Please check the examination details below before entering your candidate information

Candidate Name	Class	Section

BLOOM Geography Olympiad (BGO)

Question Paper 2024-25

Class 11

Total Questions: **50 + 5** (Tie-Breaking Section)

Total Time Allotted : 60 minutes	**Total Marks** 60

Instructions

1. There are **50 Multiple Choice Questions** in this booklet having 4 options out of which **ONLY ONE** is correct.
2. There are two sections in the Question Paper; Section A having 40 Questions carrying 1 Mark each & Section B having 10 Higher Difficulty Order Questions carrying 2 Marks each.
3. All questions are compulsory. There is **NO negative** marking for incorrect answers.
4. Total time allotted to complete the paper is 60 minutes.
5. Please fill in your details in the space provided on this page before attempting the paper.

OMR Sheet Instructions

1. Before starting the paper, fill in all the details in the OMR sheet.
2. Additional 10 minutes will be provided to fill up the OMR sheet, before the start of the exam.
3. Use HB Pencil to darken the circle of the correct option in OMR sheet. The correct way to darken the circle in OMR sheet is shown below.

   ● ○ ○ ○
4. Use black or blue ball point pen/HB pencil to fill the information in the OMR sheet. Partially filled OMR sheet will not be checked.
5. Return the OMR sheet to the invigilator after the exam.

CODE #154

G11

BLOOM CAP
Founded by | arihant

Bloom Geography Olympiad Class 11

Section A (1 Mark)

1. Which of the following countries is not a part of the Indian subcontinent?

(a) Bhutan (b) Nepal
(c) Sri Lanka (d) Bangladesh

2. Which organisation is responsible for identifying areas as biodiversity hotspots?

(a) World Wildlife Fund (WWF)
(b) United Nations Environment Programme (UNEP)
(c) International Union for the Conservation of Nature and Natural Resources (IUCN)
(d) Conservation International (CI)

3. Which geological feature separates the Peninsular Block from the Indo-Ganga-Brahmaputra Plain?

(a) The Vindhya Range (b) The Aravalli Range
(c) The Malda fault (d) The Rajmahal Hills

4. What is the primary reason for the formation of the Northern Plains of India?

(a) Deposition of sediments by the rivers Indus, Ganga and Brahmaputra.
(b) Tectonic activity leading to the upliftment of land.
(c) Volcanic activity in the region.
(d) Erosion caused by wind and glaciers.

5. Which of the following best describes the term 'dualism' in geography?

(a) A focus on only human activities.
(b) A division between physical and human geography.
(c) A focus on global rather than regional phenomena.
(d) An emphasis on technological advancements.

6. Which geographer is associated with the concept of 'Environmental Determinism'?

(a) Carl Sauer
(b) Alexander von Humboldt
(c) Friedrich Ratzel
(d) William Morris Davis

7. Which theory in geography is concerned with the influence of human cultures on the natural landscape and vice-versa?

(a) Dualism in Geography (b) Possibilism
(c) Human Ecology (d) Spatial Planning

8. Study the picture and identify the type of volcano illustrated.

(a) Composite Volcano
(b) Shield Volcano
(c) Mid-Ocean Ridge Volcanoes
(d) Caldera

9. What is the Big Bang Theory?

(a) A theory that explains the expansion of the universe from a tiny, dense point.
(b) A theory about the creation of black holes.
(c) A theory that describes the formation of stars within galaxies.
(d) A theory that suggests the universe is shrinking.

10. How did the early Earth's atmosphere differ from the present atmosphere?

(a) It was rich in oxygen and nitrogen.
(b) It consisted mainly of hydrogen and helium, with little oxygen.
(c) It had high levels of carbon monoxide.
(d) It had a similar composition to the present atmosphere.

11. The climatic phenomenon associated with the 'burst' of the monsoon in India is

(a) westerly jet stream (b) easterly jet stream
(c) polar vortex (d) tropical cyclone

12. Which factor is responsible for the cold weather experienced in Northern India during winter?

(a) Proximity to the Tropic of Cancer.
(b) Influence of the Himalayan Mountains.
(c) Presence of large water bodies.
(d) High altitude of the region.

