

Booklet
Code

A



Test Registration No. _____

The Maharaja Sayajirao University of Baroda

Faculty of Science

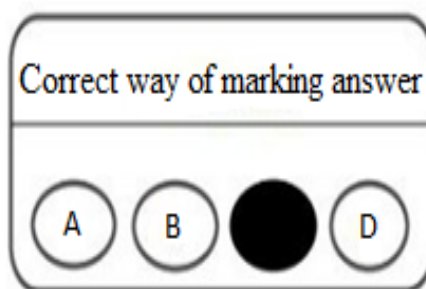
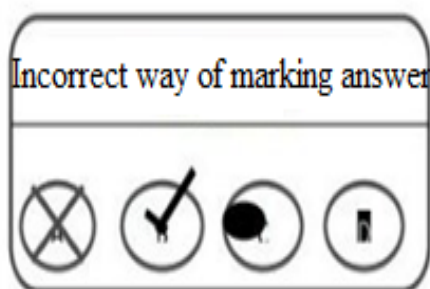
M.Sc. ENTRANCE EXAMINATION

SUBJECT: GEOGRAPHY
DAY: MONDAY

TIME: 12.00-1:30 PM
DATE: 4TH JULY, 2022

Important Instruction:

1. This test booklet is to be opened only when instructed by the invigilators to do so.
2. This booklet carries 100 questions in 6 printed pages. All questions carry equal marks.
3. For every correct answer, candidate will earn 1 mark, for every wrong answer 25% mark will be deducted.
4. Test registration number must be entered correctly in the OMR sheet, as advised by the invigilators. The Question Booklet code (A/B/C/D) must be marked on OMR Sheet (if not printed already) as instructed.
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Invigilator's Signature: _____

Choose the most appropriate answer.

1. Sona and Kalyan are the important high yielding varieties of
A) Rice B) Wheat C) Cotton D) Tobacco
2. Which one of the following is the correct sequence of surface components of pressure and wind from the equator to the poles?
A) Polar easterlies, Westerlies, Subtropical highs, Trade winds
B) Subtropical highs, Westerlies, Trade winds, Polar easterlies
C) Trade winds, Polar easterlies, Westerlies, Subtropical highs
D) Trade winds, Subtropical highs, Westerlies, Polar easterlies
3. Indian Meteorological Department (IMD) has divided India into how many seismic zones?
A) 4 B) 5 C) 6 D) 7
4. Increase in temperature with increase in height is known as
A) Lapse rate B) Adiabatic lapse rate C) Inversion of temperature D) Normal rate
5. The concept of Stop and Go determinism was proposed by
A) Griffith Taylor B) Huntington C) Harlan Barrows D) Lucien Febver
6. Arrange the processes of nitrogen cycle
A) Fixation, Nitrification, Assimilation, De-nitrification
B) De-nitrification, Nitrification, Fixation, Assimilation
C) Nitrification, Assimilation Fixation De-nitrification,
D) Assimilation, Nitrification, De-nitrification, Fixation
7. The _____ is, that describes population change over time. It is based on an interpretation begun in 1929 by the American demographer Warren Thompson, of the observed changes in birth and death rates in industrialized societies over the past two hundred years or so.
A) Malthusian Theory B) Demographic Transition C) Optimum Theory D) None
8. Which type of rainfall leads to the formation of the windward and the Leeward side?
A) Monsoonal B) Orographic C) Cyclonic D) Convectional
9. _____ is associated with the Gaia Hypothesis.
A) William Cunningham B) Charles Darwin
C) Michael McGinnis D) James Lovelock
10. A _____ is a graphical representation of market forces and income as and when an economy develops
A) Gaia B) Ecological pyramid C) Kuznets curve D) Food web
11. _____ metamorphism is the change in textural composition of the rocks.
A) Physical B) Biological C) Chemical D) Biochemical
12. Trade winds are part of the _____ circulation
A) Hadley cell B) Ferrel cell C) Polar cell D) NONE
13. Which one of the following descriptions denotes the phenomenon of El Nino ?
A) A violent rotating column of air extending from a thunderstorm to the ground.
B) The Anomalous widespread warming of the sea surface of the tropical east and central Pacific Ocean
C) The deflection of the ocean currents in the northern and southern hemispheres due to the rotation of Earth.
D) The revolving tropical storms of the Caribbean and Gulf of Mexico
14. Malthusian Theory of population grows in a Geometrical Progression and a food supply grows at _____.
A) Arithmetic progression. B) Geometrical Progression C) Both A AND B D) NONE
15. What is orbital plane?
A) Plane formed by the axis B) Plane formed by the orbit
C) Both are true D) None of these
16. It is the position of the earth when the northern hemisphere has the longest day and the shortest night
A) Winter Solstice B) Day Solstice C) Summer Solstice D) Night Solstice

