ICSE Solved Paper 2022 Semester-1
Geography
Class-X
(Maximum Marks : 40)
(Time allowed : One hours)

ALL QUESTIONS ARE COMPULSORY
The intended marks for questions or parts of questions are given in brackets [ ].

Select the correct option for each of the following questions.

1. Refer to the image and answer the question that follows: [1]

What do the black curved line in 3530 indicate?
(a) Open Scrub. (b) Dry land. (c) Broken ground. (d) Seasonal stream

Ans. Option (c) is correct.
Explanation: On toposheet, the broken ground is shown by tiny curved black line.

2. Refer to the image and answer the question that follows: [1]

What is the direction of Dadra from Doha?
(a) North east. (b) North west. (c) South east. (d) South west.

Ans. Option (a) is correct.
Explanation: As per the reference image given

3. Refer to the image and answer the question that follows: [1]

What is .7r in 4833?
(a) Relative height of 7 m (b) Relative Height of 7 cm (c) Relative depth of 7 cm (d) Relative depth of 7 m

Ans. Option (a) is correct.
Explanation: As per the reference image given

4. Refer to the image and answer the question that follows: [1]

What mode of transport is used by the people of Malawa and Dantra?
(a) Foot path (b) Cart track (c) Pack track (d) Railway

Ans. Option (b) is correct.
Explanation: The single red lines on the topographical map indicate Cart tracks.

5. Refer to the image and answer the question that follows: [1]

What is the main occupation of the people living in the area shown on the eastern part?
(a) Mining (b) Agriculture (c) Forestry (d) Sheep rearing

Ans. Option (c) is correct.
Explanation: The green color on the topographical map indicates forest region.
6. Refer to the image and answer the question that follows:

![Map Image]

What is the social significance of Idarla? [1]
(a) Idarla is larger than other settlements.
(b) Idarla is closer to Dantrai.
(c) Annual fair at Idarla.
(d) Idarla is the largest settlement.

Ans. Option (c) is correct.

Explanation: As per the reference image given.

Refer to the image and answer the question that follows: [1]

![Map Image]

What does the number 200 in grid square 4932 represent?
(a) A line of latitude.
(b) A line of longitude.
(c) Contour height.
(d) Spot height.

Ans. Option (c) is correct.

Explanation: A contour line is drawn on a topographic map that indicate ground elevation or depression. It indicates the slope of the region. Lines drawn closely indicate that the slope is steep.

9. What does nearness of contour lines indicate? [1]
(a) It indicates steep slope.
(b) It indicates gentle slope.
(c) It indicates desert area.
(d) It indicates irregular area.

Ans. Option (a) is correct.

Explanation: A contour line is a line drawn on a topographic map that indicate ground elevation or depression. It indicates the slope of the region. Lines drawn closely indicate that the slope is steep.

10. Which scale out of the following, that is printed on the topographical map, is considered a special scale? [1]
(a) Statement Scale.
(b) Representative fraction.
(c) Linear Scale.
(d) Graphical Scale.

Ans. Option (b) is correct.

Explanation: A representative fraction (RF) is the ratio of a distance on the map to distance on the ground. An RF of 1:24,000 means one inch on the map equals 24,000 inches on the ground and one centimeter on the map equals 24,000 centimeters on the ground. The topographic map is printed at the bottom.

11. With reference to winter rain in India answer the following:

(i) Western disturbances provide rain to which of the following States? [1]
(a) Punjab
(b) Sikkim
(c) West Bengal
(d) Maharashtra

(ii) Which of the following cause rain to Coromandel Coast? [1]
(a) Retreating monsoons
(b) Kal Baisakhi
(c) Western disturbances
(d) South west Monsoons

Ans. (i) Option (a) is correct.

Explanation: Punjab receives rainfall due to western disturbances. Western disturbances are extra-tropical storms that originate over the Mediterranean and flow toward the east.

(ii) Option (a) is correct.

Explanation: The withdrawing monsoon, also known as the S.E Monsoon, brings rain to the coast of Coromandel, especially Tamil Nadu.

12. Westerly depressions are active in India during which of the following months? [1]
(a) Between September and November
(b) Between December and January
(c) Between June and September
(d) Between March and May

Ans. (b) is correct.