13. The best description of the motion of water particles as a wave passes in the ocean is

(a) they move directly from the crest to the shore.
(b) they move in a small circular motion.
(c) they remain stationary.
(d) they move directly from the trough to the shore.

14. How many nations, including India, signed the Convention on Biological Diversity at the Earth Summit?

(a) 150 (b) 155
(c) 160 (d) 165

15. Which of the following tidal patterns involves one high tide and one low tide of approximately the same height each day?

(a) Spring tide (b) Mixed tide
(c) Semi-diurnal tide (d) Diurnal tide

16. Which climate classification system is most widely used and was developed by V. Koeppen?

(a) Genetic classification
(b) Empirical classification
(c) Applied classification
(d) Climatic zoning

17. How does the genetic classification of climate differ from the empirical classification?

(a) It is based on observed data like temperature and precipitation.
(b) It organises climates according to their causes.
(c) It is used for specific purposes like agriculture.
(d) It categorises climates by vegetation types.

18. Which factor most significantly influences the density of seawater and its vertical movement in the oceans?

(a) Wind speed
(b) Tidal forces
(c) Salinity and temperature
(d) Ocean currents

19. Why do tropical cyclones generally not form near the equator?

(a) Lack of sufficient sea surface temperature
(b) Absence of Coriolis force near the equator
(c) High atmospheric pressure near the equator
(d) Presence of strong trade winds.

20. What is the term used to describe the amount of water vapour present in the air expressed as a percentage of the maximum amount the air can hold at a given temperature?

(a) Absolute humidity (b) Specific humidity
(c) Relative humidity (d) Saturated air

21. Which type of cloud is associated with thunderstorms and has significant vertical development?

(a) Cirrus
(b) Stratus
(c) Nimbus
(d) Cumulonimbus

22. Why is the amount of insolation received at different parts of the Earth not the same?

(a) Because of the varying distances between the Earth and the Sun.
(b) Due to the rotation of the Earth on its axis and its spherical shape.
(c) Because of the uniform distribution of land and water.
(d) Due to the constant angle of the Sun's rays

23. What geomorphic process is responsible for the formation of a peneplain?

(a) Continuous and prolonged erosion leading to almost complete reduction of relief.
(b) Sudden volcanic activity flattening the landscape.
(c) Rapid deposition by rivers creating a flat plain.
(d) Glacial retreat carving out a flat surface.

24. What are 'hotspots' in the context of biodiversity?

(a) Areas with a high concentration of endangered species.
(b) Regions with high temperatures and low biodiversity.
(c) Areas that are remote and inaccessible.
(d) Regions that are not affected by human activities.

25. Why do S-waves not travel through the Earth's outer core?

(a) Because the outer core is composed of solid rock.
(b) Because S-waves can only travel through liquids.
(c) Because the outer core is in a liquid state, and S-waves can only travel through solids.
(d) Because S-waves are absorbed by the mantle.

26. Which forest type in India is mainly characterised by teak and sal trees and is prevalent in regions with 70-200 cm of rainfall?

(a) Tropical Evergreen Forests
(b) Tropical Deciduous Forests
(c) Montane Forests
(d) Littoral and Swamp Forests

27. Which of the following landforms are primarily formed by glacial erosion and deposition processes?

A. Cirque B. Esker C. Drumlin

Codes

(a) Only A (b) Only B (c) A and C (d) B and C

28. According to the world conservation strategy, which type of plant is suggested to be preserved?

(a) Only ornamental plants
(b) Varieties of forage plants
(c) Only invasive plant species
(d) Only native ornamental plants

29. What is the primary role of coastal regions in the lives of local communities?

(a) Providing industrial opportunities
(b) Offering urbanisation benefits
(c) Supporting ecological balance and livelihood
(d) Serving as tourist attractions

30. How can local communities contribute to the conservation of coastal regions?

(a) By promoting tourism development.
(b) By implementing sustainable fishing practices.
(c) By supporting industrialisation.
(d) By converting coastal areas into urban centers.

31. How do temperature inversions affect the atmospheric conditions near the Earth's surface?

(a) They cause the temperature to rise rapidly at higher altitudes.
(b) They prevent pollutants from dispersing, leading to poor air quality near the surface.
(c) They create conditions that lead to the rapid formation of clouds and precipitation.
(d) They increase the overall atmospheric pressure, leading to clear skies.

