$\qquad$

# ENTRANCE TEST-2023 

# SCHOOL OF ENVIRONMENTAL AND EARTH SCIENCES GEOGRAPHY 

Total Questions : 60<br>Time Allowed : 70 Minutes

Question Booklet Series A

Roll No. : |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Instructions for Candidates:

1. Write your Entrance Test Roll Number in the space provided at the top of this page of Question Booklet and fill up the necessary information in the spaces provided on the OMR Answer Sheet.
2. 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.
3. All entries in the OMR Answer Sheet, including answers to questions, are to be recorded in the Original Copy only.
4. Choose the correct / most appropriate response for each question among the options A, B, C and D and darken the circle of the appropriate response completely. The incomplete darkened circle is not correctly read by the OMR Scanner and no complaint to this effect shall be entertained.
5. Use only blue/black ball point pen to darken the circle of correct/most appropriate response. In no case gel/ink pen or pencil should be used.
6. Do not darken more than one circle of options for any question. A question with more than one darkened response shall be considered wrong.
7. There will be 'Negative Marking' for wrong answers. Each wrong answer will lead to the deduction of 0.25 marks from the total score of the candidate.
8. Only those candidates who would obtain positive score in Entrance Test Examination shall be eligible for admission.
9. Do not make any stray mark on the OMR sheet.
10. Calculators and mobiles shall not be permitted inside the examination hall.
11. Rough work, if any, should be done on the blank sheets provided with the question booklet.
12. OMR Answer Sheet must be handled carefully and it should not be folded or mutilated in which case it will not be evaluated.
13. Ensure that your OMR Answer Sheet has been signed by the Invigilator and the candidate himself/herself.
14. At the end of the examination, hand over the OMR Answer Sheet to the invigilator who will first tear off the original OMR sheet in presence of the Candidate and hand over the Candidate's Copy to the candidate.
15. Who was considered as the founder of modern Human 7. The landforms which are created by the epeirogenic

## Geography?

(A) F. Ratzel
(B) Carl Ritter
(C) E.C. Semple
(D) A.V. Humboldt
2. Which of the following is the philosophical basis of 8 . Quantitative revolution?
(A) Probabilism
(B) Positivism
(C) Environmentalism
(D) Idealism
3. Which one of the following is a key concept in humanistic geography?
(A) Spatial concentration
(B) Spatial location
(C) Development and quality of life
(D) Geographical development
4. Toynbee has divided the world into how many cultural regions?
(A) 2
(B) 5
(C) 4
(D) 3
5. Who proposed the idea of sea floor spreading?
(A) Harry Hess
(B) Alfred Wegener
(C) McKenzie and Parker
(D) Arthur Holmes
6. Which of the following theories comprehensively explains the dynamism of earth's crust and features of the endogenetic forces?
(A) Sea floor spreading
(B) Plate tectonics
(C) Geosync line theory
(D) Convective cell theory
forces are called :
(A) Primary relief
(B) Secondary relief
(C) Tertiary relief
(D) Polycyclic relief

Which of the following phenomena is more pronounced in youthful stage of Davis cycle of erosion?
(A) Vertical erosion
(B) Lateral erosion
(C) Valley widening
(D) Both vertical \& lateral erosion
9. Exfoliation of rocks due to pressure release or unloading is also known as:
(A) Sheeting
(B) Mass wasting
(C) Shattering
(D) Abrasion
10. How many types of volcanoes are there on the basis of periodicity?
(A) 2
(B) 5
(C) 3
(D) 7
11. Which of the following landform is the example of fluvial depositional landform?
(A) Delta
(B) Cataract
(C) Potholes and plunges
(D) Waterfall and rapid
12. Karst topography is strongly developed where the water table is :
(A) Relatively low
(B) Moderate
(C) High
(D) Very high
13. Consider the following statements:

1. Tropical cyclones have convectional formation whereas temperate cyclones have frontal formations.
2. Tropical cyclones move from west to east whereas temperate cyclones move from east to west.
3. Tropical cyclones originate only in deep warm oceans while temperate cyclones can originate over land as well as oceans.
Which of the above statement(s) is/are incorrect?
(A) $1 \& 2$
(B) $1 \& 3$
(C) $2 \& 3$
(D) 2 only
4. Consider the following:
5. Chinook: USA
6. Foehn: Switzerland
7. Sirocco: Sahara to Mediterranean
8. Bora: Canada

Which of the following pair(s) is/are correctly matched?
(A) $1 \& 4$
(B) $1,2 \& 4$
(C) $1,2 \& 3$
(D) All of the above
15. The phenomenon of "Pineapple Express" which was recently in news is related to:
(A) Land sinking in Joshimath.
(B) Landslide experienced in California.
(C) Technique of cultivating Pineapple.
(D) Atmospheric phenomenon that resembles a conveyor belt.
16. What happens to relative humidity when air temperature rises ?
(A) Increases
(B) Decreases
(C) May increase or decrease
(D) Remains the same
17. Which of the following statements is true?

1. West coasts of the continents in tropical and sub-tropical latitude (except close to equator) are bordered by warm currents.
2. The mixing of warm and cold current results in best fishing grounds of world.
Select the correct options :
(A) 1 only
(B) 2 only
(C) Both
(D) None
3. Which of the following ocean currents is found in southern hemisphere?
(A) Oyashio current
(B) West wind drift
(C) Gulf stream
(D) Canaries current
4. Which of the following factors are affecting the ocean salinity?
5. Evaporation
6. Freezing of ice
7. Rivers
8. Wind flow

Select the correct answer using the code given below :
(A) 1,2 and 3 only
(B) 2, 3 and 4 only
(C) 1,3 and 4 only
(D) 1,2,3 and 4
20. Arrange the following seas of Europe continent from North to South :

1. Baltic sea
2. White sea
3. Ionian sea
4. Adriatic sea

Select the correct answer using the code given below :
(A) 1-2-3-4
(B) 2-1-3-4
(C) 2-1-4-3
(D) 1-2-4-3
21. The largest ecosystem of the Earth is :
(A) Biosphere
(B) Hydrosphere
(C) Lithosphere
(D) Biome
22. Greenhouse effect means :
(A) Cultivation in green houses so as to check pollution.
(B) Trapping of solar energy due to atmospheric oxygen.
(C) Trapping of solar energy due to atmospheric carbon dioxide.
(D) Pollution in houses in tropical regions.
23. Which one of the following is the correct sequence of ecosystem in the order of decreasing productivity?
(A) Mangroves, grasslands, lakes, oceans
(B) Mangroves, oceans, grasslands, lakes
(C) Oceans, lakes, grasslands, mangroves
(D) Oceans, mangroves, lakes, grasslands
24. Who wrote the book An Essay on the Principle of 29. Which of the following soils is formed by the Population?
(A) E. Ravenstein
(B) Zelinsky
(C) R.C. Chandna
(D) Thomas Robert Malthus
25. According to Ackerman's division of world into population-resources regions, India falls under the 30 category of
(A) United State type
(B) Egyptian type
(C) Brazilian type
(D) European type
26. Which of the following conditions are characterized by second stage of demographic transition?
(A) Low birth rate, high death rate
(B) High birth rate, high death rate
(C) High birth rate, declining death rate
(D) Low birth rate, low death rate
27. Which of the following are the 'pull factor' affecting migration?

1. Better opportunities for work.
2. Better health facilities.
3. Poorer health facilities.
4. Absence of good educational institution.

Choose the correct option :
(A) Only 1 and 2
(B) Only 3 and 4
(C) Only 1, 2 and 3
(D) Only 1, 2 and 4
28. Which pass provides access to the KailashMansarovar land route?
(A) Mana pass
(B) Rohtas pass
(C) Nathula pass
(D) Baralacha la pass weathering of basaltic lava flows?
(A) Red soil
(B) Laterite soil
(C) Acidic soil
(D) Black soil
30. Which of the following characteristics are associated with dry monsoon forest of India?

