

Question Booklet No. :

ENTRANCE TEST-2025

SCHOOL OF EARTH AND ENVIRONMENTAL SCIENCES GEOGRAPHY

Total Questions : 60

Question Booklet Series

A

Time Allowed : 70 Minutes

Entrance Test Roll No. :

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Important Instructions for Candidates :

1. Candidates shall compulsorily use only **blue/ black ball point pen**. In no case gel/ink pen or pencil should be used.
2. Compulsorily write your **entrance test roll number** in the space provided at the top of this page of the question booklet.
3. Fill up the necessary information in the spaces provided on OMR Answer Sheet including **Question Booklet Number** and **Question Booklet Series**.
4. OMR Answer Sheet has an original copy and a candidate's copy glued beneath it at the top. While making entries in the original copy, candidate should ensure that the **two copies are aligned properly** so that the entries made in the original copy against each item are exactly copied in the candidate's copy.
5. All entries in the OMR Answer Sheet, including answers to questions, are to be recorded in the Original Copy only.
6. **Choose only one correct/most appropriate response** for each question among the options A, B, C and D and darken the circle of the appropriate response completely. Incompletely darkened circle is not correctly read by the OMR scanner and no complaint to this effect shall be entertained.
7. **Do not darken more than one circle of option for any question. A question with more than one darkened response shall be considered wrong.**
8. **There will be negative marking for wrong answers. Each wrong answer will lead to deduction of 0.25 marks per wrong answer from the score.**
9. Only those candidates who obtain positive score in Entrance Test shall be eligible for admission.
10. Do not make any stray mark on the OMR sheet as this may lead to errors while scanning.
11. OMR answer sheet must be handled carefully and it should not be folded or mutilated, as in such case it will not be properly evaluated by the scanning machine.
12. Use of Electronic gadgets like calculator, mobile, smart watch, blue tooth etc. is strictly prohibited.
13. Rough work, if any, should be done on the blank sheets provided with the question booklet.
14. Ensure that the OMR Sheet is signed by the Examinee as well as by the invigilator.
15. At the end of the examination, fold the OMR Sheet along the crease on the top and tear off the top strip to separate the Original OMR Sheet from the Duplicate Copy.
16. Compulsorily hand over the **Original OMR Answer Sheet** to the invigilator.
17. Candidate's can retain duplicate copy of the OMR, Question Booklet and Admit Card.
18. If any of the information in the Response Sheet/Question Paper has been found missing or not mentioned as stated above, the candidate is solely responsible for that lapse.
19. Any deficiency on the OMR shall be the responsibility of the candidate himself/herself.

1. In a satellite system, the total width of the area on the ground covered by the scanner is called:

- (A) Synoptic View
- (B) Nadir Point
- (C) Swath
- (D) Path

2. What is meant by transhumance with respect to migration?

- (A) Permanent migration
- (B) Seasonal migration
- (C) Daily migration
- (D) Long term migration

3. Which of the following is not a characteristic feature of temperate cyclone?

- (A) Fogginess and Poor visibility
- (B) Unsettled weather
- (C) Movement from west to east
- (D) Torrential rainfall

4. In which among the following countries does the ship building industry is the most advance?

- (A) Japan
- (B) China
- (C) Germany
- (D) Canada

5. Which among the following salts has the highest percentage in ocean water?

- (A) Magnesium chloride
- (B) Sodium chloride
- (C) Calcium sulphate
- (D) Calcium carbonate

6. Which among the following continents border the Pacific Ocean?

- 1. Asia
- 2. North America
- 3. South America
- 4. Africa
- 5. Australia

Select the correct code from the options given below:

- (A) Only 1, 3 & 5
- (B) Only 1, 2 & 3
- (C) Only 1, 2, 3 & 5
- (D) 1, 2, 3, 4 & 5