17. Most ecological pyramids are _____ at the base and _____ at the top.
 A) Narrow, Large B) Large, Large C) Narrow, Narrow D) Large, Narrow
18. The smallest unit of settlement occupancy is known as:
 A) Permanent Hut B) Hamlet C) Village D) House
19. The term 'sustainable development' was used by the _____ in 1987
 A) Brundtland Commission B) Montreal Protocol C) Kyoto Protocol D) Paris Agreement
20. Which of the following is also called as the Convention on Wetlands?
 A) Environmental Modification Convention B) Convention on Biodiversity
 C) Ramsar Convention D) Washington Convention
21. Which of the following are/is type/ types of intellectual property rights (IPR)
 A) Patents B) Trademarks C) Copyrights and trade secret D) ALL
22. The Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as _____.
 A) International Union for Conservation of Nature B) The Washington Convention
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23. _____ constitutes the highest proportion of salt in the sea water.
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26. When the air is saturated with water it's Relative Humidity would be _____.
 A) 25% B) 50%
 C) 75% D) 100%
27. Which of the following regions of India have the highest percentage of total forest
 A) Himalayan region including Purvanchal
 B) Great Plain Region
 C) Peninsular India
 D) Eastern and Western Ghats and Coastal Plains
28. Tidal hypothesis about the origin of the earth is propounded by _____.
 A) Kant B) Laplace
 C) Chamberlain D) James Jeans
29. Drumlin is a landform associated with _____.
 A) Glaciers B) Wind
 C) Rivers D) Sea Waves
30. Thornwaite gave his first classification of climate in _____ year.
 A) 1931 B) 1945
 C) 1956 D) 1961
31. A high pressure region surrounded by low pressure is called _____.
 A) Front B) Cyclone
 C) Airmass D) Anti cyclone
32. The Great Barrier Reef of Australia is an example of -----.
 A) Mountain Reef B) Volcanic Reef
 C) Coral Reef D) Coral Island
33. The Normal Lapse Rate is _____ degree Celsius per 1,000 metres.
 A) 6.5 B) 10.5
 C) 15.5 D) 20.5

34. _____ do not affect ocean salinity.
 A) Evaporation and precipitation B) Changes in temperature
 C) Ocean currents D) Tides
35. Match the following:
- | Agricultural Region | States |
|-------------------------|---|
| 1 Rice- Coffee-Spice | i Western Uttar Pradesh, Himachal Pradesh |
| 2 Jowar-Wheat | ii Rajasthan and Haryana |
| 3 Wheat-Maize-Sugarcane | iii Kerala and Tamilnadu |
| 4 Cotton-Oilseeds | iv Gujarat |
- A) 1(ii), 2 (i), 3 (iii), 4 (iv) B) 1(iii), 2 (ii), 3 (iv), 4 (i)
 C) 1(iii), 2 (ii), 3 (i), 4 (iv) D) 1(i), 2 (ii), 3 (iv), 4 (iii)
36. The imagery lines joining places having pressure are known as _____ lines.
 A) Isotherms B) Isobars
 C) Iso-seismal D) Seismo-tectonic
37. The grasslands of Argentina are called _____.
 A) Downs B) Pampas
 C) Prairies D) Savannah
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 C) 1:50,000 D) 1:1,00,000
39. The transitional zone between two ecosystems is called _____.
 A) Biome B) Biotope
 C) Ecotone D) Sere
40. _____ isotherm of the warmest month demarcates the northern boundary of Taiga lands.
 A) 0° C (Zero) B) 5° C
 C) 10° C D) 15° C
41. _____ is meteorologically a very important gas as it is transparent to the incoming solar radiation but opaque to the outgoing terrestrial radiation.
 A) Argon B) Neon
 C) Carbon Dioxide D) Nitrogen
42. Which of the following areas of India has high well irrigated area
 A) Rocky and uneven surface of Peninsular India
 B) Dry Tracts of Rajasthan and Gujarat
 C) Brackish groundwater region of Uttar Pradesh
 D) Deltaic Regions of Mahanadi, Godavari and Krishna
43. Indian Standard Time (IST) corresponds to _____ longitude.
 A) 83°30' West B) 83° 30' East
 C) 78° 30' West D) 78° 30' East
44. What causes rainfall on the coastal areas of Tamil Nadu in the beginning of winters?
 A) South –West Monsoon B) North-Eastern Monsoon
 C) Temperate Cyclones D) Local Air Circulation
45. Green Revolution began in Punjab, Haryana and Western Uttar Pradesh with the use of HYV seeds in _____ cultivation.
 A) Rice B) Cotton
 C) Wheat D) Gram

46. Statement I: Iron and Steel Industry uses large quantities of heavy weight loosing raw materials and its localisation is primarily controlled by the availability of raw material
Statement II: Most of the Integrated Iron and Steel Industry of the Country are established on the basis of minimum transportation cost
A) Both Statement I and II are correct and Statement II is the correct explanation to Statement I
B) Both Statement I and II are correct and Statement II is not the correct explanation to Statement I
C) Statement I is correct and Statement II is not correct
D) Statement I is not correct and Statement II is correct
47. The percentage of radiation is highest from which of the following
A) Wet Ground B) Thick Cloud
C) Forest D) Snow Cover
48. Tien Shan, Kunlun, Hindukush and Karakoram ranges spread out from which of the following
A) Pamir Plateau B) Mt. K2
C) Zaskar Range D) Kailash Range
49. The length of the Equator is about 40,000 kms. and the velocity of rotation is about 1,700 kms. per hour. What would be the velocity (kms./hour) of rotation at the poles?
A) 0 (Zero) B) 850
C) 1,700 D) 3,400
50. When warm and cold currents meet, _____ is/are formed.
A) Clouds B) Rain
C) Fog D) Frost
51. A semi-enclosed body of water where river water mixes with ocean water is called:
A) Delta B) Estuary C) Sea D) Bay
52. Suez Canal joins Mediterranean Sea with which among the following seas?
A) Red sea B) Dead sea C) Caspian sea D) White sea
53. Which among the following are commonly known as shooting stars?
A) Meteors B) Comets C) Planets D) Asteroids
54. When water is heated, it's vapour pressure will _____.
A) Increase B) decrease
C) first increase and then decrease D) nothing happens to vapor pressure
55. The Kaveri delta is located in which among the following states of India?
A) Kerela B) Maharashtra C) Tamil Nadu D) Karnataka
56. What is a large body of air whose physical properties especially temperature and moisture content are relatively uniform horizontally?
A) Cyclone B) Front C) Air mass D) Convective current
57. In which type of Agriculture the land is obtained by cleaning forest and agriculture is practiced till the fertility of the farm is exhausted?
A) Subsistence Agriculture B) Shifting Agriculture
C) Intensive Farming D) Extensive Farming
58. Local thunderstorms 'Norwesters' are prominent in _____.
A) Punjab B) West Bengal C) Andhra Pradesh D) Tamil Nadu
59. More than 70% of world's fresh water is contained in
A) Ponds B) Glaciers and polar ice caps C) Oceans D) Green land
60. The data in which the raw data is arranged in a systematic form is known as in a
A) Frequency distribution table B) Graphical representation
C) Class interval D) Grouped data
61. Find out the value of median from given data : 8,10,15,18,20,6,5,4
A) 15 B) 3 C) 9 D) 8
62. In chain and tape survey, _____ is used for determining the position of magnetic north.
A) prismatic compass B) arrow C) magnetic compass D) metallic tape