1. Annual rainfall is below 50 cm .
2. The trees are short- rooted.
3. Thorny shrubs and grasslands.
4. Mango, Mahua, Sisam and Keekar are the prominent trees.
(A) $1 \& 2$
(B) $2 \& 4$
(C) $3 \& 4$
(D) $1,2 \& 3$
5. Who among the following coined the phrase 'Jet 38. When was the first tourism policy introduced ? Stream'?
(A) H. Seilkopf
(B) Wiley Post
(A) 1982
(C) Herodotus
(B) 1981
(D) Sir Gilbert Walker
(C) 1979
(D) 1990
6. Which among the following are called Rainforests of 39. Which of the following states was chosen as the the Ocean?
(A) Phytoplanktons
(B) Zooplanktons
(C) Corals
(D) Algae initiation site in India for Green Revolution?
(A) Haryana
(B) Uttar Pradesh
(C) Punjab
7. Which of the following is not a man-made disaster?
(A) War
(B) Terrorism
(C) Drought
(D) Civil War
8. What is the range of the intensity scale used in measuring earthquakes?
(A) 1 to 12
(B) 1 to 14
(C) 1 to 10
(D) 1 to 16
9. Tsunami occurs due to :
(A) Earthquake generated in a subduction zone
(B) Wave upwelling
(C) Wind impact
(D) West Bengal
10. Given below are some factors influencing the location of certain industries :
11. Skilled labour
12. Low transportation cost
13. Clean and dust free environment
14. Availability of raw material
15. Government policy

Which among these have more strongly influenced location of IT industry in India?
(A) 1,2 and 3
(B) 2, 3 and 4
(C) 3, 4 and 5
(D) Tidal force
(D) 1,3 and 5
36. Coastal Andhra Pradesh and Odisha often face natural 41. Where was the first steel plant set-up in India? disasters due to :
(A) Bokaro
(A) Landslides
(B) Cyclones
(B) Jamshedpur
(C) Earthquakes
(D) Flood
(C) Bhadravati
(D) Rourkela
37. How many stages are there in Butler's theory of tourism development?
(A) 5
(B) 3
(C) 6
(D) 8
43. The mountain range which lies in the lesser Himalayas 49. The disconnected lines used for showing slope on and separates Kashmir valley from the outer Himalayas is :
(A) Zanskar
(B) Pir Panjal
(C) Nun Kun
(D) None of the above
44. Which is the deepest lake of India?
(A) Dal Lake
(B) Sanasar Lake
(C) Wular Lake
(D) Manasbal Lake
45. Which region has more number of biogas plants?
(A) Jammu
(B) Kashmir
(C) Ladakh
(D) None of the above
46. Which of the following is the best period for saffron to be grown in Jammu \& Kashmir?
(A) Last week of August to September
(B) Last week of Septmber to October
(C) Last week of July to August
(D) Last week of June to July
47. Which Mughal garden in Kashmir is known as 'garden of bliss'?
(A) Shalimar garden
(B) Pari mahal garden
(C) Chashmashahi garden
(D) Nishat garden
48. Hospitality dimension of tourism is given much importance for the first time in the history of tourism development in India in which policy?
(A) Tourism Policy 1982
(B) National Action Plan of Tourism 1992
(C) National Tourism Policy 2002
(D) National Strategy for Tourism Promotion
maps are known as:
(A) Contours
(B) Form lines
(C) Hachure
(D) Bench marks
50. Consider the following:

1. Homolographic projection: True Shape projection
2. Orthomorphic projection: Equal area projection
3. Azimuthal projection: True-Bearing/Planar projection
4. True Scale projection: Equi-distant projection Which of the following pair (s) is/are correctly matched:
(A) $1 \& 2$
(B) $3 \& 4$
(C) $1,2 \& 4$
(D) $2,3 \& 4$
5. Lines showing depth of the seabed are called
(A) Isotherms
(B) Isohytes
(C) Isobaths
(D) Isobars
6. Which projection system is most suitable for navigational purposes?
(A) Mercator's projection
(B) Cylindrical projection
(C) Bonne's projection
(D) Conical projection
7. In case of steep slope, the contour lines are:
(A) Widely spaced
(B) Closely spaced
(C) Cross each other
(D) None of the above
8. The GPS operated by Indians is
(A) NavIC
(B) Compass
(C) Galileo
(D) GLONASS
9. A passive sensor uses:
(A) Sun as the source of energy
(B) Its own source of energy
(C) Flashlight as a source of energy
(D) None of these
10. The number of spectral bands in the Enhanced Thematic Mapper Plus (ETM+) Sensor on remote sensing Satellite LANDSAT-7 is:
(A) 12
(B) 10
(C) 8
(D) 6
11. In an asymmetrical distribution if the mean is 23 and the mode is 15 . What will be the value of median?
(A) 18.5
(B) 19
(C) 21.6
(D) 20.3
12. Ogive curve is also known as:
(A) Simple frequency curve
(B) Cumulative frequency curve
(C) Both (A) and (B)
(D) None of the above
13. The term 'regression was introduced by:
(A) Croxton and Cowden
(B) R.A. Fischer
(C) Francis Galton
(D) Karl Pearson
14. The correlation coefficient describes:
(A) Only direction
(B) Only magnitude
(C) Neither (A) nor (B)
(D) Both (A) \& (B)

## ROUGH WORK

## ENTRANCE TEST-2021

## SCHOOL OF ENVIRONMENTAL AND EARTH SCIENCES

## GEOGRAPHY

| Total Questions $:$ | 60 |
| :--- | :--- | :--- |
| Time Allowed $:$ | $\mathbf{7 0}$ Minutes |

Question Booklet Series A

Roll No. : |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Instructions for Candidates:

1. Write your Entrance Test Roll Number in the space provided at the top of this page of Question Booklet and fill up the necessary information in the spaces provided on the OMR Answer Sheet.
2. 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.
3. All entries in the OMR Answer Sheet, including answers to questions, are to be recorded in the Original Copy only.
4. Choose the correct / most appropriate response for each question among the options A, B, C and D and darken the circle of the appropriate response completely. The incomplete darkened circle is not correctly read by the OMR Scanner and no complaint to this effect shall be entertained.
5. Use only blue/black ball point pen to darken the circle of correct/most appropriate response. In no case gel/ink pen or pencil should be used.
6. Do not darken more than one circle of options for any question. A question with more than one darkened response shall be considered wrong.
7. There will be 'Negative Marking' for wrong answers. Each wrong answer will lead to the deduction of 0.25 marks from the total score of the candidate.
8. Only those candidates who would obtain positive score in Entrance Test Examination shall be eligible for admission.
9. Do not make any stray mark on the OMR sheet.
10. Calculators and mobiles shall not be permitted inside the examination hall.
11. Rough work, if any, should be done on the blank sheets provided with the question booklet.
12. OMR Answer Sheet must be handled carefully and it should not be folded or mutilated in which case it will not be evaluated.
13. Ensure that your OMR Answer Sheet has been signed by the Invigilator and the candidate himself/ herself.
14. At the end of the examination, hand over the OMR Answer Sheet to the invigilator who will first tear off the original OMR sheet in presence of the Candidate and hand over the Candidate's Copy to the candidate.
15. The subject matter of modern Geography is based on spatial organisation and manenvironment relations. The analytical technique used in this context is concerned with :
(A) The exact positioning of events
(B) Geocentricism
(C) The best location
(D) The quality of particular areas
16. Following the orthodox structure of geography, economic geography is a subset of which of the following ?
(A) Philosophy
(B) Regional
(C) Techniques
(D) Systematic
17. Who founded the school of possibilism ?
(A) Lablache
(B) L. Febrve
(C) R. Hartshone
(D) Ratzel
18. The most successful types of regional units appear to be those whose spatial boundaries coincide most closely with the described :
(A) Socioeconomic systems
(B) Culture
(C) Model Systems
(D) Physical Systems
19. The basis of the concept of geomorphic cycle is :
(A) The effect of compensating uplift on landforms
(B) Surface tensional forces
(C) The role of declining rates of erosion over time
(D) Youth, maturity, old age
20. The waves that help scientists to understand the internal structure of the earth are :
(A) Primary waves
(B) Secondary waves
(C) Surface waves
(D) Longitudinal waves
21. Most strong earthquakes are generated by :
(A) Sudden crustal movements on active faults
(B) The collapse of calders
(C) Submarine landslides
(D) Volcanic eruptions
22. Mid-oceanic ridges are the result of :
(A) Convergent plate boundary
(B) Transform plate boundary
(C) Divergent plate boundary
(D) All the above
23. Which of the following pairs is most suitable for ascertaining the origin of the rocks ?
(A) Colour and shape
(B) Density and hardness
(C) Structure and composition
(D) Size and weight
24. Which of the following is not chemical weathering ?
(A) Oxidation
(B) Hydrolysis
(C) Carbonization
(D) Freezing
25. Alfred Wagner's theory of continental drift begins from :
(A) Carboniferous period
(B) Cretaceous period
(C) Tertiary period
(D) Jurassic period
26. Stream erosion carried out directly by impact force of flowing water is called :
(A) Corrosion
(B) Deflation
(C) Hydraulic action
(D) Abrasion
27. The debit side of the earth's solar radiation budget shows that almost two thirds of the available units are :
(A) Reflected by the atmosphere
(B) Absorbed and reradiated
(C) Diffused radiation
(D) Transferred from the earth to the atmosphere
28. The bulk of the world's wettest areas are associated with the :
(A) Subtropical highs
(B) Equatorial trough of low pressure
(C) Polar easterlies
(D) Mid-latitude westerlies
29. Tropical cyclones do not occur close to the equator because :
(A) Of excessive heat
(B) Of weal Coriolis force
(C) Land and water contrasts are large
(D) Of areas of calm air movements
30. Relative humidity of an air mass increases when :
(A) air temperature rises
(B) condensation takes place
(C) precipitation takes place
(D) air temperature falls
31. Which of the following factors influence ocean currents ?
32. Rotation of the Earth
33. Air pressure and wind
34. Ocean water density
35. Revolution of the earth