7. Which one of the following weather condition is indicated by a sudden fall in the barometer reading?

- (A) Stormy
- (B) Cloudy and dry
- (C) Calm
- (D) Hot and sunny

8. The report entitled "Our Common Future" was submitted in 1987 by:

- (A) Brundtland Commission
- (B) Food and Agricultural Organisation
- (C) World Meteorological Organisation
- (D) Intergovernmental Panel on Climate Change (IPCC)

9. Tropical black soils have been formed by:

- (A) Deposits by river
- (B) Volcanic activity
- (C) Decay and decomposition of vegetation
- (D) Chemical activity

10. A horn is associated with:

- Erosional work of a river
- Depositional work of a river
- Depositional work of a glacier
- Erosional work of a glacier

11. Which of the following is not the result of Glacio-fluvial deposits?

- Esker
- Kame
- Moraine
- Horn

12. Vector and raster data models are used in:

- Global Positioning System
- Remote Sensing
- Geographical Information System
- All the above

13. Who defined Geography as human ecology?

- Schaefer
- Hartshorne
- Richtofen
- Barrows

14. Which among the following has the highest albedo?

- Forests
- Deserts
- Fresh snow
- Land surface

15. Which one is the following is a conventional projection?

- Polyconic
- Sinusoidal
- Bonnes
- None

16. Match the List I with List II:

List I	List II
1. Isohels	a. Rainfall
2. Isonephs	b. Sunshine
3. Isohyet	c. Snow depth
4. Isonif	d. Cloudiness

1 2 3 4

- b a c d
- a c d b
- b d a c
- a d c b

17. What causes wind to deflect toward left in the Southern hemisphere?

- Temperature
- Magnetic field
- Rotation of the Earth
- Pressure

18. The Radical school of geography was established by:

- B.J. Alberry
- R. Peet
- G Taylor
- E. Sample

19. In which of the following regions would you expect the maximum effect of insolation as an agent of weathering?

- Sahara region
- Tundra region
- Mediterranean region
- Equatorial region

20. An intermontane plateau is situated:

- (A) Amidst the mountain ranges
- (B) Near the sea coast
- (C) On a cliff
- (D) On the edge of a plain

21. Carl Sauer is best identified for his classic work related to:

- (A) Cultural landscape
- (B) Economic landscape
- (C) Social landscape
- (D) Physical landscape

22. Which of the following is not a graphic representation ?

- (A) Pie Chart
- (B) Frequency Table
- (C) Bar Chart
- (D) Histogram

23. In the subcontinent of India the region frequently affected by tropical cyclone is:

- (A) Gujarat Coast
- (B) Coromandel Coast
- (C) Konkan Coast
- (D) Malabar Coast

24. Which one of the following techniques is not suitable for showing Urban population on the map?

- (A) Circles
- (B) Divided Circles
- (C) Spheres
- (D) Hachures

25. The concept of paradigm was propounded by:

- (A) Kant
- (B) Peet
- (C) Kuhn
- (D) Hagget

26. Who among the following pleaded that history be treated geographically and geography be treated historically?

- (A) Homer
- (B) Thales
- (C) Heratacus
- (D) Herodotus

27. Thornthwaite's modified climatic classification is based on the concept of:

- (A) Effective temperature
- (B) Precipitation Index
- (C) Potential Evapotranspiration
- (D) Potential Precipitation

28. In Koppen's classification of climate the symbol Aw refers to:

- (A) Tropical Savanna Climate
- (B) Monsoon Climate
- (C) Tropical rainforest Climate
- (D) Steppe

29. Which of the following earthquake waves are more destructive at epicentre?

- (A) S waves
- (B) P waves
- (C) R waves
- (D) L waves

30. Which one of the following is formed due to tectonic forces?

(A) Hanging valley
(B) U-shaped valley
(C) Blind valley
(D) Rift valley

31. Chemical weathering is more effective than mechanical weathering in :

(A) Semi-arid region
(B) Arid region
(C) Coastal region
(D) Cool temperate region

