1.   A simple scale down representation of geographical reality is known as:
      A)   Iconic Model   B)   Analogue Model
      C)   Symbolic Model   D)   Gravity Model

2.   Who was Heataeus?
      A)   Roman Philosopher   B)   Arab Philosopher
      C)   Greek Philosopher   D)   Chinese Philosopher

3.   Sedimentary rocks composed mainly of rounded gravel are known as:
      A)   Breccia   B)   Conglomerates
      C)   Sandstone   D   Mud rocks

4.   Atacama Trench is found in the :
      A)   South East Pacific Ocean   B)   South west Pacific Ocean
      C)   North Atlantic Ocean   D)   South Indian Ocean

5.   The transition zone between two biomes is known as:
      A)   Ecotone   B)   Ecotope   C)   Geotope   D)   Biotope

6.   Which among the following is an example of ubiquitous resource
      A)   Iron Ore   B)   Coal   C)   Petroleum   D)   Water

7.   To which place did Weaver applied his statistical technique for the first time to
      establish crop combination regions:
      A)   South East Germany   B)   Middle West USA
      C)   Northern France   D)   Southern Italy

8.   Nomadic Herding is practised in:
      A)   Saudi Arabia   B)   Western USA
      C)   Western Germany   D)   Western UK

9.   When was the first National Population Policy of India Formulated?
      A)   1952   B)   1965   C)   1976   D)   2000

10.   India's Crude Birth Rate is 21.8 and Crude Death Rate is 7.1 as per 2011 Census. To
      which Stage does India belong to as per the Demographic Transition Theory?
      A)   High Stationary Stage   B)   Late Expanding Stage
      C)   Early Expanding Stage   D)   Late Stationary stage

11.   The first general Laws of Migration was put forwarded by:
      A)   E. G.Ravenstein   B)   S. A. Stanffer
      C)   Everette Lee   D)   W. J. Reilley

12.   Which among the following is an example of a Functional Region?
      A)   Forest areas of Tamil Nadu   B)   Agroclimatic Zones of Tamil Nadu
      C)   Soil Types of Tamil Nadu   D)   Chennai Metropolitan Area

13. The concept of Growth Pole was first put forward by
    A) Peter Haggett   B) Francis Perroux
    C) Richard Chorley   D) Von Thunen

14. Which among the following programmes is aimed at providing Insurance Cover to rabi & khraif crops and financial support to farmers in case of crop damage.
    A) Pradhan Manthri Fasal Bhima Yojana (PMFBY)
    B) Pradhan Manthri Gram Sinachi Yojana (PMGSY)
    C) Pradhan Manthri Garib Kalyan Yojana (PMGKY)
    D) Kissan Vikas Pathra (KVP)

15. Urban population in India as per 2011 Census is -----%.
    A) 31.2   B) 23.7   C) 25.8   D) 27.8

16. Which among the following assumptions are wrong with regard to Christaller's Central Place Theory?
    1. There should be an unbounded isotrophic plain with a homogeneous distribution of purchasing power.
    2. Un-minimised consumer movement
    3. Central goods to be purchased at nearest central place.
    4. Excess profits are to be earned by any central place.

    A) 1 & 3   B) 2 & 4   C) 1 & 4   D) 2 & 3

17. The Sir Creek forms the boundary between
    A) India & Pakistan   B) India & China
    C) India & Afghanistan   D) India & Bangladesh

18. Sharda Canal is located in the State of:
    A) West Bengal   B) Tamil Nadu
    C) Madhya Pradesh   D) Uttar Pradesh

19. The State which has the longest length of National Highways in India is
    A) Madhya Pradesh   B) Andhra Pradesh
    C) Maharashtra   D) Uttar Pradesh

20. Which among the following is the major type of forest found in Kerala?
    A) Tropical Wet Evergreen   B) Tropical Moist Deciduous
    C) Tropical Dry Deciduous   D) Tropical Semi Evergreen

21. Two places are located 15 kms apart on the surface of the earth. They are shown on a map at 5 cms apart. What will be the scale of the map?
    A) 1 : 300,000   B) 1 : 30,000   C) 1 : 3000,000   D) 1 : 3000

22. The process of simplifying too small or too complex feature to be shown on a map is known as
    A) Compilation   B) Omittance
    C) Selective Selection   D) Generalization

23. Which among the following sensor is used to detect sea-surface temperature?
    A) Radar   B) Infrared   C) Microwave   D) Sonar

24. Small registration mark exposed on the edges of aerial photograph are known as
    A) Principal Marks   B) Fiducial Marks
    C) Nadir Marks   D) Perspective Marks.