Explanation: As per the reference image given.
Ans. Option (b) is correct.

Explanation: Westerly depressions are active in India between December and January. They start declining in numbers after winter. During the summer months of April and May, they move across north India.

13. Study the following data and answer the questions that follow:

<table>
<thead>
<tr>
<th>MONTH</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JULY</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMP (°C)</td>
<td>23.1</td>
<td>24.8</td>
<td>26.5</td>
<td>29.3</td>
<td>32</td>
<td>32.8</td>
<td>33.1</td>
<td>32.1</td>
<td>30.5</td>
<td>29.3</td>
<td>28.7</td>
<td>26.1</td>
</tr>
<tr>
<td>RAIN (cm)</td>
<td>15.3</td>
<td>10.1</td>
<td>0.3</td>
<td>0.1</td>
<td>1.3</td>
<td>4.5</td>
<td>6.1</td>
<td>10.2</td>
<td>10.5</td>
<td>20.1</td>
<td>16.8</td>
<td>19.0</td>
</tr>
</tbody>
</table>

(i) What is the annual range of temperature experienced by the station? [1]
(a) 20°C  
(b) 10°C  
(c) 16°C  
(d) 21°C

(ii) Which according to the given data is the driest month? [1]
(a) March  
(b) April  
(c) May  
(d) June

Ans. (i) Option (b) is correct.

Explanation: Annual range of Temperature:
Highest Temperature – Lowest Temperature
33.1 – 23.1 = 10

(ii) Option (b) is correct.

Explanation: As per the given data, April is having the least amount of rain.

14. Why is the central part of Deccan plateau a dry area? [1]
(a) It is away from the sea  
(b) There is no barrier in the part of rain bearing wind  
(c) It is due to jet Streams  
(d) It is a rain shadow area of Western Ghats

Ans. Option (d) is correct.

Explanation: The Western Ghats mountain range is very massive and blocks the moisture from the southwest monsoon from reaching the Deccan Plateau creating a rain shadow effect, so the region receives very little rainfall.

15. Why does Patna get more rain than Agra during the summer monsoon season? [1]
(a) Patna lies on windward side  
(b) Patna is on western side so Arabian sea branch brings more rain to it than to Agra  
(c) Patna is on eastern side, so Bay of Bengal branch brings more rain to it than to Agra  
(d) Patna gets rain throughout the year.

Ans. Option (c) is correct.

Explanation: Since Patna lies in the lower Ganga valley and Agra lies further west of Patna, it rains more in Patna than in Agra.

16. Which of the statement is not correct for Indian monsoon? [1]
(a) It is erratic in nature  
(b) It is seasonal in nature  
(c) Most of the rain is in winter time  
(d) Most of the rain is orographic or relief type.

Ans. Option (c) is correct.

Explanation: Indian monsoon is erratic with seasonal in nature and most of the rain is in the form of orographic or relief type. There is very less or no rainfall in winter because of it.

17. With reference to methods of prevention of soil erosion answer the following:

(i) Name the method used to prevent soil erosion by running water [1]
(a) Terrace farming  
(b) Strip cropping  
(c) Shelter belts  
(d) Leaving the land fallow

(ii) Name the method used to prevent soil erosion by wind. [1]
(a) Contour ploughing  
(b) Strip cropping  
(c) Plugging of gullies  
(d) Use of fertilizer

Ans. (i) Option (a) is correct.

Explanation: Terrace farming is a method of farming whereby “steps” known as terraces are built onto the slopes of hills and mountains to be used for crop cultivation. Terrace farming prevents the washing away of soil nutrients by the rains. This leads to the growth of healthy crops.

(ii) Option (b) is correct.

Explanation: Strip cropping is a method of farming used when a slope is too steep or too long, or otherwise, when one does not have an alternative method of preventing soil erosion especially from the wind.

18. (i) Name the soil that is found in central Deccan plateau? [1]
(a) Black soil  
(b) Alluvial soil  
(c) Red soil  
(d) Laterite soil

(ii) How is the soil named by you in (i) above formed? [1]
(a) Formed by the deposition of silt brought down by river.  
(b) Formed by the weathering of lateritic rocks.  
(c) Formed by the weathering of basic lava rocks.  
(d) Formed by the weathering of metamorphic rocks.