63. _____ is an imaginary level surface to which all the elevations are referred to.
 A) Mean sea level B) Bench mark C) Datum D) Prismatic compass
64. At a place where wet-bulb temperature as well as relative humidity is high throughout the year, _____ type of climate will be mentioned in climograph.
 A) scorching B) muggy C) raw D) keen
65. _____ are the lines of equal measure of value or density.
 A) Contours B) Choropleth C) Latitudes D) isopleth
66. _____ is an instrument which automatically records the continuous changes in pressure for a period of a week.
 A) Altimeter B) Barograph C) Fortin's barometer D) Thermograph
67. Hygrometer consists essentially of a _____ which expands or contracts as the relative humidity increases or decreases
 A) Strip of paper B) Aluminium String C) Rubber D) Human hair
68. _____ is an important economic pursuit in many arid lands.
 A) Mining B) Manufacturing C) Agriculture D) Hunting
69. _____ is the oldest human race.
 A) Negrito B) Mongolian C) Alpine D) Caucasoid
70. The four segments of the Golden Quadrilateral join the following cities.
 A) Delhi-Mumbai B) Mumbai -Chennai C) Chennai -Kolkata D) Kolkata-Delhi
71. _____ occupies the first rank in Human Development in the World.
 A) U.S.A. B) Japan C) Norway D) Switzerland
72. _____ is a geographical region that has economic laws that are more liberal than country's typical economic laws.
 A) Free trade zone B) Export processing Zone
 C) Special economic zone D) Industrial estates
73. Who among the following defined Geography as human ecology?
 A) Hartshorne B) Schaefer C) Richthofen D) Barrows
74. Rift valley is a feature resulting from _____.
 A) metamorphism B) folding C) folded mountains D) faulting
75. The part of incident energy reflected back from a surface of a body is called _____.
 A) Absorption B) Albedo C) Diffusion D) Atmospheric window
76. Xerophytes are characteristic vegetation of _____.
 A) humid region B) tundra region C) desert region D) per-humid region
77. The sea surface temperature anomaly of higher than 0.5°C in equatorial Pacific Ocean is commonly known as _____.
 A) ITCZ B) El Nino C) Temperature gradient D) Hadley effect
78. The force which deflects the direction of winds is called _____ force.
 A) gravitational B) anti-gravitational C) slow D) coriolis
79. The warm and dry winds blowing from east to west in the eastern parts of Sahara desert are known as _____.
 A) Chinook B) Harmattan C) Blizzard D) Foehn
80. _____ is an example of acidic igneous rock.
 A) Granite B) Basalt C) Gabbro D) Obsidian
81. An orthomorphic projection has the correct representation of _____.
 A) shape B) area C) bearing D) distance
82. Which of the following is tropical grassland?
 A) Prairies B) Tundra C) Pampas D) Savannah
83. The temperature increases with increasing height in the _____ layer of atmosphere.
 A) troposphere B) hydrosphere C) mesosphere D) stratosphere
84. The Himalayan mountain system belongs to which of the following?
 A) Volcanic mountains B) Horst mountains
 C) Block mountains D) Fold mountains

85. Which of the following is associated with fluvial system?
 A) Barchans B) Natural Levee C) Drumlins D) Stack
86. Funnel shaped violent storms are also known as _____.
 A) Cyclonic storm B) Depressions C) Occluded front D) Tornadoes
87. C.W. Thornthwaite used _____ as a parameter for world climatic classification.
 A) Precipitation B) Temperature
 C) Relative Humidity D) Potential Evapotranspiration
88. _____ ocean is the warmest ocean in the world.
 A) Indian B) Atlantic C) Pacific D) North Atlantic
89. Shallow ocean deposits are known as _____ deposits.
 A) pelagic B) deep water C) neritic D) terrigenous
90. U-shaped valley is generally associated with _____ action.
 A) marine B) fluvial C) glacial D) aeolian
91. The river distributaries generally develop in _____ stage of fluvial cycle of erosion.
 A) Youth B) Mature C) Old D) Youth and Mature
92. The trend of Isotherms shows strong control of _____ on the horizontal distribution of temperature.
 A) longitudes B) height C) temperature inversion D) latitudes
93. Generally, _____ are rainless and sky is free of clouds.
 A) temperate Cyclones B) tropical Cyclones
 C) sub tropical Cyclones D) anticyclones
94. In Thornthwaite's Climatic Classification, _____ is annual water deficit taken as a percentage of annual potential evapotranspiration in moist climate.
 A) humidity index B) moisture index C) aridity index D) thermal efficiency
95. _____ is the unit-less representation of map scale.
 A) Statement scale B) Representative Fraction
 C) Diagonal scale D) Comparative scale
96. A line crossing all meridians of longitude at the same angle in Gnomonic projection is called _____.
 A) Isohyet B) Standard parallel C) Loxodromes D) Standard meridian
97. _____ projection cannot represent 90° latitude.
 A) Zenithal B) Lambert's C) Gnomonic D) Mercator's
98. Square method is one of the important graphical methods for _____.
 A) map enlargement B) map printing C) map projection D) map attribution
99. Tropical cyclone, drought, wildfire is:
 A) Industrial hazard B) Man induced hazard
 C) Meteorological hazard D) Hydrological hazard
100. A soil with pH of _____ is neither acidic nor alkaline.
 A) 5 B) 7 C) 9 D) 11
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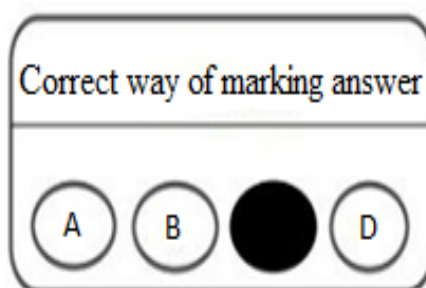
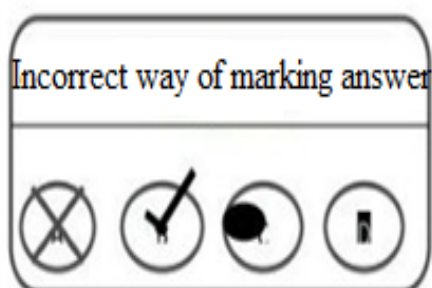
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 B) De-nitrification, Nitrification, Fixation, Assimilation
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 D) The revolving tropical storms of the Caribbean and Gulf of Mexico
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 A) Arithmetic progression. B) Geometrical Progression C) Both A AND B D) NONE
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 A) Plane formed by the axis B) Plane formed by the orbit
 C) Both are true D) None of these
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Booklet
Code**C**