25. Which among the following is a Geostationary Satellite?
    A) GSAT-31   B) IRS-1D
    C) LANDSAT-7   D) SPOT-5

26. Identify the proprietary Image Processing Software from the following
    A) ILWIS   B) OSSIM
    C) ERDAS IMAGINE   D) gVSIG

27. The process of converting an analogue map to a digital raster image is known as
    A) Scanning   B) Digitization
    C) Plotting   D) Digital Surveying

28. Quad-Tree model is a
    A) Vector Compaction Method B) Overlay Analysis Method
    C) Network Analysis Method   D) Raster Compaction Method

29. The branch of Science that deals with the study of distribution of ancient land and sea is:
    A) Palaeontology   B) Palaeogeography
    C) Palaeoclimatology   D) Palaeomagnetism

30. Which among the following is not an indicator in the calculation of Human Development Index?
    A) Life Expectancy at birth
    B) Expected years of schooling for school age children and average years of schooling in the adult population
    C) Gross National Income
    D) Literacy Rate

31. W. M. Davis' concept of Cycle of Erosion is based on
    A) Darwin's Concept of Evolution
    B) Ritter's Concept of Unity in Diversity
    C) Humboldt Concept of Continentality
    D) Peter Haggett's Concept of Spatial Diffusion

32. Sea floor Spreading occurs along
    A) Convergent Plate Boundary B) Transform Plate Boundary
    C) Divergent Plate Boundary   D) Occluded Plate Boundary

33. Yardangs are formed by the action of
    A) Running water B) Wind   C) Waves   D) Glaciers

34. Assertion: A: The diurnal range of temperature is more at higher altitudes than at sea level.
Reason: R: Atmosphere is less dense at higher altitudes.

A) A & R are true and R is the correct reason of A
B) A & R are true and R is not the correct reason of A
C) A is true but R is false
D) A is false but R is true

35. An area on the surface of the Earth that can be classified according to the plants and animals living in it is known as:
A) Ecosystem B) Biome C) Environment D) Niche

36. Following table shows major industrial regions of the world and major urban centres in them. Match them correctly.

Industrial Regions	Urban Centres
a) Mid-Lake Region	1. Cardiff
b) South Wales	2. Baku
c) Caucasus	3. Nagoya
d) Chukyo	4. Pittsburg

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

37. Which agricultural regionalization technique uses One-Sheet Table for identifying crop combination region?
A) Weaver's technique   B) Smith's technique
C) Coppock's technique   D) Doi's techinique.

38. Identify the statements which are not true with regard to the Green Revolution in India
1. High Yielding Varieties of seeds were used to achieve greater productivity.
2. Focus was on small and poor farmers
3. Attained self-sufficiency in food grain production.
4. Punjab was most beneficial State.

A) 1 & 4   B) 2 & 3   C) Only 2   D) 3 & 4

39. Most populous metropolitan city in India as per 2011 Census:
A) Delhi   B) Kolkata   C) Mumbai   D) Chennai

40. Who put forward the doctrine that the population increases in geometric progression while food supply increases in arithmetic progression.
A) Edwin Cannon   B) Thomas Malthus
C) David Ricardo   D) Karl Marx

41. Highest in hierarchy of growth foci is
A) Growth Centres   B) Growth Points
C) Local Service Centres D) Growth Poles

42. The main objective of HRIDAY Scheme is
    A) To provide hygienic and affordable sanitation facilities for urban poor
    B) To provide holistic development of heritage cities
    C) To provide better infrastructural facilities
    D) To provide affordable home to urban poor

43. A town in India notified by Law by respective State Governments/ UTs and have local bodies irrespective of demographic characteristics is known as
    A) Census Town   B) Urban Outgrowth
    C) Statutory Town   D) Urban Agglomeration

