a. Size of the Bay of Bengal is larger than the Arabian Sea
  - b. Large influx of freshwaters into the Bay of Bengal
  - c. The Large number of Salt producing Industries is located on the coast of Bay of Bengal
  - d. There is no delta formation in the coast of the Arabian Sea

### Answer: b

- The Bay of Bengal has lower salinity due to the influx of water from the rivers. On the contrary, the Arabian Sea shows higher salinity due to high evaporation and a low influx of fresh water.
- 3) When you start a journey from Surat to Kolkata, then in which order you would face the following mountains?
  - 1. Maikala Range
  - 2. Mahadeo Hills
  - 3. Ramgarh Hills
  - 4. Rajmahal hills

Select the correct answer using the code given below.

- a. 2 1 3 4
- b. 1 2 3 4
- c. 4 3 2 1
- d. 3 2 1 4

## Answer: a

- The traveller will first reach the Mahadeo Hills and thento the Maikala Hills, both of which forms the Northern part of the Deccan Plateau. Further travelling East the traveller would reach the Ramgarh Hills. Raj Mahal hills are further eastern.
- 4) Consider the following statements:
  - 1. The Great Boundary Fault separates the Vindhyan Hills from the Satpura Hills.
  - 2. The Malda fault separates the North Eastern parts of India and the Chota Nagpur Plateau.

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

- The Great Boundary Fault (GBF) separates the Vindhyan System from the Aravallis for a distance of about eight hundred km.
- The north-eastern states are separated by the Malda fault in west Bengal from the Chotanagpur plateau.
- 5) Consider the following statements regarding the Himalayas.
  - 1. Its width is almost the same throughout its range in the West to East direction.
  - 2. Almost all the lofty peaks and snow glaciers are located only in the extreme west of the Himalayas.
  - 3. The Karewaregion in the Himalayas is known for the cultivation of Saffron.

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

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

### Answer: a

- The approximate length of the Great Himalayan range, also known as the central axial range, is 2,500 km from east to west, and their width varies between 160-400 km from north to south.
- Lofty peaks such as Namcha barwa, Mt k2,Mt Everest and glaciers such as zemu are located in the eastern Himalayas.
- The Kashmir Himalayas are also famous for Karewa formations, which are useful for the cultivation of Zafran, a local variety of saffron. Karewas are the thick deposits of glacial clay and other materials embedded with moraines.
- 6) Which of the following hill ranges is part of the Eastern Ghats?
  - 1. Nallamala Hills
  - 2. Shevarov Hills
  - 3. Anaimalai Hills

## 4. Seshachalam Hills

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

- 7) Consider the following statements:
  - 1. The main concentration of canal irrigation is mainly found at Uttar Pradesh.
  - 2. The largest area under the Well and Tube well irrigation is mainly found at Maharashtra.
  - 3. The largest area under the Tank irrigation is mainly found at Andhra Pradesh and Tamilnadu.

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

- The maximum part of the total irrigated area of the country by canals is in Uttar Pradesh. Other major states where irrigation is done by canals are Madhya Pradesh, Andhra Pradesh, Haryana, Punjab and Bihar.
- Uttar Pradesh has the largest area under well irrigation. It is followed by Rajasthan, Madhya Pradesh, Punjab, Gujarat, Maharashtra and Bihar.
- Tank Irrigation is popular in the peninsular plateau area where Andhra Pradesh and Tamil Nadu are the leading states. Andhra Pradesh has the largest area (29%) of tank irrigation in India followed by Tamil nadu (23%).
- 8) With respect Lakes in India, which one of the following statements is **not correct**?
  - a. The Largest brackish water lake of India is Chilika Lake
  - b. The largest inland Salt Lake of India is Sambhar Lake
  - c. The Longest lake of India is Pulicat Lagoon
  - d. The lake formed as a result of tectonic activity is Wular Lake

### Answer: c

- Pulicat lake is the second-largest brackish water lake after Chilika lake while Vembanad is the longest lake in India and the largest lake in Kerala. It is the second-largest Ramsar site in India after Sunderbans in West Bengal.
- 9) 'Fujiwhara effect', sometimes seen in the news recently, is related to which of the following events?
  - a. Meeting of two cyclones
  - b. El Nino-Southern Oscillation
  - c. Depression of Upwelling phenomenon
  - d. Volcanism induced Tsunami effect

### Answer: a

• The Fujiwhara effect, is a phenomenon that occurs when two nearby cyclonic vortices move around each other and close the distance between the circulations of their corresponding low-pressure areas.

