

SECTION A [40 Marks]
Answer **all** the questions
Use OMR sheet for question I only

Question I

[30]

1. What is the direction of the earth's rotation?
 - A East to West
 - B West to East
 - C South to North
 - D North to South
2. How many days does the Earth take to complete one revolution?
 - A 365 days
 - B 366 days
 - C $365 \frac{1}{4}$ days
 - D $366 \frac{1}{4}$ days
3. What is the name of the latitude located at $23\frac{1}{2}^{\circ}$ North?
 - A Equator
 - B Arctic Circle
 - C Antarctic Circle
 - D Tropic of Cancer
4. Which longitude marks the change of one calendar day to a new day?
 - A Equator
 - B Prime Meridian
 - C Tropic of Capricorn
 - D International Dateline
5. What is the time difference between the places located at 15° East and 45° East?
 - A 1 hour
 - B 2 hours
 - C 3 hours
 - D 4 hours
6. The earth takes 24 hours to complete one rotation. How many degrees does it rotate in 20 minutes?
 - A 3 degrees
 - B 4 degrees
 - C 5 degrees
 - D 6 degrees
7. Which gas in the atmosphere is known as greenhouse gas?
 - A Helium
 - B Oxygen
 - C Nitrogen

- D Carbon dioxide
8. "This layer extends from 14.5 km to 50 km, and the temperature increases with increase in height." Which layer is best described in the statement?
- A Mesosphere
 - B Troposphere
 - C Stratosphere
 - D Thermosphere
9. What is the function of oxygen present in the Earth's atmosphere?
- A Respiration
 - B Photosynthesis
 - C Controls the fire
 - D Filters ultraviolet rays
10. In which direction does the monsoon wind blow during summer?
- A North-West to South-East
 - B North-East to South-West
 - C South-East to North-West
 - D South-West to North-East
11. During a weather observation activity, students use a barometer to record weather data. What information does the instrument provide?
- A Wind
 - B Rainfall
 - C Pressure
 - D Temperature
12. Which pH value is considered neutral in soil?
- A 6
 - B 7
 - C 8
 - D 9
13. "Soil is thinner and less fertile on steep slopes compared to low land". Which factor is mainly responsible for this difference?
- A Time
 - B Climate
 - C Topography
 - D Parent material
14. Which type of soil is best for holding enough water while allowing excess water to drain?
- A Silty
 - B Loamy

- C Sandy
D Clayey
15. Which term describes the variety of plants that grow in an area without human interference?
- A Natural Vegetation
B Artificial Vegetation
C Cultivated Vegetation
D Agriculture Vegetation
16. "This type of vegetation consists mainly of mosses, lichens, and small shrubs because of extremely cold climate". Which type of natural vegetation does the statement describe?
- A Coniferous forest
B Tropical rainforest
C Desert vegetation
D Tundra vegetation
17. What causes the population of a place to increase naturally?
- A Death rate is higher than birth rate
B Birth rate is higher than death rate
C Birth rate and death rate are equal
D Emigration is higher than immigration
18. Which instrument is used to record the intensity of earthquake?
- A Barometer
B Anemometer
C Seismometer
D Thermometer
19. Identify the type of volcano that is inactive but has the potential to erupt again.
- A Active
B Shield
C Extinct
D Dormant
20. Which term refers to a condition that has the potential to cause harm, loss of life, or damage to property?
- A Hazard
B Disaster
C Emergency
D Vulnerability

21. An earthquake occurs while students are inside their classroom. Which safety measure should they follow?
- A Stop, drop and roll
 - B Stand near windows
 - C Duck, cover and hold
 - D Run outside immediately
22. Which situation shows a human-induced hazard?
- A Fire caused by lightning
 - B Earthquake shaking buildings
 - C River overflows after continuous rain
 - D Dam failure due to poor construction
23. Houses are built close to one another surrounded by farmland. Which settlement pattern does the statement describe?
- A Linear
 - B Circular
 - C Clustered
 - D Dispersed
24. Which landform is formed when a river flows in a zigzag, snake-like path across flat land?
- A Delta
 - B Levee
 - C Meander
 - D Floodplain
25. Identify the group that consists entirely of abiotic components of the environment?
- A Fish, air, soil, trees
 - B Fish, water, rock, plants
 - C Rocks, mineral, air, sunlight
 - D Rocks, plants, animals, insects
26. Choose the correct sequence of a food chain.
- A Hawk → Snake → Frog → Insect → Plant
 - B Plant → Insect → Frog → Snake → Hawk
 - C Plant → Snake → Insect → Frog → Hawk
 - D Insect → Plant → Frog → Snake → Hawk
27. On 21st March, day and night are nearly equal all over the world. What is this event called?

- A Equinox
- B Rotation
- C Winter Solstice
- D Summer Solstice

28. Which statement about the longitudes is correct?

- A They are parallel to each other
- B They are equal in length to the equator
- C They meet at the north and south poles
- D They measure distance north and south of the equator

29. Identify the instrument shown in the picture.

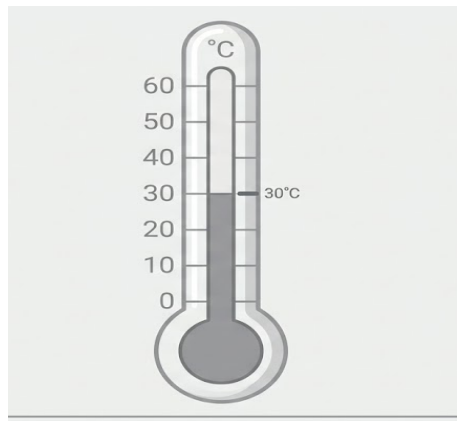


Fig 1.1

- A Barometer
- B Rain Guage
- C Anemometer
- D Thermometer

30. A river flows through gentle slopes at a moderate speed, and its volume increases as more tributaries join the main river. Which stage of the river is being described?