Test Registration No. _____

The Maharaja Sayajirao University of Baroda

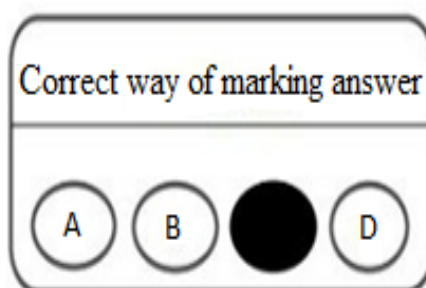
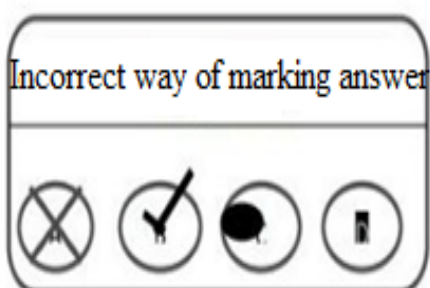
Faculty of Science

M.Sc. ENTRANCE EXAMINATION

SUBJECT: GEOGRAPHY**DAY: MONDAY****TIME: 12.00-1:30 PM****DATE: 4TH JULY, 2022**

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Invigilator's Signature: _____

Choose the most appropriate answer.

1. Xerophytes are characteristic vegetation of _____.
A) Humid Region B) Tundra Region C) Desert Region D) Per-Humid Region
2. The sea surface temperature anomaly of higher than 0.5°C in equatorial Pacific Ocean is commonly known as _____.
A) ITCZ B) El Niño C) Temperature gradient D) Hadley effect
3. The force which deflects the direction of winds is called _____ force.
A) Gravitational B) Anti-Gravitational C) Slow D) Coriolis
4. The warm and dry winds blowing from east to west in the eastern parts of Sahara desert are known as _____.
A) Chinook B) Harmattan C) Blizzard D) Foehn
5. _____ is an example of acidic igneous rock.
A) Granite B) Basalt C) Gabbro D) Obsidian
6. An orthomorphic projection has the correct representation of _____.
A) Shape B) Area C) Bearing D) Distance
7. Which of the following is tropical grassland?
A) Prairies B) Tundra C) Pampas D) Savannah
8. The temperature increases with increasing height in the _____ layer of atmosphere.
A) troposphere B) hydrosphere C) mesosphere D) stratosphere
9. The Himalayan mountain system belongs to which of the following?
A) Volcanic mountains B) Horst mountains
C) Block mountains D) Fold mountains
10. Which of the following is associated with fluvial system?
A) Barchans B) Natural Levee C) Drumlins D) Stack
11. Funnel shaped violent storms are also known as _____.
A) Cyclonic storm B) Depressions C) Occluded front D) Tornadoes
12. C.W. Thornthwaite used _____ as a parameter for world climatic classification.
A) Precipitation B) Temperature
C) Relative Humidity D) Potential Evapotranspiration
13. _____ ocean is the warmest ocean in the world.
A) Indian B) Atlantic C) Pacific D) North Atlantic
14. Shallow ocean deposits are known as _____ deposits.
A) Pelagic B) Deep Water C) Neritic D) Terrigenous
15. U-shaped valley is generally associated with _____ action.
A) Marine B) Fluvial C) Glacial D) Aeolian
16. The river distributaries generally develop in _____ stage of fluvial cycle of erosion.
A) Youth B) Mature C) Old D) Youth and Mature
17. The trend of Isotherms shows strong control of _____ on the horizontal distribution of temperature.
A) Longitudes B) Height C) Temperature Inversion D) Latitudes
18. Generally, _____ are rainless and sky is free of clouds.
A) Temperate Cyclones B) Tropical Cyclones
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19. In Thornthwaite's Climatic Classification, _____ is annual water deficit taken as a percentage of annual potential evapotranspiration in moist climate.
A) Humidity Index B) Moisture Index C) Aridity Index D) Thermal Efficiency
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22. _____ projection cannot represent 90° latitude.
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23. Square method is one of the important graphical methods for _____.
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 A) Frequency distribution table B) Graphical representation
 C) Class interval D) Grouped data
36. Find out the value of median from given data : 8,10,15,18,20,6,5,4
 A) 15 B) 3 C) 9 D) 8
37. In chain and tape survey, _____ is used for determining the position of magnetic north.
 A) Prismatic Compass B) Arrow C) Magnetic Compass D) Metallic Tape
38. _____ is an imaginary level surface to which all the elevations are referred to.
 A) Mean sea level B) Bench mark C) Datum D) Prismatic compass
39. At a place where wet-bulb temperature as well as relative humidity is high throughout the year, _____ type of climate will be mentioned in climograph.
 A) Scorching B) Muggy C) Raw D) Keen
40. _____ are the lines of equal measure of value or density.
 A) Contours B) Choropleth C) Latitudes D) Isopleth
41. _____ is an instrument which automatically records the continuous changes in pressure for a period of a week.
 A) Altimeter B) Barograph C) Fortin's barometer D) Thermograph
42. Hygrometer consists essentially of a _____ which expands or contracts as the relative humidity increases or decreases
 A) Strip of paper B) Aluminium String C) Rubber D) Human hair
43. _____ is an important economic pursuit in many arid lands.
 A) Mining B) Manufacturing C) Agriculture D) Hunting