- 10) If you visit Peninsular India generally and Tamilnadu particularly, which one of the following types of soil you can predominantly see?
  - a. Black Soil
  - b. Red Soil
  - c. Alluvial Soil
  - d. Laterite Soil

### Answer: b

- Red soil develops on crystalline igneous rocks in areas of low rainfall in the eastern and southern parts of the Deccan plateau. It looks yellow when it occurs in a hydrated form.
- The fine-grained red and yellow soils are normally fertile, whereas coarse-grained soils found in dry upland areas are poor in fertility. They are generally poor in nitrogen, phosphorous and humus.
- 11) Which of the following methods can be employed to prevent soil erosions?
  - 1. Shifting cultivation
  - 2. Mulching
  - 3. Strip farming
  - 4. Crop rotation
  - 5. Geotextiles

Select the correct answer using the code given below.

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



## Answer: b

- Shifting cultivation is an agricultural system in which plots of land are cultivated temporarily, then abandoned while post-disturbance fallow vegetation is allowed to freely grow while the cultivator moves on to another plot. It exhausts the soil and will increase soil erosion.
- Mulching is the process or practice of covering the soil/ground to make more favourable conditions for plant growth, development and efficient crop production. Mulch technical term means 'covering of soil'. It is one of the methods employed to prevent soil erosions.
- Strip cropping is a method of farming which involves cultivating a field partitioned into long, narrow strips which are alternated in a crop rotation system. It is used when a slope is too steep or when there is no alternative method of preventing soil erosion.
- Crop rotation is the practice of growing a series of different types of crops in the same area across a sequence of growing seasons. It reduces reliance on one set of nutrients, pest and weed pressure, and the probability of developing resistant pest and weeds.
- Geotextiles are permeable fabrics which, when used in association with soil, have the ability to separate, filter, reinforce, protect, or drain. Typically made from polypropylene or polyester, geotextile fabrics come in three basic forms: woven (resembling mail bag sacking), needle punched (resembling felt), or heat bonded (resembling ironed felt). It can be used to prevent soil erosion.
- 12) Consider the following statements with respect to estuaries
  - 1. Estuary is a type of ecotone between marine and terrestrial ecosystems.
  - 2. They are not suitable as harbours and ports.
  - 3. Most of the estuaries in India are located on the western coast.

Which of the statements given above is/are correct?

a. 1 and 2 only

- b. 1 and 3 only
- c. 3 only
- d. 1,2 and 3

## Answer: b

- An estuary is a place where a river or a stream opens into the sea. It is a partially enclosed coastal area of brackish water. It forms a transition zone (ecotones) between the river environment and the maritime environment.
- They are deep and well protected from marine transgressions, and hence they are ideal locations for the construction of ports and harbours.
- The western coast of India is a submergent coast which makes it easier to form estuaries due to its abrupt ending of the coast and low deposition by western rivers. Though larger estuaries are formed on the eastern coasts due to the flow of many larger eastern rivers, more number of estuaries are formed on the western coast.
- 13) With reference to rainfall variability in India, consider the following statements:
  - 1. Western Ghats is an area of high rainfall along with high rainfall variability.
  - 2. The Deccan interiors like Vidarbhareceive less rainfall along with less rainfall variability.

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

- The Western Ghats is an area of high rainfall and receives rainfall of 200-400 cms. Rainfall variability refers to the increased unevenness in the rainfall over a region in a particular year. Rainfall variability is low in the Western Ghats as the region experiences continuous rainfall throughout the year.
- Deccan interiors either lie in the centre of the peninsula or on the leeward side of the Western Ghats or hence experience very low rainfall. This rainfall is also concentrated during certain months and therefore the rainfall variability is high in these regions.
- 14) The weather in Month of October in India is called October heat. What would be the possible reason for this phenomenon in India?
  - a. Due to the occurrence of the September Equinox
  - b. Due to the withdrawal of South West Monsoon
  - c. Due to impact of Western disturbances from the North West Region
  - d. Due to the absence and of the North East Monsoon

## Answer: b

- The retreating southwest monsoon season is marked by clear skies and rise in temperature. The land is still moist. Owing to the conditions of high temperature and humidity, the weather becomes rather oppressive. This is commonly known as the October heat.
- 15) Despite having the lengthiest coastline, the Indian Government recently dropped to harness the tidal projects at Gujarat and West Bengal. What would be the best possible reason for this decision?
  - a. Tides occur very rarely in these coasts
  - b. The establishment of Tidal plants creates severe ecological damages
  - c. These projects are not viable economically
  - d. There is no technological viability even in the World to harness this energy