32. What role do jet streams play in the development of cyclones and anticyclones?

(a) They create high-pressure systems by converging at the surface.
(b) They steer and intensify cyclones and anticyclones by altering the upper-level wind patterns.
(c) They neutralise the effects of surface winds.
(d) They are irrelevant to cyclone formation.

33. How does the distribution of land and water in the Northern and Southern hemispheres affect the global pattern of ocean temperatures?

(a) Oceans in the Northern hemisphere are cooler due to the larger landmass.
(b) Oceans in the Southern hemisphere are warmer due to more extensive water bodies.
(c) The distribution causes higher temperature variability in the Southern hemisphere.
(d) It results in the Northern hemisphere having higher average ocean temperatures than the Southern hemisphere.

34. Why are the Littoral and Swamp Forests considered important for conservation?

(a) They are located in the heart of urban areas.
(b) They contain commercially valuable trees.
(c) They protect coastal regions from natural calamities and support unique biodiversity.
(d) They are the only source of fresh water in coastal areas.

35. How has the geological history of the Peninsular Plateau influenced its current topography?

(a) The plateau has remained unchanged over millions of years.
(b) The plateau has undergone several phases of upliftment and submergence, leading to diverse landforms.
(c) The plateau has been shaped primarily by volcanic activity.
(d) The plateau has been eroded completely by wind and water.

36. Which of the following cloud types is characterised by a feathery appearance and is always white in colour?

(a) Cumulus (b) Stratus (c) Cirrus (d) Nimbus

37. When isobars are straight and there is no friction, the resultant wind that blows parallel to the isobars is known as

(a) cyclonic wind (b) anticyclonic wind
(c) geostrophic wind (d) surface wind

38. What are the surface winds flowing towards the equator from about 30°N and S latitudes called?

(a) Westerlies (b) Polar Easterlies
(c) Trade winds (d) Subtropical Winds

39. Where and when did the world conference on Natural Disaster Reduction take place?

(a) New Zealand, September 1992
(b) Geneva, March 1993
(c) Yokohama, 23rd-27th May, 1994
(d) Paris, 15th-20th June, 1995

40. What distinguishes a tropical cyclone from other types of cyclones?

(a) Its formation in polar regions
(b) Its high latitude location
(c) Its formation in low-pressure areas between 30°N and 30° S latitudes
(d) Its small size and weak wind speeds

Section B (2 Marks)

41. Match the types of biodiversity with their correct descriptions.

List I		List II	
A.	Genetic Diversity	1.	Variety of species within a given area
B.	Species Diversity	2.	Variability among individuals within a species
C.	Ecosystem Diversity	3.	Differences in ecosystems and habitats in a region
D.	Agro-biodiversity	4.	Diversity within agricultural systems, including crops

Codes

	A	B	C	D
(a)	1	3	2	4
(b)	2	1	3	4
(c)	3	2	1	4
(d)	4	2	1	3

42. Why are the Peninsular rivers generally less prone to flooding compared to the Himalayan rivers?

(a) They have steeper gradients and faster flow.
(b) They have shallower valleys and lower gradients.
(c) They flow through densely populated areas.
(d) They are fed by both rain and snowmelt.

43. Arrange the following events related to biodiversity conservation in chronological order.

I. Signing of the Convention on Biological Diversity (CBD) at the Earth Summit.
II. Introduction of the Wildlife Protection Act in India.
III. Establishment of the International Union for Conservation of Nature (IUCN).
IV. Declaration of the first National Park in India.

Codes

(a) III, II, IV, I
(b) II, IV, I, III
(c) IV, II, III, I
(d) III, IV, II, I

44. In the questions given below there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.

Assertion (A) Spring tides occur when the Sun, Moon and Earth are aligned in a straight line.

Reason (R) This alignment increases the gravitational pull on Earth's oceans, leading to higher-than-normal tides.

Codes

(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true, but R is not the correct explanation of A.
(c) A is true, but R is false.
(d) A is false, but R is true.