Select the correct answer using the codes given below :
(A) 1 and 2
(B) 1 and 4
(C) 1,2 and 3
(D) 2,3 and 4
18. Pelagic deposits consist of matter derived from algae and are mostly in the form of liquid mud known as :
(A) Blue mud
(B) Red mud
(C) Ooze
(D) Coral mud
19. Which of the following currents belong to Indian Ocean?
(A) Agulhas current
(B) Labrador current
(C) Canary current
(D) Antilles current
20. The rate of decrease of temperature in oceans with increasing depth is more rapid near the :
(A) Equator
(B) Poles
(C) Tropic of Cancer
(D) Tropic of Capricorn
21. Which of the following are the major factors responsible for the monsoon type of climate in India?

1. Location
2. Thermal contrast
3. Upper air circulation
4. The Himalayan Mountains

Select the correct answer using the code given below :
(A) 1 and 4 only
(B) 1,2,3 and 4
(C) 2, 3 and 4 only
(D) 1,2 and 3 only
22. The Karewas of Kashmir refers to which among the following types of deposits ?
(A) Aeolian and glacial
(B) Lacustrine
(C) Fluvial
(D) Volcanic
23. What is the name given to the foothills zone of Himalayas ?
(A) Inner Himalayas
(B) Siwalik
(C) Middle Himalayas
(D) Central Himalayas
24. 'Yellow Revolution' is associated with the production of :
(A) Oil seeds
(B) Poultry
(C) Sunflower
(D) Gold
25. In the 'Index of Eight Core Industries', which one of the following is given the highest weight?
(A) Coal production
(B) Fertilizer production
(C) Electricity generation
(D) Steel production

## SS-5461-A

26. Which of the following rivers is formed by two streams, the Chandra and Bhaga ?
(A) Neelam
(B) Ravi
(C) Chenab
(D) Sutlej
27. The amount of material utilized at any particular level in the food chain is called :
(A) A consumption ratio
(B) An atrophy level
(C) A trophic level
(D) A structural attendant
28. The optimistic view regarding the length of time that the earth's non- renewable resources will last is based on :
(A) Improvements in technology
(B) Reduction in population
(C) Reduction in consumption
(D) Increase in consumption
29. Which of the following is a tropical grassland ?
(A) Savana
(B) Pampas
(C) Prairie
(D) Taiga
30. An equilibrium state which is the result of vegetative change over a long period of time is called a(n) :
(A) Climax
(B) Invasion
(C) Succulent
(D) Succession
31. The biological ability of an area to provide sufficient food stuffs to support the population (of a particular species) of that area is called the :
(A) Logistic growth constant
(B) Fluctuation equivalent
(C) Ecological plausibility
(D) Carrying capacity
32. Population dividend refers to :
(A) Total number of population
(B) Relatively high proportion of experienced aged people
(C) Youthful age structure of a population
(D) Migration from richer region to poorer region
33. The late expanding phase of "demographic transition" is associated with :
(A) Isolated and primitive tribes
(B) High birth rates and high death rates
(C) Stabilization of death rate at a low level
(D) Most of the third world
34. The part of the Malthusian equation never made completely clear is the :
(A) The basis for the geometric growth of population
(B) Curtailment of population increases by birth control
(C) Biotic potential
(D) The basis for the arithmetic growth of agriculture
35. As the doubling time of population growth decreases the rate of growth :
(A) Decreases
(B) Increases
(C) Stabilizes
(D) Triples

SS-5461-A
41. The distance between parallels in Mercator's projection :
21.
(A) Decreases towards the poles
(B) Increases towards the poles
(C) Remains same throughout
(D) Increases towards the equator
42. Actual heights of places above sea level are represented by :
(A) Contours
(B) Layer colouring
(C) Spot height
(D) Hachures
43. Which of the following profiles show only the ruggedness of the sky-line?
(A) Projected profiles
(B) Super-imposed profiles
(C) Composite profiles
(D) Longitudinal profile
44. The direct use of an aerial photograph as a map is prevented by :
(A) Very wide variation in the scale
(B) Horizontal displacement
(C) Vertical displacement
(D) The inability to measure the relief
45. Multi-variable climate data can be best shown by :
(A) Dots
(B) Circles
(C) Graphs
(D) Shades
46. Which among the following is not a segment of GPS ?
(A) Space segment
(B) Control segment
(C) User segment
(D) Variable segment
47. Contours of equal spacing represent :
(A) Uniform slope
(B) Gentle slope
(C) Steep slope
(D) Convex slope
48. Which of the following is a classification base on the instrument used ?
(A) Traverse surveying
(B) Topographic surveying
(C) Hydrographic surveying
(D) Cadastral surveying
49. Which among the following methods of pla table survey is suitable for locating inaccessil points ?
(A) Radiation
(B) Resection
(C) Intersection
(D) All the above
50. Which of the following scales is usec accurately measure minute divisions ?
(A) Plain scale
(B) Comparative scale
(C) Diagonal scale
(D) Vernier's scale
51. When the values in a series are not of equal importance, we calculate the :
(A) Mode
(B) Weighted mean
(C) Geometric mean
(D) Arithmetic mean
52. To measure the consistency between the two or more than two series we use :
(A) Combined standard deviation
(B) Corrected standard deviation
(C) Coefficient of skewness
(D) Coefficient of variation
53. In a scattered diagram, if most of the points lie in the first and third quadrants, then coefficient of correlation is :
(A) Zero correlation
(B) Negative correlation
(C) Positive correlation
(D) High negative correlation
54. When the ratio of variations in the related variables is constant, it is called :
(A) Negative correlation
(B) Positive correlation
(C) Nonlinear correlation
(D) Linear correlation
55. Questionnaire is filled by :
(A) Enumerator
(B) Respondent
(C) Everybody
(D) A special person
56. Disaster is an event arising out of :
(A) Result of hazard event
(B) Causes of hazard event Respondent
(C) Causes of disaster event
(D) All of the above
57. Which of the following is not a component of disaster management cycle ?
(A) Preparedness
(B) Construction
(C) Response
(D) Recovery
58. Which of the following is not an example of a rapid on-set of disaster ?
(A) Earthquake
(B) Cyclone
(C) Drought
(D) Tsunami
59. What types of disasters are most predominant in India?
(A) Drought
(B) Earthquake
(C) Flood
(D) Cyclone
60. In India Tsunami warning centre is located at :
(A) Ahmadabad
(B) Kolkata
(C) Vishakhapatnam
(D) Hyderabad