32. Which one of the following is not a sedimentary rock?

(A) Coal
(B) Shale
(C) State
(D) Sandstone

33. Which of the following is a warm ocean current?

(A) Canary
(B) Gulf Stream
(C) Labrador
(D) Kuril

34. Which one of the following is missing in classifying a settlement as a town in the census of India?

(A) Population size
(B) Population density
(C) Dominance of male worker participation
(D) Function

35. According to Christaller's Central Place Theory $k = 4$ stands for :

(A) Administrative principle
(B) Market principle
(C) Transport principle
(D) Trade principle

36. Which one of the following is not correctly matched?

(A) Concentric theory- Sinclair
(B) Sector theory- Human Hoyt
(C) Central Place Theory- Christaller
(D) Multiple Nuclei Theory- Harris and Ullman

37. For his model of industrial location, Weber marks use of:

(A) Isogons
(B) Isophens
(C) Isodapanes
(D) Isohyet

38. Which of the following is a footloose industry?

(A) Electronics
(B) Leather
(C) Paper
(D) Cement

39. With increase in time and distance, accessibility:

(A) Reduces
(B) Increases
(C) Remains the same
(D) First reduces then increases

40. Which one of the following can be categorized as a primary activity?

(A) Coal mining
(B) Teaching
(C) Handicrafts
(D) Car manufacturing

41. Growth Pole theory was originally developed by :

(A) Glasson
(B) Perroux
(C) Thirwal
(D) Hirschman

42. Which one of the following is an example of a Nodal Region ?

(A) Damodar Valley Region
(B) Upper Ganga Yamuna Doab Region
(C) Western Ghats Region
(D) National Capital Region

43. The city region is an example of :

(A) Formal region
(B) Functional region
(C) Compact region
(D) Adhoc region

44. Which of the following is not part of the Cryosphere?

(A) Glaciers
(B) Rivers
(C) Iceberg
(D) Permafrost

45. Which of these continents contains a by part of the cryosphere?

(A) Antarctica
(B) Artic
(C) Australia
(D) South America

46. _____ is the frozen water part of the Earth water system.

(A) Lithosphere
(B) Troposphere
(C) Mesosphere
(D) Cryosphere

47. Which of the following is a gas released when permafrost thaws?

(A) Oxygen
(B) Methane
(C) Hydrogen
(D) Nitrogen

48. Rainfall with an intensity of 6 mm/hr is classified as :

(A) Trace rain
(B) Moderate rain
(C) Heavy rain
(D) Light rain

49. When rainfall intensity is greater than infiltration capacity indicated by the infiltration curve, the excess water contributes to :

(A) Ground water charge
(B) Evapotranspiration
(C) Surface run off
(D) Evaporation

50. A land is known as waterlogged :
(A) When the permanent wilting point is reached
(B) When gravity drainage has ceased
(C) Capillary fringe reaches the root zone of plants
(D) None of the above

51. Pick up the correct statement from the following.
(A) Hydrograph is a plot of discharge and time
(B) In hydrograph, time is plotted on x axis
(C) The maximum flow in the river due to rainfall is called peak flow
(D) All the above

52. Which one of the following is not a part of spatial information technique?
(A) GIS
(B) GPS
(C) SPSS
(D) Remote Sensing

53. Which of the following is a GIS analysis technique?
(A) Image displaying
(B) Contrast Sketching
(C) Map Overlaying
(D) Map designing

54. Which one of the following characteristics separate GIS from other systems?
(A) Map making and generalised output
(B) Linking spatial and attribute data
(C) Map designing and layout
(D) All the above

55. Out of the following which one is not the example of polar orbiting satellites?
(A) IIRS
(B) LANDSAT
(C) SPOT
(D) INSAT

56. Which element is most useful for identifying tall building in an aerial photograph?
(A) Size
(B) Shadow
(C) Shape
(D) Pattern