44. To which theory does the statement "If all the urban settlements in an area are ranked in descending order of population, the population of the nth ranking town will be $1/n^{th}$ that of the largest town" pertains to
    A) Rank-Size Rule   B) Central Place Theory
    C) Gravity Model   D) Multiple Nuclei Theory

45. The highest peak in Trans-Himalayas is
    A) Mt. Nandadevi   B) Mt. K2
    C) Mt. Everest   D) Mt. Kailash

46. The largest rice producer in India:
    A) Andhra Pradesh   B) Tamil Nadu
    C) West Bengal   D) Karnataka

47. National Fisheries Development Board is located at:
    A) Visakhapatnam   B) Hyderabad
    C) Kochi   D) Mumbai

48. The GI registered pineapple variety in Kerala is:
    A) Muthalamada Pineapple   B) Neriamangalam Pineapple
    C) Vazhakulam Pineapple   D) Changalikodan Pineapple

49. A map showing the land use / land cover of India is an example of
    A) Special purpose map   B) General map
    C) Quantitative map   D) Qualitative map

50. What is the scale of the Topographic sheet with the number 58/D?
    A) 1 : 250,000   B) 1 : 50,000   C) 1 : 25,000   D) 1 : 100,000

51. An example of Active Remote Sensing sensor:
    A) LISS   B) WiFs   C) MSS   D) SAR

52. Panchromatic films are
    A) Colour Films   B) B&W Films
    C) Infrared Films   D) False Colour Films

53. Spatial resolution of Thermal Infrared Sensor of LANDSAT 9 Satellite is
    A) 15 m   B) 50 m   C) 30 m   D) 100 m

54. Identify the digital image enhancement techniques from the following
    1. Contrast Enhancement
    2. Spacial Filtering
    3. Unsupervised Classification
    4. Supervised Classification

    A) 1&3   B) 1&2   C) 2&4   D) 1&4

55. Polygons accidentally created through overlap with existing feature is known as
    A) Overshoot Polygon   B) Dangling Polygon
    C) Sliver Polygon   D) None of these

56. Which among the following is a raster data format?
    A) .shp   B) .tiff   C) .dxf   D) .tab

57. The study of specific natural or human phenomenon that give rise to certain spatial patterns and structures on surface of the Earth is called
    A) Regional Study   B) Global Study
    C) Macro Study   D) Systematic Study

58. Who is the author of the book 'Anthropogeographie'?
    A) Allen Semple   B) Ellsworth Huntington
    C) Mark Jefferson   D) Friedrich Ratzel

59. The Big Bang Theory of origin on universe was proposed by
    A) Georges Lemaitre   B) Immanuel Kant
    C) Laplace   D) Jeans & Geoffrey

60. Match the following:

Geologic Era	Geologic Period
a. Cenozoic	1) Carboniferous
b. Mesozoic	2) Cryogenious
c. Paleozoic	3) Quaternary
d. Neoproterozoic	4) Jurassic

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

61. Who postulated the idea 'Geographic forms are an expression of the phase and rate of uplift in relation to the rate of degradation'
    A) W.M. Davis   B) William D. Thornbury
    C) Richard Bailey   D) Walther Penk

62. Assertion (A): Alfisols are moderately leached soils found in hardwood forest areas and have high native fertility.
    Reason(R):   They are widely used in agriculture and forestry

    A) A& R are true and R is the correct explanation of A
    B) A& R are true and R is not the correct explanation of A
    C) A is true but R is false
    D) A is false but R is true.

63. The average salinity of world oceans is
A) 4.5% B) 3.5% C) 6.5% D) 8.5%

64. Which type scattering in the atmosphere results in the sky appearing blue?
A) Mie Scattering B) Non-Selective Scattering
C) Rayleigh Scattering D) Selective Scattering

65. The Mojave Desert is in
A) Namibia B) South Africa C) Saudi Arabia D) USA

66. How many RAMSAR Wetland Sites are there in Kerala?
A) 3 B) 2 C) 1 D) 5

67. Weber's Industrial Location Theory is based on
A) Least transportation cost B) Least management cost
C) Availability of raw materials D) Availability of market