45. Which of the following factors influence the movement of ocean currents?

I. Wind patterns
II. Solar heating
III. Centrifugal force
IV. Salinity differences

Codes

(a) I and II (b) I, II and IV
(c) II, III and IV (d) All of these

46. Arrange the following processes related to the water cycle in the correct order.

I. Evaporation II. Condensation
III. Precipitation IV. Transpiration

Codes

(a) I, IV, II, III (b) II, I, III, IV
(c) IV, I, II, III (d) I, III, IV, II

47. Match the following atmospheric processes with their correct descriptions.

List I	List II
A. Transpiration	1. Conversion of water vapour into liquid form
B. Sublimation	2. Direct transition from solid to vapour without passing through the liquid phase
C. Evaporation	3. Release of moisture from plants into the atmosphere
D. Condensation	4. Process by which liquid water becomes water vapour

Codes

	A	B	C	D		A	B	C	D
(a)	2	4	3	1	(b)	3	2	4	1
(c)	4	1	2	3	(d)	1	3	4	2

48. Arrange the following processes involved in the Earth's heat balance in the correct sequence.

I. Insolation absorption by the Earth's surface.
II. Terrestrial radiation emitted by the Earth.
III. Reflection of solar radiation by clouds.
IV. Heat transfer from the Earth's surface to the atmosphere through conduction.

Codes

(a) I, III, IV, II (b) III, I, IV, II
(c) II, I, III, IV (d) IV, III, II, I

49. Which of the following factors influence the Earth's heat budget?

I. Albedo of the Earth's surface
II. Distribution of land and sea
III. Latitude of the location
IV. Lunar gravitational pull

Codes

(a) I and II (b) I, II and III
(c) II, III and IV (d) All of these

50. Match the following concepts related to Earth's temperature regulation with their correct descriptions.

List I	List II
A. Terrestrial Radiation	1. Transfer of heat through horizontal movement of air
B. Convection	2. Heat transfer from the Earth's surface to the atmosphere
C. Advection	3. Vertical movement of air transferring heat
D. Albedo	4. Percentage of solar energy reflected by Earth's surface

Codes

	A	B	C	D		A	B	C	D
(a)	2	3	1	4	(b)	2	4	1	3
(c)	3	2	4	1	(d)	4	1	3	2

Tie-Breaking Section

Instructions

1. This section consists of 5 questions.
2. The score achieved in this section will not be included in the total marks.
3. If overall marks of two or more students are same, winner will be decided based on the score in this section.
4. Participation in this section is optional and students may choose to attempt it or not.

1. **Statement I** Montane forests in India are characterised by the presence of coniferous trees such as pine, fir and deodar.

Statement II Montane forests are typically found in the coastal regions of India.

Codes

(a) Both statements are true.
(b) Both statements are false.
(c) Statement I is true, but Statement II is false.
(d) Statement II is false, but Statement II is true.

2. Which of the following factors are threats to India's natural vegetation?

I. Deforestation
II. Overgrazing by livestock
III. Rapid urbanisation
IV. Increase in protected areas

Codes

(a) I, II and III (b) I and IV
(c) II and III (d) All of these

3. In the questions given below there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.

Assertion (A) The Inter-Tropical Convergence Zone (ITCZ) plays a crucial role in the formation of the Indian monsoon.

Reason (R) The ITCZ shifts its position Southwards during the summer, attracting the North-East trade winds towards the Indian sub-continent.

Codes

(a) Both A and R are true and R is the correct explanation of A
(b) Both A and R are true, but R is not the correct explanation of A
(c) A is true, but R is false
(d) A is false, but R is true

4. Which of the following factors influence the climate of India?

I. Latitude and longitude
II. Himalayan mountain range
III. Distribution of land and water
IV. Monsoon winds

Codes

(a) I and II (b) I, II and III
(c) II, III and IV (d) All of these

5. In the questions given below there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.

Assertion (A) Karst landscapes are formed predominantly in regions with high precipitation and limestone bedrock, leading to the development of features like sinkholes and underground rivers.

Reason (R) Karst topography develops due to the mechanical erosion of rocks by wind and the abrasive action of water carrying sediments.

Codes

(a) Both A and R are true and R is the correct explanation of A
(b) Both A and R are true, but R is not the correct explanation of A
(c) A is true, but R is false
(d) A is false, but R is true