57. Which is not a method of hypothesis testing?
(A) Chi-square test
(B) Student test
(C) Circular test
(D) Parametric test

58. Which type of sampling technique is used to draw a sample from a heterogeneous universe?
(A) Systematic
(B) Stratified
(C) Random
(D) Area

59. Mean, Median and Mode are:
(A) Measures of Deviation
(B) Ways of Sampling
(C) Measure of Central Tendency
(D) Measure of Dispersion

60. Which of the following statistical technique is used to analyse the interdependence of variables ?
(A) Location Quotient
(B) Standard Score
(C) Coefficient of Variability
(D) Factor Analysis

ROUGH WORK

ENTRANCE TEST-2024

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GEOGRAPHY

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SEAL

1. 'Nature is never more than an adviser' is the essence of :
 - (A) Environmentalism
 - (B) Neo-determinism
 - (C) Possibilism
 - (D) Radicalism
2. 'Principles of Human Geography' was authored by :
 - (A) E. Huntington
 - (B) E.C. Semple
 - (C) F. Ratzel
 - (D) G. Taylor
3. Bushmen live in :
 - (A) Mudhouse
 - (B) Cave
 - (C) Igloo
 - (D) Scherms
4. Which of the following is not a subfield of human geography ?
 - (A) Population Geography
 - (B) Urban Geography
 - (C) Physical Geography
 - (D) Economic Geography
5. Which of the following is unrelated to Plate Tectonics Theory ?
 - (A) Sea Floor Spreading
 - (B) Alfred Wegener
 - (C) Folded Mountains
 - (D) Benioff Zones
6. The principle of continents being in buoyant equilibrium is known as :
 - (A) Isostasy
 - (B) The principle of buoyant equilibrium
 - (C) The elastic rebound theory
 - (D) None of these
7. Lithosphere is composed of :
 - (A) Crust and Mantle
 - (B) Mantle only
 - (C) Crust and Upper Mantle
 - (D) Crust only
8. Which of the following is not considered a characteristic feature of the youthful stage of an ideal normal cycle of erosion ?
 - (A) Natural Levees
 - (B) Potholes
 - (C) River Capture
 - (D) Gorges

9. Mauna Loa is an example of :

- (A) Active volcano
- (B) Dormant volcano
- (C) Extinct volcano
- (D) Plateau

10. Which of the following pairs of landforms are created by glacial erosion ?

- (A) Yardang and Zeugen
- (B) Loess and Seif
- (C) Stalactite and Stalagmite
- (D) Cirque and Hanging Valley

11. Which of the following is not true about weathering ?

- (A) Weathering aids mass wasting and erosion and reduces relief
- (B) Weathering helps enrich certain minerals like iron and copper ores
- (C) Weathering of rocks aids soil formation
- (D) Plants, animals, and microorganisms have no role in weathering

12. Shale is an example of :

- (A) Igneous rock
- (B) Sedimentary rock
- (C) Metamorphic rock
- (D) A mineral

13. Among the following layers of the atmosphere, the minimum temperature in the atmosphere occurs in :

- (A) Tropopause
- (B) Stratopause
- (C) Mesopause
- (D) Thermosphere

14. The process of transfer of energy or heat without the help of any material medium is known as :

- (A) Insolation
- (B) Radiation
- (C) Convection
- (D) Conduction

15. Seasonal contrast in pressure between land and sea gives rise to :

- (A) Land and Sea breezes
- (B) Westerly winds
- (C) Trade winds
- (D) Monsoons

16. The calm area at the centre of the cyclone is referred to as :

- (A) Epicentre
- (B) Focus
- (C) Eye
- (D) Core

17. Which one of the following is not a cold current ?

- (A) Kuroshio Current
- (B) Humboldt Current
- (C) Labrador Current
- (D) California Current

18. High ocean water salinity is observed in :

- (A) Polar region
- (B) Sub-polar region
- (C) Sub-tropical region
- (D) Equatorial region