44. _____ is the oldest human race.
 A) Negrito B) Mongolian C) Alpine D) Caucasoid
45. The four segments of the Golden Quadrilateral join the following cities.
 A) Delhi-Mumbai B) Mumbai -Chennai C) Chennai -Kolkata D) Kolkata-Delhi
46. _____ occupies the first rank in Human Development in the World.
 A) U.S.A. B) Japan C) Norway D) Switzerland
47. _____ is a geographical region that has economic laws that are more liberal than country's typical economic laws.
 A) Free trade zone B) Export processing Zone
 C) Special economic zone D) Industrial estates
48. Who among the following defined Geography as human ecology?
 A) Hartshorne B) Schaefer C) Richthofen D) Barrows
49. Rift valley is a feature resulting from _____.
 A) Metamorphism B) Folding C) Folded Mountains D) Faulting
50. The part of incident energy reflected back from a surface of a body is called _____.
 A) Absorption B) Albedo C) Diffusion D) Atmospheric window
51. When the air is saturated with water it's Relative Humidity would be _____.
 A) 25% B) 50%
 C) 75% D) 100%
52. Which of the following regions of India have the highest percentage of total forest
 A) Himalayan region including Purvanchal
 B) Great Plain Region
 C) Peninsular India
 D) Eastern and Western Ghats and Coastal Plains
53. Tidal hypothesis about the origin of the earth is propounded by _____.
 A) Kant B) Laplace C) Chamberlain D) James Jeans
54. Drumlin is a landform associated with _____.
 A) Glaciers B) Wind C) Rivers D) Sea Waves
55. Thornwaite gave his first classification of climate in _____ year.
 A) 1931 B) 1945 C) 1956 D) 1961
56. A high pressure region surrounded by low pressure is called _____.
 A) Front B) Cyclone C) Air mass D) Anti cyclone
57. The Great Barrier Reef of Australia is an example of _____.
 A) Mountain Reef B) Volcanic Reef
 C) Coral Reef D) Coral Island
58. The Normal Lapse Rate is _____ degree Celsius per 1,000 metres.
 A) 6.5 B) 10.5 C) 15.5 D) 20.5
59. _____ do not affect ocean salinity.
 A) Evaporation and precipitation B) Changes in temperature
 C) Ocean currents D) Tides
60. Match the following:
- | Agricultural Region | States |
|------------------------|---|
| 1 Rice- Coffee-Spice | i Western Uttar Pradesh, Himachal Pradesh |
| 2 Jowar-Wheat | ii Rajasthan and Haryana |
| 3Wheat-Maize-Sugarcane | iii Kerela and Tamilnadu |
| 4 Cotton-Oilseeds | iv Gujarat |
- A) 1(ii), 2 (i), 3 (iii), 4 (iv) B) 1(iii), 2 (ii), 3 (iv), 4 (i)
 C) 1(iii), 2 (ii), 3 (i), 4 (iv) D) 1(i), 2 (ii), 3 (iv), 4 (iii)
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 A) Isotherms B) Isobars C) Iso-seismal D) Seismo-tectonic
62. The grasslands of Argentina are called _____.
 A) Downs B) Pampas C) Prairies D) Savannah
63. The R.F. of the toposheet 72 F/11 would be _____.
 A) 1: 1,50,000 B) 1:2,50,000 C) 1:50,000 D) 1:1,00,000

64. The transitional zone between two ecosystems is called _____.
 A) Biome B) Biotope C) Ecotone D) Sere
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96. Which of the following are/is type/ types of intellectual property rights (IPR)
A) Patents B) Trademarks
C) Copyrights and trade secret D) ALL
97. The Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as _____.
A) International Union for Conservation of Nature B) The Washington Convention
C) General Agreement on Tariffs and Trade D) None of These
98. _____ constitutes the highest proportion of salt in the sea water.
A) Magnesium chloride B) Sodium chloride
C) Potassium chloride D) Calcium chloride.
99. Which of the following is a warm current ?
A) Gulf stream B) Humboldt current
C) Peruvian current D) Benguela current
100. Which of the following ocean currents is popularly known as warm blanket of Europe?
A) Benguela Current B) Canaries current
C) Gulf Stream D) None of these
-

Booklet
Code

D



Test Registration No. _____

The Maharaja Sayajirao University of Baroda
Faculty of Science

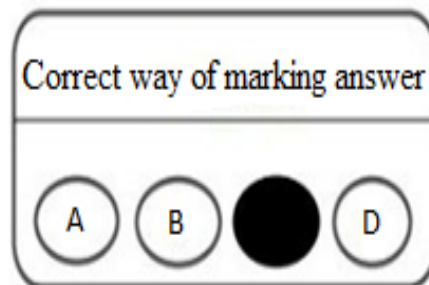
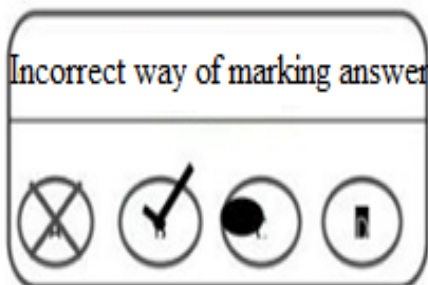
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Invigilator's Signature: _____

Choose the most appropriate answer.