68. Bannargette National Park is in
A) Jharkand B) Madhya Pradesh
C) Karnataka D) Maharashtra

69. As per the nine fold classification of landuse in India, the land which include lands available for cultivation whether not taken up for cultivation or taken up for cultivation once but not cultivated during the current year and is not cultivated during the last 5 years in succession is known as
A) Current Fallow
B) Cultivable Waste land
C) Permanent Pastures & Grazing land
D) Fallow other than Current Fallow

70. Match the following

Agricultural Regions of India	Area Covered
a) Maize and Coarse Crop region	1. Southern Andhra Pradesh and parts of Tamil Nadu
b) Millets and Oil Seeds Region	2. Kashmir Valley and Assam
c) Fruits and Vegetable Region	3. Deccan Plateau
d) Cotton Region	4. Western Rajasthan and Northern Gujarat

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

71. Which among the following State recorded highest population growth between 2001-2011 Censuses?
A) Madhya Pradesh B) Andhra Pradesh
C) Uttar Pradesh D) Bihar

72. The term 'non-ecumene' refers to:
A) Inhabited places of the earth's surface
B) Uninhabited places on the surface of the earth
C) Mining areas
D) Cultivated areas

73. The amount of moisture that a soil type can hold is called
    A)   Water Retention Capacity   B)   Moisture Holding Capacity
    C)   Field Capacity   D)   Saturation Capacity

74. Spread and Back Wash Effect is associated with
    A)   Myrdal Theory   B)   Central Place Theory
    C)   Gravity Model   D)   Growth Pole Theory

75. Which among the following statements are true with regard to Planning in India?
    1.   It had been essentially normative single level economic planning
    2.   It had heavy dependence on sectoral approach
    3.   Planning is centralized at national level
    4.   Multi-level planning is not yet attempted in large scale

    A)   1 & 4 only   B)   1 & 3 only
    C)   2 & 4 only   D)   1, 2 & 3 only

76. One among the following is not an urban development programme. Identify it
    A)   JNNRUM   B)   PMJAY   C)   AMRUT   D)   NUSP

77. What is the share of urban population in Kerala as per 2011 Census?
    A)   31.16   B)   47.72   C)   25.71   D)   52.28

78. The Sector Model of urban landuse was proposed by
    A)   E. W. Burgess   B)   C. D. Harris & E. L. Ullmann
    C)   H. Hoyt   D)   Torsten Haggerstrand

79. The source region of River Narmada is
    A)   Mahabaleswar   B)   Amarkantak
    C)   Trimbata Plateau   D)   Dhandakaranya

80. The 'Amw' type of climate as per Koeppen's Climatic classification is experienced in
    A)   Western Coastal Region south of Mumbai
    B)   Coastal Tamil Nadu and coastal Andhra Pradesh
    C)   Peninsular Plateau Region
    D)   Ganga Plain, eastern Rajasthan, Assam and Madhya Pradesh

81. The largest producer of Sugarcane in India:
    A)   Tamil Nadu   B)   Maharashtra
    C)   Uttar Pradesh   D)   West Bengal

82. The Government Authority responsible for the management of steel plants in India:
    A)   TISSCO   B)   IISCO   C)   VSP   D)   SAIL

83. Gandhakasala is an indigenous variety of
    A)   Plantain   B)   Rice   C)   Cardamom   D)   Pepper

84. The average sex ratio in India as per 2011 Census is:
    A)   933   B)   943   C)   929   D)   None of these

85. 'Muniyara Caves' are found in
    A)   Marayoor   B)   Ambalavayal C)   Iritty   D)   Nelliampathy

86. Identify the map projection based on its properties given below
    1.   Latitudes are drawn as concentric circles
    2.   Longitudes are straight lines drawn radially from the centre
    3.   Area is exaggerated away from the centre
    4.   The scale is correct along the meridians

    A)   Zenithal Equidistant Projection Equatorial Case
    B)   Zenithal Equal Area Projection Equatorial Case
    C)   Zenithal Equidistant Projection Polar Case
    D)   Zenithal Equal Area Projection Polar Case

87. Carrying capacity of land refers to
    A)   The number of people that a unit area of land can support in a given
          technological level and system of landuse
    B)   The amount of fertilizer that a unit area of land can hold
    C)   The amount of moisture that the soil of a given land can hold
    D)   The number buildings that a given land can hold