## ENTRANCE TEST-2021

# SCHOOL OF ENVIRONMENTAL AND EARTH SCIENCES GEOGRAPHY 

Total Questions : 60<br>Time Allowed : 70 Minutes



## Instructions for Candidates :

1. Write your Entrance Test Roll Number in the space provided at the top of this page of Question Booklet and fill up the necessary information in the spaces provided on the OMR Answer Sheet.
2. 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.
3. All entries in the OMR Answer Sheet, including answers to questions, are to be recorded in the Original Copy only.
4. Choose the correct / most appropriate response for each question among the options $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D and darken the circle of the appropriate response completely. The incomplete darkened circle is not correctly read by the OMR Scanner and no complaint to this effect shall be entertained.
5. Use only blue/black ball point pen to darken the circle of correct/most appropriate response. In no case gel/ink pen or pencil should be used.
6. Do not darken more than one circle of options for any question. A question with more than one darkened response shall be considered wrong.
7. There will be 'Negative Marking' for wrong answers. Each wrong answer will lead to the deduction of 0.25 marks from the total score of the candidate.
8. Only those candidates who would obtain positive score in Entrance Test Examination shall be eligible for admission.
9. Do not make any stray mark on the OMR sheet.
10. Calculators and mobiles shall not be permitted inside the examination hall.
11. Rough work, if any, should be done on the blank sheets provided with the question booklet.
12. OMR Answer Sheet must be handled carefully and it should not be folded or mutilated in which case it will not be evaluated.
13. Ensure that your OMR Answer Sheet has been signed by the Invigilator and the candidate himself/ herself.
14. At the end of the examination, hand over the OMR Answer Sheet to the invigilator who will first tear off the original OMR sheet in presence of the Candidate and hand over the Candidate's Copy to the candidate.
15. The subject matter of modern Geography is based on spatial organisation and manenvironment relations. The analytical technique used in this context is concerned with :
(A) The exact positioning of events
(B) Geocentricism
(C) The best location
(D) The quality of particular areas
16. Following the orthodox structure of geography, economic geography is a subset of which of the following ?
(A) Philosophy
(B) Regional
(C) Techniques
(D) Systematic
17. Who founded the school of possibilism ?
(A) Lablache
(B) L. Febrve
(C) R. Hartshone
(D) Ratzel
18. The most successful types of regional units appear to be those whose spatial boundaries coincide most closely with the described :
(A) Socioeconomic systems
(B) Culture
(C) Model Systems
(D) Physical Systems
19. The basis of the concept of geomorphic cycle is :
(A) The effect of compensating uplift on landforms
(B) Surface tensional forces
(C) The role of declining rates of erosion over time
(D) Youth, maturity, old age
20. The waves that help scientists to understand the internal structure of the earth are :
(A) Primary waves
(B) Secondary waves
(C) Surface waves
(D) Longitudinal waves
21. Most strong earthquakes are generated by :
(A) Sudden crustal movements on active faults
(B) The collapse of calders
(C) Submarine landslides
(D) Volcanic eruptions
22. Mid-oceanic ridges are the result of :
(A) Convergent plate boundary
(B) Transform plate boundary
(C) Divergent plate boundary
(D) All the above
23. Which of the following pairs is most suitable for ascertaining the origin of the rocks ?
(A) Colour and shape
(B) Density and hardness
(C) Structure and composition
(D) Size and weight
24. Which of the following is not chemical weathering?
(A) Oxidation
(B) Hydrolysis
(C) Carbonization
(D) Freezing
25. Alfred Wagner's theory of continental drift begins from :
(A) Carboniferous period
(B) Cretaceous period
(C) Tertiary period
(D) Jurassic period
26. Stream erosion carried out directly by impact force of flowing water is called :
(A) Corrosion
(B) Deflation
(C) Hydraulic action
(D) Abrasion
27. The debit side of the earth's solar radiation budget shows that almost two thirds of the available units are :
(A) Reflected by the atmosphere
(B) Absorbed and reradiated
(C) Diffused radiation
(D) Transferred from the earth to the atmosphere
28. The bulk of the world's wettest areas are associated with the :
(A) Subtropical highs
(B) Equatorial trough of low pressure
(C) Polar easterlies
(D) Mid-latitude westerlies
29. Tropical cyclones do not occur close to the equator because :
(A) Of excessive heat
(B) Of weal Coriolis force
(C) Land and water contrasts are large
(D) Of areas of calm air movements
30. Relative humidity of an air mass increases when :
(A) air temperature rises
(B) condensation takes place
(C) precipitation takes place
(D) air temperature falls
31. Which of the following factors influence ocean currents ?
32. Rotation of the Earth
33. Air pressure and wind
34. Ocean water density
35. Revolution of the earth

Select the correct answer using the codes given below :
(A) 1 and 2
(B) 1 and 4
(C) 1, 2 and 3
(D) 2, 3 and 4
18. Pelagic deposits consist of matter derived from algae and are mostly in the form of liquid mud known as :
(A) Blue mud
(B) Red mud
(C) Ooze
(D) Coral mud
19. Which of the following currents belong to Indian Ocean?
(A) Agulhas current
(B) Labrador current
(C) Canary current
(D) Antilles current
20. The rate of decrease of temperature in oceans with increasing depth is more rapid near the :
(A) Equator
(B) Poles
(C) Tropic of Cancer
(D) Tropic of Capricorn
21. Which of the following are the major factors responsible for the monsoon type of climate in India?

1. Location
2. Thermal contrast
3. Upper air circulation
4. The Himalayan Mountains

Select the correct answer using the code given below :
(A) 1 and 4 only
(B) 1, 2, 3 and 4
(C) 2,3 and 4 only
(D) 1, 2 and 3 only
22. The Karewas of Kashmir refers to which among the following types of deposits ?
(A) Aeolian and glacial
(B) Lacustrine
(C) Fluvial
(D) Volcanic
23. What is the name given to the foothills zone of Himalayas ?
(A) Inner Himalayas
(B) Siwalik
(C) Middle Himalayas
(D) Central Himalayas
24. 'Yellow Revolution' is associated with the production of :
(A) Oil seeds
(B) Poultry
(C) Sunflower
(D) Gold
25. In the 'Index of Eight Core Industries', which one of the following is given the highest weight?
(A) Coal production
(B) Fertilizer production
(C) Electricity generation
(D) Steel production
26. Which of the following rivers is formed by two streams, the Chandra and Bhaga ?
(A) Neelam
(B) Ravi
(C) Chenab
(D) Sutlej
27. The amount of material utilized at any particular level in the food chain is called :
(A) A consumption ratio
(B) An atrophy level
(C) A trophic level
(D) A structural attendant
28. The optimistic view regarding the length of time that the earth's non- renewable resources will last is based on :
(A) Improvements in technology
(B) Reduction in population
(C) Reduction in consumption
(D) Increase in consumption
29. Which of the following is a tropical grassland ?
(A) Savana
(B) Pampas
(C) Prairie
(D) Taiga
30. An equilibrium state which is the result of vegetative change over a long period of time is called $\mathrm{a}(\mathrm{n})$ :
(A) Climax
(B) Invasion
(C) Succulent
(D) Succession
31. The biological ability of an area to provide sufficient food stuffs to support the population (of a particular species) of that area is called the :
(A) Logistic growth constant
(B) Fluctuation equivalent
(C) Ecological plausibility
(D) Carrying capacity
32. Population dividend refers to :
(A) Total number of population
(B) Relatively high proportion of experienced aged people
(C) Youthful age structure of a population
(D) Migration from richer region to poorer region
33. The late expanding phase of "demographic transition" is associated with :
(A) Isolated and primitive tribes
(B) High birth rates and high death rates
(C) Stabilization of death rate at a low level
(D) Most of the third world
34. The part of the Malthusian equation never made completely clear is the :
(A) The basis for the geometric growth of population
(B) Curtailment of population increases by birth control
(C) Biotic potential
(D) The basis for the arithmetic growth of agriculture
35. As the doubling time of population growth decreases the rate of growth :
(A) Decreases
(B) Increases
(C) Stabilizes
(D) Triples
36. The largest reserves of coal in India occurs in :
(A) Damodar basin
(B) Narmada basin
(C) Cauvery basin
(D) Godavari basin
37. The most important industrial crop of India is :
(A) Tea
(B) Sugarcane
(C) Coffee
(D) Cotton
38. Which of the following is the largest steel plant of India?
(A) Vishakhapatnam steel plant
(B) Daitari steel plant
(C) Salem steel plant
(D) Bokaro steel plant
39. Many parts of India face difficulty in producing multiple crops because :
(A) Temperature fluctuates in extreme
(B) Monsoons are unpredictable
(C) Water is not easily available
(D) It is not economically viable
40. Crop rotation is being adopted to increase the :
(A) Crop yield
(B) Productivity of the land
(C) Soil water
(D) Crop resistance to pests
41. The distance between parallels in Mercator's projection :
(A) Decreases towards the poles
(B) Increases towards the poles
(C) Remains same throughout
(D) Increases towards the equator
42. Actual heights of places above sea level are represented by :
(A) Contours
(B) Layer colouring
(C) Spot height
(D) Hachures
43. Which of the following profiles show only the ruggedness of the sky-line?
(A) Projected profiles
(B) Super-imposed profiles
(C) Composite profiles
(D) Longitudinal profile
44. The direct use of an aerial photograph as a map is prevented by :
(A) Very wide variation in the scale
(B) Horizontal displacement
(C) Vertical displacement
(D) The inability to measure the relief
45. Multi-variable climate data can be best shown by :
(A) Dots
(B) Circles
(C) Graphs
(D) Shades
46. Which among the following is not a segment of GPS ?
(A) Space segment
(B) Control segment
(C) User segment
(D) Variable segment
47. Contours of equal spacing represent :
(A) Uniform slope
(B) Gentle slope
(C) Steep slope
(D) Convex slope
48. Which of the following is a classification based on the instrument used?
(A) Traverse surveying
(B) Topographic surveying
(C) Hydrographic surveying
(D) Cadastral surveying
49. Which among the following methods of plane table survey is suitable for locating inaccessible points ?
(A) Radiation
(B) Resection
(C) Intersection
(D) All the above
50. Which of the following scales is used to accurately measure minute divisions ?
(A) Plain scale
(B) Comparative scale
(C) Diagonal scale
(D) Vernier's scale
51. When the values in a series are not of equal importance, we calculate the :
(A) Mode
(B) Weighted mean
(C) Geometric mean
(D) Arithmetic mean
52. To measure the consistency between the two or more than two series we use :
(A) Combined standard deviation
(B) Corrected standard deviation
(C) Coefficient of skewness
(D) Coefficient of variation
53. In a scattered diagram, if most of the points lie in the first and third quadrants, then coefficient of correlation is :
(A) Zero correlation
(B) Negative correlation
(C) Positive correlation
(D) High negative correlation
54. When the ratio of variations in the related variables is constant, it is called :
(A) Negative correlation
(B) Positive correlation
(C) Nonlinear correlation
(D) Linear correlation
55. Questionnaire is filled by :
(A) Enumerator
(B) Respondent
(C) Everybody
(D) A special person
56. Disaster is an event arising out of :
(A) Result of hazard event
(B) Causes of hazard event Respondent
(C) Causes of disaster event
(D) All of the above
57. Which of the following is not a component of disaster management cycle?
(A) Preparedness
(B) Construction
(C) Response
(D) Recovery
58. Which of the following is not an example of a rapid on-set of disaster ?
(A) Earthquake
(B) Cyclone
(C) Drought
(D) Tsunami
59. What types of disasters are most predominant in India?
(A) Drought
(B) Earthquake
(C) Flood
(D) Cyclone
60. In India Tsunami warning centre is located at :
(A) Ahmadabad
(B) Kolkata
(C) Vishakhapatnam
(D) Hyderabad