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11. An orthomorphic projection has the correct representation of _____.
A) shape B) area C) bearing D) distance
12. Which of the following is tropical grassland?
A) Prairies B) Tundra C) Pampas D) Savannah
13. The temperature increases with increasing height in the _____ layer of atmosphere.
A) troposphere B) hydrosphere C) mesosphere D) stratosphere
14. The Himalayan Mountain system belongs to which of the following?
A) Volcanic mountains B) Horst mountains
C) Block mountains D) Fold mountains
15. Which of the following is associated with fluvial system?
A) Barchans B) Natural Levee C) Drumlins D) Stack
16. Funnel shaped violent storms are also known as _____.
A) Cyclonic storm B) Depressions C) Occluded front D) Tornadoes
17. C.W. Thornthwaite used _____ as a parameter for world climatic classification.
A) Precipitation B) Temperature
C) Relative Humidity D) Potential Evapotranspiration
18. _____ ocean is the warmest ocean in the world.
A) Indian B) Atlantic C) Pacific D) North Atlantic
19. Shallow Ocean deposits are known as _____ deposits.
A) pelagic B) deep water C) neritic D) terrigenous
20. U-shaped valley is generally associated with _____ action.
A) marine B) fluvial C) glacial D) aeolian
21. _____ occupies the first rank in Human Development in the World.
A) U.S.A. B) Japan C) Norway D) Switzerland

45. The Kaveri delta is located in which among the following states of India?
 A) Kerela B) Maharashtra C) Tamil Nadu D) Karnataka
46. What is a large body of air whose physical properties especially temperature and moisture content are relatively uniform horizontally?
 A) Cyclone B) Front C) Air mass D) Convective current
47. In which type of Agriculture the land is obtained by cleaning forest and agriculture is practiced till the fertility of the farm is exhausted?
 A) Subsistence Agriculture B) Shifting Agriculture
 C) Intensive Farming D) Extensive Farming
48. Local thunderstorms 'Norwesters' are prominent in _____.
 A) Punjab B) West Bengal C) Andhra Pradesh D) Tamil Nadu
49. More than 70% of world's fresh water is contained in
 A) Ponds B) Glaciers and polar ice caps C) Oceans D) Green land
50. The data in which the raw data is arranged in a systematic form is known as in a
 A) Frequency distribution table B) Graphical representation
 C) Class interval D) Grouped data
51. _____ is meteorologically a very important gas as it is transparent to the incoming solar radiation but opaque to the outgoing terrestrial radiation.
 A) Argon B) Neon C) Carbon Dioxide D) Nitrogen
52. Which of the following areas of India has high well irrigated area
 A) Rocky and uneven surface of Peninsular India
 B) Dry Tracts of Rajasthan and Gujarat
 C) Brackish groundwater region of Uttar Pradesh
 D) Deltaic Regions of Mahanadi, Godavari and Krishna
53. Indian Standard Time (IST) corresponds to _____ longitude.
 A) $83^{\circ}30'$ West B) $83^{\circ}30'$ East
 C) $78^{\circ}30'$ West D) $78^{\circ}30'$ East
54. What causes rainfall on the coastal areas of Tamil Nadu in the beginning of winters?
 A) South –West Monsoon B) North-Eastern Monsoon
 C) Temperate Cyclones D) Local Air Circulation
55. Green Revolution began in Punjab, Haryana and Western Uttar Pradesh with the use of HYV seeds in _____ cultivation.
 A) Rice B) Cotton C) Wheat D) Gram
56. Statement I: Iron and Steel Industry uses large quantities of heavy weight loosing raw materials and its localisation is primarily controlled by the availability of raw material
 Statement II: Most of the Integrated Iron and Steel Industry of the Country are established on the basis of minimum transportation cost
 A) Both Statement I and II are correct and Statement II is the correct explanation to Statement I
 B) Both Statement I and II are correct and Statement II is not the correct explanation to Statement I
 C) Statement I is correct and Statement II is not correct
 D) Statement I is not correct and Statement II is correct
57. The percentage of radiation is highest from which of the following
 A) Wet Ground B) Thick Cloud C) Forest D) Snow Cover
58. Tien Shan, Kunlun, Hindukush and Karakoram ranges spread out from which of the following
 A) Pamir Plateau B) Mt. K2 C) Zaskar Range D) Kailash Range
59. The length of the Equator is about 40,000 kms. and the velocity of rotation is about 1,700 kms. per hour. What would be the velocity (kms./hour) of rotation at the poles?
 A) 0 (Zero) B) 850 C) 1,700 D) 3,400
60. When warm and cold currents meet, _____ is/are formed.
 A) Clouds B) Rain C) Fog D) Frost
61. A high pressure region surrounded by low pressure is called _____.
 A) Front B) Cyclone C) Airmass D) Anti cyclone