- A Upper
- B Lower
- C Mature
- D Youthful

Question II: Map Reading and Interpretation

1. State TWO characteristics of contour lines.

[2]

2. Identify the contour map is more suitable for farming. Give ONE reason.

[2]

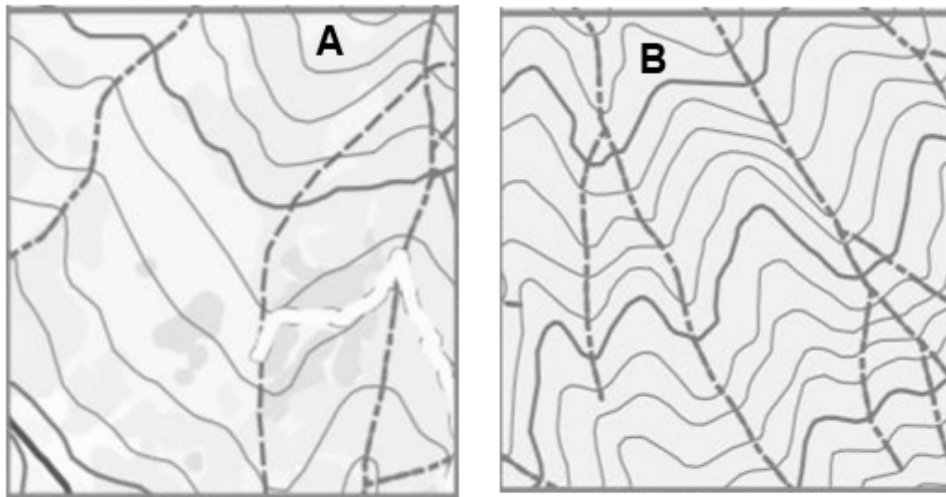


Figure 2.1. Contour Map

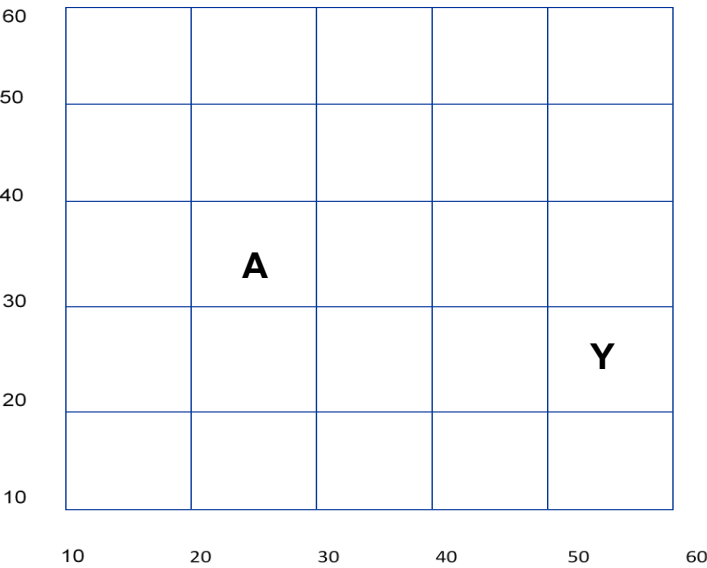
3. A map has a statement scale of 1cm = 3km. Convert this scale into a representative fraction (RF). Show the calculation.

[2]

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4. Give the **four-figure** grid reference of the point (A) and point (Y).

[2]



5. To what extent are map reading skills important when digital maps are easily available?
Support your answer with ONE reason.

[2]

SECTION B [40 Marks]

Answer all the questions

Question III

1. Calculate the local time of a place at 30° west, when it is 6:00 P.M. at 60° west. Show all the steps of calculation.

[3]

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2. Discuss the impacts on the earth, if there was no atmosphere.

[3]

3. Earthquakes cause more destruction to the lives and properties than volcanoes. Evaluate the statement.

[4]

Question IV

1. Describe the characteristics of a river at each stage of its course. **[3]**

2. Label the diagram in the spaces provided **[3]**

 i..... ii..... iii.....	
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Volcanic Eruption

3. Evaluate the advantages and disadvantages of population growth. **[4]**

Question V

1. When it is 3:00 P.M. at 30° east. Calculate the longitude of a place where it is 5:00 P.M. Show the steps of calculation.

[3]

2. Suggest THREE safety measures to consider before an earthquake.

[3]

3. Do you think environmental conservation is important? Explain with TWO reasons.

[4]

Question VI

1. Describe the biotic components of the environment.

[3]

2. Discuss TWO characteristics of a linear pattern of settlement with the help of a diagram.

[3]

3. The summer season plays an important role in the lives of people in Bhutan. Evaluate the statement.

[4]