ROUGH WORK

## ENTRANCE TEST-2020

# SCHOOL OF ENVIRONMENTAL AND EARTH SCIENCES GEOGRAPHY 

Total Questions<br>Time Allowed<br>: 60

## Instructions for Candidates :

1. Write your Entrance Test Roll Number in the space provided at the top of this page of Question Booklet and fill up the necessary information in the spaces provided on the OMR Answer Sheet.
2. 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. Copy.
3. All entries in the OMR Answer Sheet, including answers to questions, are to be recorded in the Original
Copy only.
4. Choose the correct / most appropriate response for each question among the options $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D and darken the circle of the appropriate response completely. The incomplete darkened circle is not correctly read by the OMR Scanner and no complaint to this effect shall be entertained.
5. Use only blue/black ball point pen to darken the circle of correct/most appropriate response. In no case
gel/ink pen or pencil should be used. gel/ink pen or pencil should be used.
6. Do not darken more than one circle of options for any question. A question with more than one darkened response shall be considered wrong.
7. There will be 'Negative Marking' for wrong answers. Each wrong answer will lead to the deduction
of 0.25 marks from the total score of the candidate. of 0.25 marks from the total score of the candidate.
8. Only those candidates who would obtain positive score in Entrance Test Examination shall be eligible for admission.
9. Do not make any stray mark on the OMR sheet.
10. Calculators and mobiles shall not be permitted inside the examination hall.
11. Rough work, if any, should be done on the blank sheets provided with the question booklet.
12. OMR Answer Sheet must be handled carefully and it should not be folded or mutilated in which case it
will not be evaluated.
13. Ensure that your OMR Answer Sheet has been signed by the Invigilator and the candidate himself/
herself.
14. At the end of the examination, hand over the OMR Answer Sheet to the invigilator who will first tear off the original OMR sheet in presence of the Candidate and hand over the Candidate's Copy to the candidate.
15. The four great clusters of population in the world 5. The global distribution of different types of terrestrial are :
(A) East Asia, South Asia, Europe, North America
(B) East Asia, South Asia, Europe, Africa
(C) East Asia, South Africa, Europe, North America
(D) East Asia, South Asia, North America, South America
16. Optimum Theory of Population was given by :
(A) Carr Saunders and Malthus
(B) Edwin Cannan, Dalton and Carr Saunders
(C) Rosenstein Rodan, Schumpeter and Ricardo
(D) Marshall, Schumpeter and Ricardo
17. Which of the following is characterised by the second stage of demographic transition?
(A) Low birth rate and high death rate
(B) High birth rate and high death rate
(C) High birth rate and declining death rate
(D) Low birth rate and low death rate
18. Some analysts point to a future problem in countries such as Japan, Italy, and Canada where the swelling ranks of the elderly have fewer and fewer young people to support them in old age. This condition is referred to as :
(A) The demographic transition
(B) Overpopulation
(C) An absence of fecundity
(D) Underpopulation
19. Which of the following can be threats to the biodiversity of a geographical area?
I. Global warming
II. Fragmentation of habitat
III. Invasion of alien species
IV. Promotion of vegetarianism

Select the correct answer using the codes given below:
(A) I and IV only
(B) II and III only
(C) I, II and III only
(D) I, II, III and IV
8. A series of protected areas linked through a global network, intended to demonstrate the relationship between conservation and development is called as :
(A) Biosphere reserve
(B) National park
(C) Bird sanctuaries
(D) Wildlife sanctuaries
9. The Aravalli Range runs across which of the 12. Match the following local storms with their following pairs of Indian States?
(A) Gujarat, Rajasthan, Punjab and Delhi
(B) Nepal, Rajasthan, Haryana and Delhi
(C) Gujarat, Rajasthan, UP and Delhi
(D) Gujarat, Rajasthan, Haryana and Delhi
10. Match List-I with List-II and select the correct answer using the codes below :

## List-I

(Source Region)
I. Chottanagpur plateau
II. Verinag spring
III.Brahamgiri hills
IV. Mahabaleshwar

I II III IV
(A) $\begin{array}{llll}1 & 3 & 4 & 2\end{array}$
(B) $23 \quad 4 \quad 1$
(C) $\begin{array}{llll}4 & 3 & 1 & 2\end{array}$
(D) $\begin{array}{llll}4 & 2 & 1 & 3\end{array}$
11. The concept of differential heating was primarily given to explain which of the following geographical phenomena in India?
(A) Monsoon
(B) Desert Storms
(C) Jet Streams
(D) Cyclones

## List-II

(Rivers)

1. Cauvery
2. Krishna
3. Jhelum
4. Subernarekha
ii. Nor Westers
iii. Mango Shower
iv. Loo
(A) $1 \begin{array}{llll}1 & 2 & 3 & 4\end{array}$
(B) $2 \quad 1 \quad 4 \quad 3$
(C) $3 \quad 4 \quad 1 \quad 2$
(D) $\begin{array}{llll}1 & 3 & 2 & 4\end{array}$
5. Consider the following statements :
6. Central Rice Research institution is located in Bengaluru.
7. Agriculture sector directly employs $65 \%$ of labour force in India.
8. The impact of green revolution is felt most in the production of wheat.
Which statements are correct?
(A) 1 and 2
(B) 1 and 3
(C) 2 and 3
(D) 1, 2 and 3
9. Which one of the following groups of iron and steel plants is located within the Chottanagpur region?
(A) Madurai, Mettur, Salem
(B) Bokaro, Rourkela, Burnpur
(C) Sharavati, Pykara, Mettur
(D) Salem, Villupuram, Sharavati
10. Which agency is responsible for procurement, distribution and storage of food grain production in India?
(A) Food Corporation of India
(B) NAFED
(C) Ministry of Agriculture
(D) TRIFED
11. Which of the following industries provides maximum number of employment in India?
(A) Paper industry
(B) Iron and Steel industry
(C) Cement industry
(D) Cotton Textile industry
12. Between which ranges does the Kashmir valley in the Himalayas lie ?
(A) Pir Panjal and Dhauladrar
(B) Dhauladhar and Zanskar
(C) Zanskar and Pir Panjal
(D) Siwalik and Pir Panjal
13. Match the following correctly:

## List-I

(Hydroelectric Projects)
List-II
(Rivers)
i. Baghliar

1. Jhelum
ii. Nimo Bazgo
iii. Uri
2. Indus
3. Chinab

Codes :

|  | i | ii | iii |
| :---: | :---: | :---: | :---: |
| (A) | 3 | 2 | 1 |
| (B) | 3 | 1 | 2 |
| (C) | 1 | 3 | 2 |
| (D) | 1 | 2 | 3 |

19. Which of the following districts of Jammu anc Kashmir has the highest density of population a: per 2011 census?
(A) Kupwara
(B) Budgam
(C) Rajouri
(D) Doda
20. Match the following List-I with List-1 correctly:

| List-I | List-II |
| :--- | :--- |
| (Wildlife Sanctuary) | (District) |

Codes :

|  | i | ii | iii | iv |
| :---: | :---: | :---: | :---: | :---: |
| (A) | 2 | 3 | 1 | 4 |
| (B) | 3 | 1 | 4 | 2 |
| (C) | 2 | 3 | 4 | 1 |
| (D) | 1 | 2 | 3 | 4 |

21. Which of the following is/are the secondary skills which are useful for disaster managers?
(A) Disaster assessment
(B) Refugee camp planning
(C) Law enforcement
(D) All the above
22. The process of identifying the probability of occurrence of a natural hazard of a given intensity at a specific location based on an analysis of natural processes and site conditions is termed as :
(A) Disaster calculation
(B) Hazard Assessment
(C) Hazard calculation
(D) None of the above
23. Which of the following is an example of a rapid-onset disaster?
(A) Drought
(B) Famine
(C) Epidemic
(D) Earthquake
24. The disaster which occurred at Chernobyl (USSR), Three Mile Island (USA) and Fukusima (JAPAN) are all related to :
(A) Nuclear disasters
(B) Epidemic disasters
(C) Chemical disasters
(D) Flood disasters
e
25. Which of the following is not the part of 'The Involvement Stage' of the Butler's theory of tourism development?
(A) Local residents become involved in tourism
(B) Successful redevelopment leads to renewed growth
(C) Emergence of secondary tourism facilities such as guest houses
(D) Pressure develops for governments to improve transport for tourists
26. Sustainable tourism as a concept is closely linked to which of the following?
(A) Sustainable mobility
(B) Reliable electricity
(C) Road worthiness
(D) Hospitality
27. The travel advisory issued by a government for its citizens leads to what type of demand for tourism?
(A) Potential demand
(B) Effective demand
(C) No demand
(D) Deferred demand
28. The Indian Institute of Skiing and Mountaineering is located in :
(A) Yusmarg
(B) Sonamarg
(C) Gulmarg
(D) Pahalgam

## JJ-315-B

29. Match the following correctly :

| List-I | List-II |
| :---: | :---: |
| (Cartographic Methods) | (Maps) |

i. Chorochromatic
ii. Choropleth
iii. Choroschematic
iv. Isopleth

1. Density of population
2. Contour
3. Administrative map
4. Use of letters like $\mathrm{W}=$ Wheat, $\mathrm{P}=$ Paddy

## Codes :

|  | i | ii | iii | iv |
| :--- | :--- | :--- | :--- | :--- |
| (A) | 2 | 3 | 1 | 4 |
| (B) | 3 | 1 | 4 | 2 |
| (C) | 1 | 3 | 4 | 3 |
| (D) | 1 | 2 | 3 | 4 |

30. Which of the following does not belong to the category of cartographic elements of a map?
(A) Grid
(B) Bar scale
(C) Cardinal direction
(D) Legends
31. Which of the following are the steps for digital map making process?
I. Preparation of grid
II. Import of cloud of points
III. Drawing of objects and contours
IV. Taking of printout

Choose the correct options :
(A) I and II only
(B) I and IV only
(C) II, III and IV only
(D) I, II and III only
35. Remote Sensing satellites generally orbit in:
(A) Sun-synchronous
(B) Geostationary
(C) Geo-synchronous
(D) None of the above
36. Indian equivalent of GPS navigation system is known as :
(A) GALILEO
(B) NAVIC
(C) IKONOS
(D) GLONASS
37. Analysis of variance is a statistical method of comparing which of the following?
(A) Standard deviations
(B) Variances
(C) Means
(D) Proportions
38. The study of functional relationship between the variables, making it possible to predict/estimate the unknown value of one of the variables from the known value of the other is known as :
(A) Correlational Analysis
(B) RegressionAnalysis
(C) Mean Difference Analysis
(D) None of these
39. Which of the following is used to compare the consistency of two or more sets of data?
(A) Coefficient of Skewness
(B) Coefficient of Correlation
(C) Coefficient of Kurtosis
(D) Coefficient of Variation
40. Mean marks of 150 students were found to be 50 .

Later it was found that a score of 87 was misread as 78. What is the correct mean?
(A) 49.9
(B) 59.5
(C) 50.09
(D) 51.05
41. Who among the following defined geography as discovery of predictive patterns during quantitative revolution period?
(A) P. Hagget
(B) D. Stewart
(C) W. Bunge
(D) D. Harvey
42. Who have contributed to the solution of the controversy of Regional vs. Systematic geography?
(A) Richthofen and Hattner
(B) Ritter and Ratzel
(C) Ritter and Humbolt
(D) Hattner and Peschel
43. Cephalic index which is to classify human races is calculated as :
(A) Ratio between the length and breadth of the nose
(B) Ratio between the length and breadth of the head
(C) Ratio between the length of the head and weight of body
(D) Ratio between flatness and length of the head

1. A Plateau lying to the west of the Armenian knot, bordered by Pontic mountains to the North and Taurus mountains to the South is:
(A) Anatolian plateau
(B) Tibetan plateau
(C) Iranian plateau
(D) Siestan plateau
2. A zone of transition between two Biomes is called :
(A) Ecosystem
(B) Biosphere
(C) Bioreserve
(D) Ecotone
3. Which of the following mountain ranges is not a part of Alpine mountain system?
(A) Carpathian mountains
(B) Pyrenees mountains
(C) Balkanmountains
(D) Caledonian mountains
4. The Baglihar hydroelectric power project built on the river Chenab is located in the district :
(A) Kishtawar
(B) Kathua
(C) Doda
(D) Baramulla
5. The entire planning technique in India has been based on the model papered by :
(A) P.C. Mahalanobis
(B) Friedman
(C) Domar
(D) V. M. Danderkar
6. Into how many climatic regions has L.D. Stamp divided Asia?
(A) 08
(B) 09
(C) 10
(D) 12
7. Which one of the following is not among the six stages of Buttler's tourist cycle area evolution?
(A) Exploration stage
(B) Involvement stage
(C) Developmental stage
(D) Exponential stage
8. Which one of the following is not part of the geological disaster?
(A) Volcanoes
(B) Earthquakes
(C) Tsunami
(D) Sea surge
9. Which map projection comes nearest to the simple regular graph paper?
(A) Universal Transverse Mercator
(B) Gall 'stereographic' scant equatorial Projection
(C) Simple Cylindrical Projection
(D) Polyconic Projection
10. Which feature is shown by contours drawn in pairs ?
(A) Volcanoe
(B) Undulating slope
(C) Convex slope
(D) Concave slope
11. The average depth of the deep sea plain extends between:
(A) $1000 \mathrm{~m}-2000 \mathrm{~m}$
(B) $2000 \mathrm{~m}-3000 \mathrm{~m}$
(C) $3000 \mathrm{~m}-6000 \mathrm{~m}$
(D) $6000 \mathrm{~m}-8000 \mathrm{~m}$
12. What is shown correctly by a homolographic projection?
(A) Area
(B) Shape
(C) Direction
(D) None of these