62. The Great Barrier Reef of Australia is an example of -----.
- A) Mountain Reef B) Volcanic Reef C) Coral Reef D) Coral Island
63. The Normal Lapse Rate is _____ degree Celsius per 1,000 metres.
- A) 6.5 B) 10.5 C) 15.5 D) 20.5
64. _____ do not affect ocean salinity.
- A) Evaporation and precipitation B) Changes in temperature
C) Ocean currents D) Tides
65. Match the following:
- | | |
|-------------------------|---|
| Agricultural Region | States |
| 1 Rice- Coffee-Spice | i Western Uttar Pradesh, Himachal Pradesh |
| 2 Jowar-Wheat | ii Rajasthan and Haryana |
| 3 Wheat-Maize-Sugarcane | iii Kerala and Tamil Nādu |
| 4 Cotton-Oilseeds | iv Gujarat |
- A) 1(ii), 2 (i), 3 (iii), 4 (iv) B) 1(iii), 2 (ii), 3 (iv), 4 (i)
C) 1(iii), 2 (ii), 3 (i), 4 (iv) D) 1(i), 2 (ii), 3 (iv), 4 (iii)
66. The imagery lines joining places having pressure are known as _____ lines.
- A) Isotherms B) Isobars C) Iso-seismal D) Seismo-tectonic
67. The grasslands of Argentina are called _____.
- A) Downs B) Pampas C) Prairies D) Savannah
68. The R.F. of the toposheet 72 F/11 would be _____.
- A) 1: 1,50,000 B) 1:2,50,000 C) 1:50,000 D) 1:1,00,000
69. The transitional zone between two ecosystems is called _____.
- A) Biome B) Biotope C) Ecotone D) Sere
70. _____ isotherm of the warmest month demarcates the northern boundary of Taiga lands.
- A) 0° C (Zero) B) 5° C C) 10° C D) 15° C
71. Which of the following are/is type/ types of intellectual property rights (IPR)
- A) Patents B) Trademarks C) Copyrights and trade secret D) ALL
72. The Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as _____.
- A) International Union for Conservation of Nature B) The Washington Convention
C) General Agreement on Tariffs and Trade D) None of These
73. _____ constitutes the highest proportion of salt in the sea water.
- A) Magnesium chloride B) Sodium chloride C) Potassium chloride D) Calcium chloride.
74. Which of the following is a warm current ?
- A) Gulf stream B) Humboldt current C) Peruvian current D) Benguela current
75. Which of the following ocean currents is popularly known as warm blanket of Europe?
- A) Benguela Current B) Canaries current C) Gulf Stream D) None of these
76. When the air is saturated with water it's Relative Humidity would be _____.
- A) 25% B) 50% C) 75% D) 100%
77. Which of the following regions of India have the highest percentage of total forest
- A) Himalayan region including Purvanchal
B) Great Plain Region
C) Peninsular India
D) Eastern and Western Ghats and Coastal Plains
78. Tidal hypothesis about the origin of the earth is propounded by _____.
- A) Kant B) Laplace C) Chamberlain D) James Jeans
79. Drumlin is a landform associated with _____.
- A) Glaciers B) Wind C) Rivers D) Sea Waves
80. Thornwaite gave his first classification of climate in _____ year.
- A) 1931 B) 1945 C) 1956 D) 1961
81. _____ metamorphism is the change in textural composition of the rocks.
- A) Physical B) Biological C) Chemical D) Biochemical
82. Trade winds are part of the _____ circulation
- A) Hadley cell B) Ferrel cell C) Polar cell D) NONE

83. Which one of the following descriptions denotes the phenomenon of El Niño ?
 A) A violent rotating column of air extending from a thunderstorm to the ground.
 B) The Anomalous widespread warming of the sea surface of the tropical east and central Pacific Ocean
 C) The deflection of the ocean currents in the northern and southern hemispheres due to the rotation of Earth.
 D) The revolving tropical storms of the Caribbean and Gulf of Mexico
84. Malthusian Theory of population grows in a Geometrical Progression and a food supply grows at _____.
 A) Arithmetic progression. B) Geometrical Progression C) Both A AND B D) NONE
85. What is orbital plane?
 A) Plane formed by the axis B) Plane formed by the orbit
 C) Both are true D) None of these
86. It is the position of the earth when the northern hemisphere has the longest day and the shortest night
 A) Winter Solstice B) Day Solstice C) Summer Solstice D) Night Solstice
87. Most ecological pyramids are _____ at the base and _____ at the top.
 A) Narrow, Large B) Large, Large C) Narrow, Narrow D) Large, Narrow
88. The smallest unit of settlement occupancy is known as:
 A) Permanent Hut B) Hamlet C) Village D) House
89. The term 'sustainable development' was used by the _____ in 1987
 A) Brundtland Commission B) Montreal Protocol C) Kyoto Protocol D) Paris Agreement
90. Which of the following is also called as the Convention on Wetlands?
 A) Environmental Modification Convention B) Convention on Biodiversity
 C) Ramsar Convention D) Washington Convention
91. Sona and Kalyan are the important high yielding varieties of
 A) Rice B) Wheat C) Cotton D) Tobacco
92. Which one of the following is the correct sequence of surface components of pressure and wind from the equator to the poles?
 A) Polar easterlies, Westerlies, Subtropical highs, Trade winds
 B) Subtropical highs, Westerlies, Trade winds, Polar easterlies
 C) Trade winds, Polar easterlies, Westerlies, Subtropical highs
 D) Trade winds, Subtropical highs, Westerlies, Polar easterlies
93. Indian Meteorological Department (IMD) has divided India into how many seismic zones?
 A) 4 B) 5 C) 6 D) 7
94. Increase in temperature with increase in height is known as
 A) Lapse rate B) Adiabatic lapse rate C) Inversion of temperature D) Normal rate
95. The concept of Stop and Go determinism was proposed by
 A) Griffith Taylor B) Huntington C) Harlan Barrows D) Lucien Febver
96. Arrange the processes of nitrogen cycle
 A) Fixation, Nitrification, Assimilation, De-nitrification
 B) De-nitrification, Nitrification, Fixation, Assimilation
 C) Nitrification, Assimilation Fixation De-nitrification,
 D) Assimilation, Nitrification, De-nitrification, Fixation
97. The _____ is, that describes population change over time. It is based on an interpretation begun in 1929 by the American demographer Warren Thompson, of the observed changes in birth and death rates in industrialized societies over the past two hundred years or so.
 A) Malthusian Theory B) Demographic Transition C) Optimum Theory D) None
98. Which type of rainfall leads to the formation of the windward and the Leeward side?
 A) Monsoonal B) Orographic C) Cyclonic D) Convectional
99. _____ is associated with the Gaia Hypothesis.
 A) William Cunningham B) Charles Darwin
 C) Michael McGinnis D) James Lovelock