19. Ninety-East Ridge is found in :

- (A) Indian Ocean
- (B) Atlantic Ocean
- (C) Rocky Mountain
- (D) Andes Mountain

20. Which one of the following regions has the largest coral reefs in India ?

- (A) Lakshadweep
- (B) Andaman and Nicobar
- (C) Gulf of Kutch
- (D) Gulf of Mannar

21. In a population, the rate of addition of new members is higher than the rate of individuals lost. It shows :

- (A) Zero population growth
- (B) Exponential growth
- (C) Declined growth
- (D) None of these

22. Who predicted that 'the population would increase by a geometric progression while food production would increase in arithmetic progression' ?

- (A) Warren Thompson
- (B) Adolphe Landry
- (C) Frank W. Notestein
- (D) Thomas Robert Malthus

23. In India, the human population has a higher number of younger age groups because of :

- (A) Birth rate is equal to death rate
- (B) Short life span and low birth rate
- (C) Short life span and high birth rate
- (D) Long life span and low birth rate

24. Which of the following stages of demographic transition indicate the state of underdevelopment ?

- (A) High stationary stage
- (B) Early expanding stage
- (C) Late expanding stage
- (D) Low stationary stage

25. Mangrove forests are the best example of :

- (A) Ecotone
- (B) Biome
- (C) Niche
- (D) Ecological succession

26. The area in which an organism can live and which affords it relatively favourable conditions for existence is called :

(A) Society
(B) Environment
(C) Biome
(D) Habitat

27. For the conservation of biological resources in India, The Biological Diversity Act was enacted in :

(A) 1986
(B) 2002
(C) 2006
(D) 2010

28. Which of the following gases has the highest Global Warming Potential ?

(A) Carbon monoxide
(B) Carbon dioxide
(C) Chlorofluorocarbons
(D) Methene

29. The River Indus originates from :

(A) Bara Lapcha La
(B) Near Rohtang Pass
(C) Near Manasarovar Lake
(D) Verinag

30. As per Koppen's Climatic Regions of India, Jammu and Kashmir falls under :

(A) Cold humid with short summer (Dfc)
(B) Polar (E)
(C) Polar Tundra (ET)
(D) Mountain climate (H)

31. The Tibetan Plateau and its related theory of Monsoon was given by :

(A) R.L. Singh
(B) Pancheti Koteswaram
(C) Al Masudi
(D) Sir Edmund Halley

32. Alluvial soils are found in India in which of the following regions ?

(A) Brahmaputra Valley
(B) Karnataka Plateau
(C) Deccan Trap
(D) Jammu and Kashmir

33. "Shree Anna" refers to :

(A) Rice
(B) Potato
(C) Tapioca
(D) Millets

34. Which of the following industrial regions of India is called as 'Ruhr of India' ?

(A) Bengaluru-Madurai Industrial Region
(B) Visakhapatnam-Guntur Industrial Region
(C) Ahmedabad-Vadodara Industrial Region
(D) Chotanagpur Industrial Region

35. Which city of India is known as 'Manchester of India' ?

(A) Surat
(B) Ahmedabad
(C) Srinagar (J&K)
(D) Ludhiana

36. Which one of the following is not correct ?

(A) White Revolution refers to Dairy Farming
(B) Green Revolution refers to Forestry
(C) Blue Revolution refers to Fishing
(D) Grey Revolution refers to Fertilizers

37. Which of the following places in India does not get the Sun's Vertical rays ?

(A) Kanyakumari
(B) Bangalore
(C) Nagpur
(D) Srinagar (J&K)

38. Saffron is best cultivated in Karewas soil from the Karewa Formation in Kashmir. The age of the Karewa Formation is :

(A) Holocene
(B) Plio-Pleistocene
(C) Permian
(D) Silurian

39. The Uri Dam is located on which river in Jammu & Kashmir ?

(A) Jhelum River
(B) Beas River
(C) Chenab River
(D) Ravi River

40. Which one is the smallest National Park in Jammu and Kashmir ?

(A) Kishtwar National Park
(B) Hemis National Park
(C) Salim Ali National Park
(D) Dachigam National Park