Ans. (i) Option (a) is correct.
Explanation: Black soils are mineral soils that have a black surface horizon, enriched with organic carbon that is at least 25 cm deep. It is found in the central Deccan plateau mostly across the interior of Gujarat, Maharashtra, Karnataka, and Madhya Pradesh.

(ii) Option (c) is correct.

Explanation: Black soil is formed from the weathering of igneous rocks and the cooling of lava after a volcanic eruption. It is known as Regur soil, cotton soil, and lava soil. It is made from the breaking down of Igneous rocks.

19. Why is laterite soil used in Goa and Kerala for the construction of houses? [1]
(a) It become hard when dry.
(b) This soil is generally coarse in texture and porous in nature.
(c) It has more of clay content in it.
(d) It looks beautiful when used in buildings.

Ans. Option (a) is correct.

Explanation: Laterite is mined while it is below the water table, so it is wet and soft. Upon exposure to air, it gradually hardens and irreversible hardening always occurs. It is commonly used in road pavement materials.

20. Why are the foothills of Himalayas prone to excessive soil erosion? [1]
(a) Absence of crop cover.
(b) Too much of development of transportation.
(c) Large scale deforestation in past
(d) Tourists are spreading pollutants in rivers.

Ans. Option (c) is correct.

Explanation: The foothills of the Himalayas are prone to excessive soil erosion because of the excessive deforestation practices in the past. The vegetation over there is very little which makes it excessively prone to excessive soil erosion.

21. Name the soil that possesses the following characteristics:
   (i) Soil is generally confined to river basins. [1]
      (a) Black soil (b) Alluvial soil
      (c) Red soil (d) Laterite soil
   (ii) Soil that becomes infertile because of desilication. [1]
      (a) Black soil (b) Alluvial soil
      (c) Red soil (d) Laterite soil

Ans. (i) Option (b) is correct.

Explanation: Alluvial soils are rich in humus as they are deposited by three important rivers of the Himalayas, the Indus river, the Ganges, and the Brahmaputra River. They are found in the eastern coastal plains of India, particularly in the deltas of rivers Mahanadi, Godavari river, Krishna river, and Kaveri.

(ii) Option (d) is correct.

Explanation: Laterite soils are mainly found in Karnataka, Kerala, Tamil Nadu, Madhya Pradesh, Andhra Pradesh and the hilly areas of Odisha and Assam. After adopting appropriate soil conservation techniques particularly in the hilly areas of Karnataka, Kerala, and Tamil Nadu, this soil is very useful for growing tea and coffee.

22. The productive functions of forests include: [1]
   (a) Habitat for the wildlife.
   (b) Control the water flow.
   (c) Provide various products such as timber, fuel wood, leaves, etc.
   (d) Producing oxygen.

Ans. Option (c) is correct.

Explanation: Forests play a role in filtering water pollutants, regulating water yield and flow, moderating floods, enhancing precipitation (e.g. ‘cloud forests’, which capture moisture from clouds), and mitigating salinity.

23. Which of the following pairs is correctly matched? [1]
   (a) Babool-Tropical evergreen forest
   (b) Sandalwood-Tropical deciduous forest
   (c) Cinchona-Mountain forest
   (d) Sal-Tidal forest

Ans. Option (b) is correct.

Explanation: Generally, Sandalwood is found in the dry deciduous forests of the Deccan Plateau, mostly in the states of Karnataka and Tamil Nadu. The evergreen tree regenerates naturally when conditions are favorable and has been spreading in its distribution.

24. Name the type of Natural Vegetation that is found in the windward side of the Western Ghats: [1]
   (a) Tropical Evergreen
   (b) Tropical Deciduous
   (c) Mangrove Forest
   (d) Mountain Forest

Ans. Option (a) is correct.

Explanation: Tropical Evergreen forests are found on the windward side of the Western Ghats. The ecosystems of the Western Ghats are located mainly in this forest region.