## HFO-850-D

13. International map projection is a modification of:
(A) Bonne's projection
(B) Simple conical projection
(C) Polyconic projection
(D) Mercator's projection
14. The no. of agro-climatic regions of India as per planning commission of India is:
(A) 10
(B) 12
(C) 14
(D) 15
15. Which one of the following is not among the instruments used in plane table survey?
(A) Alidade
(B) Spiritlevel
(C) Trough compass
(D) Cross staff
16. The difference of time between any two successive degrees of longitudes is :
(A) 02 min .
(B) 04 min .
(C) 06 min .
(D) 08 min .
17. Remote sensing of terrain features is mostly based on:
(A) Diffuse reflectance properties of the terrain features
(B) Transmitted properties of the terrain features
(C) Absorption properties of the terrain features
(D) Emissivity properties of the terrain features
18. Which one of the following is not a measure of central tendency?
(A) Arithmeticmean
(B) Mean deviation
(C) Median
(D) Mode
19. Lorenz curve is used to find which one of the following?
(A) Relative concentration of phenomenon
(B) Absolute concentration of phenomenon
(C) Both absolute and relative concentration of phenomenon
(D) Probability of dispersion of phenomenon
20. Among the following remote sensing satellite series, which has the oldest remote sensing program?
(A) IRS series
(B) LANDSET series
(C) SPOT series
(D) NOAA series
21. Which of the following scholars said "Geography is a science of mathematical relationships and everything else is chorography"?
(A) Ptolemy
(B) Plato
(C) Herodotus
(D) Anaximander
22. The first isothermal world map for average temperatures and concept of continentality were developed by:
(A) Ratzel
(B) Alexander von Humboldt
(C) Hartshorne
(D) Carl Ritter
23. Which one of the following processes is responsible for the weathering of rocks in karst regions?
(A) Hydrolysis
(B) Oxydation
(C) Carbonation
(D) Scree formation
24. Nomadic herding is practiced in:
(A) Hot-wet areas
(B) Cool humid areas
(C) Seasonal dry areas
(D) Semi-temperate areas
25. Which of the following is not a strong evidence to prove the continental drift theory?
(A) Thejigsaw fit
(B) The similarity of Precambrian rocks
(C) The continuity of tectonic trends
(D) The distribution of population
26. Repiti discontinuity lies between:
(A) Outer mantle and inner mantle
(B) Core and mantle
(C) Outer core and inner core
(D) Crust and mantle
27. Crickmay, while disagreeing with Davis, supplemented the term peneplain with:
(A) Pediplain
(B) Panplane
(C) Etch plain
(D) Structural plain
28. When the limbs of fold dip in the same direction at the same angle, it is called :
(A) Syncline
(B) Homocline
(C) Monocline
(D) Isocline
29. Earthquakes, which occur at greater depth, are called :
(A) Tectonic earthquakes
(B) Isostatic earthquakes
(C) Plutonic earthquakes
(D) Volcanic earthquakes
30. Which among the following is not a type of sedimentary rock?
(A) Conglomerate
(B) Basalt
(C) Gabbro
(D) Obsidian
31. The people living in Africa South of Sahara having dark black skin, black wooly hair and dark eyes are called:
(A) Caucasoids
(B) Mongoloids
(C) Nordics
(D) Negroids
32. Badland topography is the product of the combined action of:
(A) Wind and glacier
(B) Water and glacier
(C) Sea and glacier
(D) Wind and water
33. Relative humidity within a mass of air increases. When:
(A) Temperature rises
(B) Condensation takes place
(C) Precipitation takes place
(D) Temperature falls
34. What conditions favour temperature inversion?
(A) Rapid terrestrial radiations during the long winternights
(B) Slow radiation during the summer cloudy nights
(C) Movement of cold air over an area of warm surface
(D) Upslope movement of warm air in the mountains at night
35. Which one of the following is not among the currents of Atlantic Ocean?
(A) Gulf stream
(B) Kuroshio current
(C) Brazil current
(D) Canary current
36. In Koppen, sclassification of climate, the symbol Aw refers to:
(A) Monsoon climate
(B) Tropical savanna climate
(C) Tropical rainforest climate
(D) Steppe climate
37. Most of the salt in the sea water is derived from the: 43. Who among the following asserted that the power
(A) Seafloor
(B) Atmosphere
(C) Remains of sealife
(D) Continents
38. The corals do not grow near the mouths of rivers because of:
(A) Inadequate depth
(B) Inadequate temperature
(C) Low salinity and high turbidity
(D) Lack of plankton
39. In a tropical cyclone, the pattern of isobars is :
(A) Elliptical
(B) Circular
(C) Semicircular
(D) Rectangular
40. What would be the R.F. when a map of $1 \mathrm{~cm}=60 \mathrm{~km}$ is reduced to one-third?
(A) $1: 18,000,000$
(B) $1: 3,168,000$
(C) $1: 1,000,000$
(D) $1: 20,000$
41. India is expected to be the most populas country by 2050 surpassing :
(A) USA
(B) Brazil
(C) Russia
(D) China
42. A country having zero population growth would be characterized by the following factors except :
(A) Increased proportion of older citizens
(B) Lots of young people
(C) Rise in median age population
(D) Fewer young people
of population to reproduce is much greater than the power of earth to produce food for them?
(A) Thomas Malthus
(B) W.S. Thompson
(C) F.N. Notestein
(D) W.Zelinkesy
43. The mobility transition model of migration was put forth by:
(A) Ziph
(B) Zelinkesy
(C) Thompson
(D) Stopher
44. The term Ecology was coined by a German biologist named:
(A) Earnest Haeckel
(B) E.P.Odum
(C) Isodou Geoffroy
(D) GJ. Mivert
45. Agriculture region is an example of:
(A) Functional region
(B) Homogenous region
(C) Nodal region
(D) Axial region
46. The natural ability of an Ecosystem to restore a state of equilibrium in it is called:
(A) Equilibrium state
(B) Steady state
(C) Homeostasis
(D) All of the above
47. D. Whittlesy has classified the world into how many agricultural regions?
(A) 10
(B) 11
(C) 12
(D) 13
48. The largest physiographic division of India by area is:
(A) Himalayanmountains
(B) Indo-gangetic plain
(C) Peninsulaplateau
(D) Coastal plains
49. Among the following Indian rivers, which one is not antecedent in nature :
(A) Indus
(B) Son
(C) Ganga
(D) Sutlej
50. Which one of the following States does not receive much rainfall during the south-westmonsoon season?
(A) Tamil Nadu
(B) Kerala
(C) Karnataka
(D) Assam
51. The length of Gunters chain is :
(A) 100 ft .
(B) 80 ft .
(C) 66 ft .
(D) 50 ft .
52. Which of the following is not among the major characteristics of Indian agriculture?
(A) Small size of landholdings
(B) Subsistence farming
(C) Commercial nature
(D) High dependency on monsoon
53. The oldest and the richest coal field of India as per quantity of production and quality is :
(A) Jharia
(B) Bokaro
(C) Makum-Nazira
(D) Raniganj
54. In India the leading producer of Sugar cane is :
(A) U.P.
(B) Karnataka
(C) Tamil Nadu
(D) Gujarat
55. Which of the following is not among the major components of Green Revolution in India?
(A) HYV seeds
(B) Use of chemical fertilizers
(C) Land reforms
(D) Subsistence agriculture
56. Which sector contributes largest share to economy of J \& K ?
(A) Tourism
(B) Agriculture
(C) Trade
(D) Industry
57. Bulk of the precipitation in the State of Jammu and Kashmir is received through :
(A) Western disturbances
(B) South west monsson
(C) North east monsoon
(D) None of the above
58. The valley of Kashmir lies between which of the following mountain ranges:
(A) Suleiman and Kirthar
(B) Zaskar and Ladakh
(C) Pir-panjal and Zaskar
(D) Pir-panjal and Karakoram
59. Which of the following continents is not divided by the equator?
(A) Asia
(B) Africa
(C) Australia
(D) South America
60. A Plateau lying to the west of the Armenian knot, bordered by Pontic mountains to the North and Taurus mountains to the South is:
(A) Anatolian plateau
(B) Tibetan plateau
(C) Iranian plateau
(D) Siestan plateau
61. A zone of transition between two Biomes is called :
(A) Ecosystem
(B) Biosphere
(C) Bioreserve
(D) Ecotone
62. Which of the following mountain ranges is not a part of Alpine mountain system?
(A) Carpathian mountains
(B) Pyrenees mountains
(C) Balkanmountains
(D) Caledonian mountains
63. The Baglihar hydroelectric power project built on the river Chenab is located in the district :
(A) Kishtawar
(B) Kathua
(C) Doda
(D) Baramulla
64. The entire planning technique in India has been based on the model papered by :
(A) P.C. Mahalanobis
(B) Friedman
(C) Domar
(D) V. M. Danderkar
65. Into how many climatic regions has L.D. Stamp divided Asia?
(A) 08
(B) 09
(C) 10
(D) 12
66. Which one of the following is not among the six stages of Buttler's tourist cycle area evolution?
(A) Exploration stage
(B) Involvement stage
(C) Developmental stage
(D) Exponential stage
67. Which one of the following is not part of the geological disaster?
(A) Volcanoes
(B) Earthquakes
(C) Tsunami
(D) Sea surge
68. Which map projection comes nearest to the simple regular graph paper?
(A) Universal Transverse Mercator
(B) Gall 'stereographic' scant equatorial Projection
(C) Simple Cylindrical Projection
(D) Polyconic Projection
69. Which feature is shown by contours drawn in pairs ?
(A) Volcanoe
(B) Undulating slope
(C) Convex slope
(D) Concave slope
70. The average depth of the deep sea plain extends between:
(A) $1000 \mathrm{~m}-2000 \mathrm{~m}$
(B) $2000 \mathrm{~m}-3000 \mathrm{~m}$
(C) $3000 \mathrm{~m}-6000 \mathrm{~m}$
(D) $6000 \mathrm{~m}-8000 \mathrm{~m}$
71. What is shown correctly by a homolographic projection?
(A) Area
(B) Shape
(C) Direction
(D) None of these