41. The greatest amount of destruction caused by an earthquake occurs at :

(A) Zone of subduction
(B) Epicentre
(C) Hypocentre
(D) Hadley's Zone

42. The descent of material down a slope, specifically the hurtling down of a mass compounded with ice and rock, is known as :

(A) Tsunami
(B) Earthquake
(C) Debris Flow
(D) Avalanche

43. Disaster risk is a function of :

(A) Hazard
(B) Exposure
(C) Vulnerability
(D) All of these

44. Which one is not a man-made disaster ?

(A) Hurricanes
(B) Cyberattack
(C) Groundwater Contamination
(D) Chemical Spills

45. The correct order of stages as per Butler's Tourism Area Life Cycle (TALC) model :

(A) Decline, Consolidation, Involvement, Exploration, Development, Stagnation
(B) Exploration, Involvement, Development, Consolidation, Stagnation, Decline
(C) Development, Consolidation, Exploration, Involvement, Stagnation, Decline
(D) Stagnation, Decline, Consolidation, Exploration, Involvement, Development

46. National Tourism Policy was implemented in the year :

(A) 2000
(B) 2001
(C) 2002
(D) 2003

47. "Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" — refers to :

(A) Ecotourism
(B) Carrying capacity
(C) Responsible travel
(D) Sustainable tourism

48. Which tourist place in Jammu and Kashmir is most famous for Skiing ?

(A) Gulmarg
(B) Yusmarg
(C) Yumthang
(D) Narkanda

49. A map with a scale of 1:50,000 is enlarged to 5 times; which one of the following scales is correct for the enlarged map ?

(A) 1:25,000
(B) 1:10,000
(C) 1:100,000
(D) 1:250,000

50. The advance of the Southwest Monsoon is shown on the Map of India using :

(A) Isochrones
(B) Isohyets
(C) Isobars
(D) Isotachs

51. Which projection system is used by Survey of India Open Series Map (OSM) toposheets ?

(A) Polyconic
(B) Lambert Conformal Conic
(C) Bonne's
(D) UTM

52. Which of the following cartographic methods is generally used to show population density ?

(A) Isopleth
(B) Choropleth
(C) Chorochromatic
(D) Dot density

53. In a prismatic compass survey, bearings are measured with reference to :

(A) Grid North
(B) Geographic North
(C) Magnetic North
(D) Assumed North

54. Which one of the following Indian Remote Sensing satellites provides the highest spatial resolution ?

(A) Resourcesat
(B) Cartosat
(C) Oceansat
(D) RISAT

55. The main purpose of the overlap of consecutive aerial photo pairs is :

(A) Tonal clarity
(B) Scale determination
(C) Stereoscopy
(D) Mosaic preparation

56. Which one of the following is not a Global Navigation Satellite System (GNSS) constellation ?

(A) World View
(B) NavIC
(C) GPS
(D) Galileo

57. Mean, Median, and Mode coincide if the distribution of values is :

(A) Negatively skewed
(B) Positively skewed
(C) Normal
(D) None of the above

58. The sum of deviations from which of the following measures of central tendency is always zero ?

- (A) Median
- (B) Mode
- (C) Mean
- (D) All of the above

59. Which dataset has a higher relative variability: Dataset P with an Arithmetic Mean of 30 and a Standard Deviation of 5, or Dataset Q with an Arithmetic Mean of 40 and a Standard Deviation of 6 ?

- (A) Dataset P
- (B) Dataset Q
- (C) Both have the same relative variability
- (D) Cannot be determined from the given information

60. If the coefficient of correlation $r_{xy}=0$, then the variables X and Y are :

- (A) Independent
- (B) Variables are uncorrelated
- (C) No linear relation between them
- (D) All of the above