### Answer: c

- Ocean-based tidal projects of Gujarat and in the Gangetic delta of Sunderbans in west Bengal have been cancelled by the respective state governments due to high capital costs.
- 16) The Core Heatwave Zone (CHZ) includes which one of the following pair of states?
  - a. Rajasthan, Andhra Pradesh, Telangana, Odisha, and Karnataka
  - b. Madhya Pradesh, Jharkhand, Odisha, and Karnataka
  - c. Rajasthan Madhya Pradesh, Jharkhand, and Gujarat
  - d. Rajasthan, Punjab, Haryana, Andhra Pradesh, and Telangana

### Answer: d

- The CHZ covers Rajasthan, Punjab, Haryana, Chandigarh, Delhi, West Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Odisha, Vidarbha in Maharashtra, parts of Gangetic West Bengal, Coastal Andhra Pradesh and Telangana.
- 17) Consider the following statements regarding the Wetland Management in India
  - 1. Recently India's first dedicated Centre for Wetland Conservation and Management (CWCM) has been set up in Chennai.
  - 2. It has been setup as part of the National Centre for Sustainable Coastal Management (NCSCM)under the Ministry of Environment, Forest and Climate Change.
  - 3. It will support partnerships and networks with national and international agencies that work on wetlands.

Which of the statements given above is/are correct?

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



## Answer: d

- The Centre for Wetland Conservation and Management (CWCM), India's first Wetland management centre to be setup in Chennai.
- The CWCM is to become a part of National Centre for Sustainable Coastal Management (NCSCM), in Chennai under the Ministry of Environment, Forest and Climate Change.
- The centre would act as a knowledge hub for wetland researchers, policymakers, managers and users. It will help in building partnership and networks with relevant national and international agencies.
- 18) With respect to the Lithium Reserves in India, which of the following statements is/are correct?
  - 1. At present, India's lithium-ion battery demand is fulfilled by imports from China, Vietnam, and Hong Kong.
  - 2. India has recently discovered its maiden lithium deposits in the Mandya district of Karnataka.

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: c

• At present, India's lithium-ion battery demand is fulfilled by imports from China, Vietnam, and Hong Kong. In the last 2 years & its lithium imports have tripled from \$384 mn to \$1.2 bn.

- Recently, Lithium resources of 1,600 tonnes have been found in Marlagalla -Mandya district, Karnataka. Exploratory activities are being carried out in Rajasthan and Gujarat and the mica belts of Odisha and Chhattisgarh.
- 19) Consider the following statements about Sugar Industry in India:
  - 1. It is the largest agro-based industry in India
  - 2. Sugarcane is a weight losing crop and so Industries are located near the markets
  - 3. India is the second-largest sugar-producing country in the world
  - 4. Sugarcane control order 2018 states that production of ethanol directly from sugarcane juice shall be allowed in the case of sugar factories only

Which of the following statements given below are correct?

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

## Answer: d

- The sugar industry is the second largest agro-based industry in India after Cotton Industry. In 1840, the first sugar industry was set up in Betia (Bihar).
- Sugarcane is a weight-losing crop. The ratio of sugar to sugarcane varies between 9 to 12 percent depending on its variety. Its sucrose content begins to dry during haulage after it has been harvested from the field. Better recovery of sugar is dependent upon its being crushed within 24 hours of its harvesting. Sugar factories hence, are located within the cane producing regions
- India is the second largest sugar producing country of the World after Brazil. Maharashtra has emerged as a leading sugar producer in the country and produces more than one-third of the total production of the sugar in the country. Uttar Pradesh is the second largest producer of sugar. The sugar factories are concentrated in two belts the Ganga-Yamuna doab and the tarai region.
- Under the Essential Commodities Act, 1955, the Central Government has made the Sugarcane (Control) Amendment Order, 2018 to further amend the Sugarcane (Control) Order, 1966. According to it, production of ethanol directly from sugarcane juice shall be allowed in case of sugar factories only.".
- 20) Indonesia is home to nearly 130 active volcanoes. What could be the possible reason for this geographical feature?
  - a. It is the convergence zone of the Burma Plate and the Sunda Plate
  - b. The subduction of the Indian Ocean crust underneath the Asian Plate caused this feature.
  - c. It is the transform plate boundary between the Indian Plate and the Philippines sea plate
  - d. It is the divergence plate boundary created by the Indo Australian Plate and the Eurasian Plate.

### Answer: b

• Most volcanoes in Indonesia belong to the Sunda Volcanic Arc, streching over 3,000 kilometers from NW Sumatra to the Banda Sea. This volcanic arc results from the subduction of Indian Ocean crust beneath the Asian Plate and includes 76% of the region's volcanoes.