25. Which of the following is NOT a characteristic of desert vegetation? [1]
   (a) Short, stunted growth of vegetation
   (b) Thick fleshy stems
   (c) Broad leaves
   (d) Long and deep roots

Ans. Option (c) is correct.
26. Why do we need forest conservation? [1]
(a) Forests provide food for growing population.
(b) Forests help in earning foreign exchange.
(c) Forests help in maintaining ecological balance.
(d) Forests look beautiful.

Ans. Option (c) is correct.

Explanation: We should conserve forests because they are essential for us in the following terms: Forests provide us with oxygen, and they cause rainfall. Forest prevents soil erosion. Plants are dependent on animals and birds for their pollination and seed dispersal.

27. During which month do we celebrate VAN MAHOTSAV every year in India? [1]
(a) In December to February time period
(b) In July to September time period
(c) In March to May time period
(d) In November to January time period

Ans. Option (b) is correct.

Explanation: Van Mahotsav or Forest Festival is an annual tree-planting festival celebrated from 1st July to 7th July in which thousands of trees are planted all over the country in order to spread awareness of forest conservation.

28. What is the term used to describe the growing of trees in various parts of the country? [1]
(a) Re afforestation
(b) Deforestation
(c) Agronomy
(d) Afforestation.

Ans. Option (d) is correct.

Explanation: Afforestation is the establishment of a forest or stand in an area where there was no previous tree cover.

29. Why is there a need to conserve water in India? [1]
(a) A lot of water is polluted
(b) No water is found below the land in India
(c) Water is in abundance in India
(d) We receive lot of rain in summer

Ans. Option (a) is correct.

Explanation: Conservation of water resources is very essential in India. To safeguard ourselves from health hazards as the quality of water is badly affected by a discharge of urban wastes, industrial effluents, pesticides, and fertilizers and to ensure the availability of safe drinking water.

30. What are the advantage of rain water harvesting? [1]
(a) Recharge of ground water and conservation of water.
(b) Provide water through canals to the farms and its conservation
(c) It helps in harvesting of crops and its storage
(d) Provide water for multinational companies to produce packaged drinking water.

Ans. Option (b) is correct.

Explanation: The Advantage of harvesting rainwater is that it decreases the water demand. Reduces the need for imported water. Promotes water and energy conservation. Improves the quality and quantity of groundwater.

31. Why is canal irrigation more popular in Northern Plains? [1]
(a) The surface of land is almost flat and soft soil is easy to dig.
(b) To supply water to a number of cities in the plain area.
(c) Rocky surface of the plain help in their construction.
(d) Rivers are seasonal and so canals are needed.

Ans. Option (a) is correct.

Explanation: The surface of the land in the Northern Plains is flat, which makes Canal Irrigation an adequate option.

32. Which of the following is correctly matched? [1]
(a) Tube well — Karnataka
(b) Tank — Punjab
(c) Lined well — Uttar pradesh
(d) Canal — Mizoram

Ans. Option (c) is correct.

Explanation: The rocky undulating surface of south India is not suitable for well construction. North India has a widespread deposition of alluvial soil which is suitable for well irrigation. In south India, the groundwater reserve is far below the surface but in north India, the groundwater level is within easy reach.

33. Which of the following is NOT a suitable condition for the development of tank irrigation? [1]
(a) Presence of natural depressions.
(b) Permeable rock structure.
(c) Plenty of rain in rainy period.
(d) Hard subsurface rock structure.

Ans. Option (b) is correct.

Explanation: Conditions Required for Tank Irrigation
1. There should be hard rocks or an impervious layer below so that water does not seep in.
2. There should be some means of filling up again.

34. Which among the following is a ground water source? [1]
(a) Spring
(b) Pond
(c) River
(d) Lake
Ans. Option (a) is correct.

*Explanation:* Springs and wells are the groundwater sources. A spring occurs when groundwater appears on the land surface.

35. **What is the importance of “DRIP IRRIGATION”?** [1]

(a) It is an ultra-modern system of irrigation.
(b) It is cheaper than other sources.
(c) It can irrigate more area with less usage of water.
(d) It is used by almost all farmers in India.

Ans. Option (c) is correct.

*Explanation:* Drip irrigation is the most efficient water and nutrient delivery system for growing crops. It ensures that water and nutrients are directly delivered to plant's root zone.