## HFO-850-D

13. International map projection is a modification of:
(A) Bonne's projection
(B) Simple conical projection
(C) Polyconic projection
(D) Mercator's projection
14. The no. of agro-climatic regions of India as per planning commission of India is:
(A) 10
(B) 12
(C) 14
(D) 15
15. Which one of the following is not among the instruments used in plane table survey?
(A) Alidade
(B) Spiritlevel
(C) Trough compass
(D) Cross staff
16. The difference of time between any two successive degrees of longitudes is :
(A) 02 min .
(B) 04 min .
(C) 06 min .
(D) 08 min .
17. Remote sensing of terrain features is mostly based on:
(A) Diffuse reflectance properties of the terrain features
(B) Transmitted properties of the terrain features
(C) Absorption properties of the terrain features
(D) Emissivity properties of the terrain features
18. Which one of the following is not a measure of central tendency?
(A) Arithmeticmean
(B) Mean deviation
(C) Median
(D) Mode
19. Lorenz curve is used to find which one of the following?
(A) Relative concentration of phenomenon
(B) Absolute concentration of phenomenon
(C) Both absolute and relative concentration of phenomenon
(D) Probability of dispersion of phenomenon
20. Among the following remote sensing satellite series, which has the oldest remote sensing program?
(A) IRS series
(B) LANDSET series
(C) SPOT series
(D) NOAA series
21. Which of the following scholars said "Geography is a science of mathematical relationships and everything else is chorography"?
(A) Ptolemy
(B) Plato
(C) Herodotus
(D) Anaximander
22. The first isothermal world map for average temperatures and concept of continentality were developed by:
(A) Ratzel
(B) Alexander von Humboldt
(C) Hartshorne
(D) Carl Ritter
23. Which one of the following processes is responsible for the weathering of rocks in karst regions?
(A) Hydrolysis
(B) Oxydation
(C) Carbonation
(D) Scree formation
24. Nomadic herding is practiced in:
(A) Hot-wet areas
(B) Cool humid areas
(C) Seasonal dry areas
(D) Semi-temperate areas
25. Which of the following is not a strong evidence to prove the continental drift theory?
(A) Thejigsaw fit
(B) The similarity of Precambrian rocks
(C) The continuity of tectonic trends
(D) The distribution of population
26. Repiti discontinuity lies between:
(A) Outer mantle and inner mantle
(B) Core and mantle
(C) Outer core and inner core
(D) Crust and mantle
27. Crickmay, while disagreeing with Davis, supplemented the term peneplain with:
(A) Pediplain
(B) Panplane
(C) Etch plain
(D) Structural plain
28. When the limbs of fold dip in the same direction at the same angle, it is called :
(A) Syncline
(B) Homocline
(C) Monocline
(D) Isocline
29. Earthquakes, which occur at greater depth, are called :
(A) Tectonic earthquakes
(B) Isostatic earthquakes
(C) Plutonic earthquakes
(D) Volcanic earthquakes
30. Which among the following is not a type of sedimentary rock?
(A) Conglomerate
(B) Basalt
(C) Gabbro
(D) Obsidian
31. The people living in Africa South of Sahara having dark black skin, black wooly hair and dark eyes are called:
(A) Caucasoids
(B) Mongoloids
(C) Nordics
(D) Negroids
32. Badland topography is the product of the combined action of:
(A) Wind and glacier
(B) Water and glacier
(C) Sea and glacier
(D) Wind and water
33. Relative humidity within a mass of air increases. When:
(A) Temperature rises
(B) Condensation takes place
(C) Precipitation takes place
(D) Temperature falls
34. What conditions favour temperature inversion?
(A) Rapid terrestrial radiations during the long winternights
(B) Slow radiation during the summer cloudy nights
(C) Movement of cold air over an area of warm surface
(D) Upslope movement of warm air in the mountains at night
35. Which one of the following is not among the currents of Atlantic Ocean?
(A) Gulf stream
(B) Kuroshio current
(C) Brazil current
(D) Canary current
36. In Koppen, sclassification of climate, the symbol Aw refers to:
(A) Monsoon climate
(B) Tropical savanna climate
(C) Tropical rainforest climate
(D) Steppe climate
37. Most of the salt in the sea water is derived from the: 43. Who among the following asserted that the power
(A) Seafloor
(B) Atmosphere
(C) Remains of sealife
(D) Continents
38. The corals do not grow near the mouths of rivers because of:
(A) Inadequate depth
(B) Inadequate temperature
(C) Low salinity and high turbidity
(D) Lack of plankton
39. In a tropical cyclone, the pattern of isobars is :
(A) Elliptical
(B) Circular
(C) Semicircular
(D) Rectangular
40. What would be the R.F. when a map of $1 \mathrm{~cm}=60 \mathrm{~km}$ is reduced to one-third?
(A) $1: 18,000,000$
(B) $1: 3,168,000$
(C) $1: 1,000,000$
(D) $1: 20,000$
41. India is expected to be the most populas country by 2050 surpassing :
(A) USA
(B) Brazil
(C) Russia
(D) China
42. A country having zero population growth would be characterized by the following factors except :
(A) Increased proportion of older citizens
(B) Lots of young people
(C) Rise in median age population
(D) Fewer young people
of population to reproduce is much greater than the power of earth to produce food for them?
(A) Thomas Malthus
(B) W.S. Thompson
(C) F.N. Notestein
(D) W.Zelinkesy
43. The mobility transition model of migration was put forth by:
(A) Ziph
(B) Zelinkesy
(C) Thompson
(D) Stopher
44. The term Ecology was coined by a German biologist named:
(A) Earnest Haeckel
(B) E.P.Odum
(C) Isodou Geoffroy
(D) GJ. Mivert
45. Agriculture region is an example of:
(A) Functional region
(B) Homogenous region
(C) Nodal region
(D) Axial region
46. The natural ability of an Ecosystem to restore a state of equilibrium in it is called:
(A) Equilibrium state
(B) Steady state
(C) Homeostasis
(D) All of the above
47. D. Whittlesy has classified the world into how many agricultural regions?
(A) 10
(B) 11
(C) 12
(D) 13
48. The largest physiographic division of India by area is:
(A) Himalayanmountains
(B) Indo-gangetic plain
(C) Peninsulaplateau
(D) Coastal plains
49. Among the following Indian rivers, which one is not antecedent in nature :
(A) Indus
(B) Son
(C) Ganga
(D) Sutlej
50. Which one of the following States does not receive much rainfall during the south-westmonsoon season?
(A) Tamil Nadu
(B) Kerala
(C) Karnataka
(D) Assam
51. The length of Gunters chain is :
(A) 100 ft .
(B) 80 ft .
(C) 66 ft .
(D) 50 ft .
52. Which of the following is not among the major characteristics of Indian agriculture?
(A) Small size of landholdings
(B) Subsistence farming
(C) Commercial nature
(D) High dependency on monsoon
53. The oldest and the richest coal field of India as per quantity of production and quality is :
(A) Jharia
(B) Bokaro
(C) Makum-Nazira
(D) Raniganj
54. In India the leading producer of Sugar cane is :
(A) U.P.
(B) Karnataka
(C) Tamil Nadu
(D) Gujarat
55. Which of the following is not among the major components of Green Revolution in India?
(A) HYV seeds
(B) Use of chemical fertilizers
(C) Land reforms
(D) Subsistence agriculture
56. Which sector contributes largest share to economy of J \& K ?
(A) Tourism
(B) Agriculture
(C) Trade
(D) Industry
57. Bulk of the precipitation in the State of Jammu and Kashmir is received through :
(A) Western disturbances
(B) South west monsson
(C) North east monsoon
(D) None of the above
58. The valley of Kashmir lies between which of the following mountain ranges:
(A) Suleiman and Kirthar
(B) Zaskar and Ladakh
(C) Pir-panjal and Zaskar
(D) Pir-panjal and Karakoram
59. Which of the following continents is not divided by the equator?
(A) Asia
(B) Africa
(C) Australia
(D) South America