100. A _____ is a graphical representation of market forces and income as and when an economy develops

- A) Gaia B) Ecological pyramid C) Kuznets curve D) Food web

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MSc Entrance Test - 2022 Answer key SET-A							
Que. No.	Answer	Que. No.	Answer	Que. No.	Answer	Que. No.	Answer
1	B	26	D	51	B	76	C
2	D	27	C	52	A	77	B
3	B	28	D	53	A	78	D
4	C	29	A	54	A	79	B
5	A	30	A	55	C	80	A
6	A	31	D	56	C	81	A
7	B	32	C	57	B	82	D
8	B	33	A	58	B	83	D
9	D	34	D	59	B	84	D
10	C	35	C	60	A	85	B
11	A	36	B	61	C	86	D
12	A	37	B	62	C	87	D
13	B	38	C	63	C	88	A
14	A	39	C	64	B	89	C
15	B	40	C	65	D	90	C
16	C	41	C	66	B	91	C
17	D	42	D	67	D	92	D
18	B	43	B	68	A	93	D
19	A	44	B	69	A	94	C
20	C	45	C	70	A	95	B
21	D	46	A	71	C	96	C
22	B	47	D	72	C	97	D
23	B	48	A	73	D	98	A
24	A	49	A	74	D	99	C
25	C	50	C	75	B	100	B

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MSc Entrance Test - 2022 Answer key SET-B							
Que. No.	Answer	Que. No.	Answer	Que. No.	Answer	Que. No.	Answer
1	A	26	D	51	C	76	C
2	D	27	C	52	C	77	B
3	D	28	D	53	D	78	B
4	D	29	A	54	D	79	B
5	B	30	A	55	B	80	A
6	D	31	D	56	C	81	B
7	D	32	C	57	B	82	D
8	A	33	A	58	D	83	B
9	C	34	D	59	B	84	C
10	C	35	C	60	A	85	A
11	C	36	B	61	C	86	A
12	D	37	B	62	D	87	B
13	D	38	C	63	B	88	B
14	C	39	C	64	B	89	D
15	B	40	C	65	C	90	C
16	C	41	C	66	A	91	A
17	D	42	C	67	D	92	A
18	A	43	C	68	A	93	B
19	C	44	B	69	A	94	A
20	B	45	D	70	C	95	B
21	D	46	B	71	B	96	C
22	B	47	D	72	A	97	D
23	B	48	A	73	A	98	B
24	A	49	A	74	A	99	A
25	C	50	A	75	C	100	C

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MSc Entrance Test - 2022 Answer key SET-C							
Que. No.	Answer	Que. No.	Answer	Que. No.	Answer	Que. No.	Answer
1	C	26	B	51	D	76	B
2	B	27	A	52	C	77	D
3	D	28	A	53	D	78	B
4	B	29	A	54	A	79	C
5	A	30	C	55	A	80	A
6	A	31	C	56	D	81	A
7	D	32	B	57	C	82	B
8	D	33	B	58	A	83	B
9	D	34	B	59	D	84	D
10	B	35	A	60	C	85	C
11	D	36	C	61	B	86	A
12	D	37	C	62	B	87	A
13	A	38	C	63	C	88	B
14	C	39	B	64	C	89	A
15	C	40	D	65	C	90	B
16	C	41	B	66	C	91	C
17	D	42	D	67	D	92	D
18	D	43	A	68	B	93	B
19	C	44	A	69	B	94	A
20	B	45	A	70	C	95	C
21	C	46	C	71	A	96	D
22	D	47	C	72	D	97	B
23	A	48	D	73	A	98	B
24	C	49	D	74	A	99	A
25	B	50	B	75	C	100	C

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MSc Entrance Test - 2022 Answer key SET-D							
Que. No.	Answer	Que. No.	Answer	Que. No.	Answer	Que. No.	Answer
1	C	26	C	51	C	76	D
2	D	27	B	52	D	77	C
3	D	28	D	53	B	78	D
4	C	29	B	54	B	79	A
5	B	30	A	55	C	80	A
6	C	31	C	56	A	81	A
7	D	32	C	57	D	82	A
8	A	33	C	58	A	83	B
9	C	34	B	59	A	84	A
10	B	35	D	60	C	85	B
11	A	36	B	61	D	86	C
12	D	37	D	62	C	87	D
13	D	38	A	63	A	88	B
14	D	39	A	64	D	89	A
15	B	40	A	65	C	90	C
16	D	41	B	66	B	91	B
17	D	42	A	67	B	92	D
18	A	43	A	68	C	93	B
19	C	44	A	69	C	94	C
20	C	45	C	70	C	95	A
21	C	46	C	71	D	96	A
22	C	47	B	72	B	97	B
23	D	48	B	73	B	98	B
24	D	49	B	74	A	99	D
25	B	50	A	75	C	100	C