88. Green vegetation appear as red in FCC because
    A)   Vegetation absorbs electromagnetic radiation in the blue band
    B)   Vegetation reflects electromagnetic radiation in the green band
    C)   Vegetation reflects almost all energy at infrared band
    D)   Vegetation absorbs all the incoming energy in the visible spectrum

89. To which country does the GLONASS Navigation System belong?
    A)   USA   B)   Japan   C)   Israel   D)   Russia

90. What will be the scale of aerial photograph when the focal length of the camera is
    150 mm and flying height of the aircraft is 7500 meters?
    A)   1:25,000   B)   1:50,000   C)   1: 7500   D)   1: 75,000

91. Which projection is used in the Survey of India OSM maps?
    A)   UTM Projection   B)   Polyconic Projection
    C)   Mollweid's Projection   D)   Bonne's Projection

92. Which among the following are the characteristics of a vertical aerial photograph?
    1.   Optical axis deviates <300 from the vertical axis
    2.   Horizon does not appear on the photograph
    3.   Shape of the area photographed will be square
    4.   Scale decreases from foreground to background

    A)   1 & 4 only   B)   2 & 4 only   C)   2&3 only   D)   1&3 only

93. The Swath of LISS IV sensor of Resourcesat-2 satellite is
    A)   70 km   B)   140 km   C)   840 km   D)   740 km

9

94. The grey scale value of 8 bit digital satellite image varies between
A) 10-255   B) 1-100   C) 255-355   D) 0-255

95. How many segments are there in GPS?
A) 2   B) 3   C) 4   D) 6

96. Who among the following opined that 'the physical and cultural phenomena are in a state of perpetual change and they must be studied in the temporal change, instead of taking them as state in time scale'?
A) Jean Brunhes
B) Vidal-de-Lablache
C) Allen Semple
D) W. M. Davis

97. Who is the author of the book 'Kosmos'?
A) Varenius
B) Alexander von Humboldt
C) Carl O. Sauer
D) Richard Hartshone

98. Which among the following is not a characteristic of 'P' waves?
A) It can move through solids and liquids
B) They are fastest waves
C) It can move particles perpendicular to the direction that the wave is travelling
D) They are compressional waves

99. The pattern of drainage developed as a result of symmetrical erosion around uplift domes and volcanic cones are known as
A) Dendritic Pattern
B) Trellis Pattern
C) Rectangular Pattern
D) Radial Pattern

100. Rills are formed by
A) Glacial Erosion
B) Fluvial Erosion
C) Aeolian Erosion
D) Wave Erosion

101. Which among the following is not a warm ocean current?
A) East Australian Current
B) Brazil Current
C) Agulhas Current
D) Labrador Current

102. How many Land Capability Classes are there in the scheme followed in India?
A) 8   B) 7   C) 5   D) 10

103. Identify the natural surface which has high albedo among the following
A) Ice Cap
B) Equatorial Forest
C) Water Bodies
D) Soil with high moisture content

104. Which among the following is not an ex-situ conservation method?
A) Seed Gene Bank
B) Field Gene Bank
C) Botanical Garden
D) Wild Life Sanctuary

105. Losch's Industrial Location Model sorts to explain the location of industries based on
   A) Least labour cost
   B) Size and shape of market area
   C) Maximum availability of raw materials
   D) Maximum availability of capital

106. Identify the criteria listed below which are true with regard to defining a census town in India
   1. It should have a population of at least 50,000
   2. At least 75% of the male working population should be engaged in non-agricultural activities
   3. It should have a density of at least 400 person per sq. km.
   4. It should have area of at least 5 sq. km.

   A) 2 & 3 only   B) 1 & 4 only
   C) 1 & 3 only   D) 2 & 4 only

107. A continuous urban spread in India and its adjoining out growth of two or more physically contiguous towns are termed as
   A) Conurbation   B) Urban Out Growth
   C) Urban Agglomeration   D) Metropolitan City

108. Which State has more than 50% its area under tea?
   A) Tamil Nadu   B) Kerala   C) Karnataka   D) Assam

109. The first fertilizer factory India under FCIL was setup in
   A) Sindri   B) Ramagudam   C) Talchar   D) Korba

110. The Industrial Region known as the 'Ruhr of India' is
   A) Gujarat Industrial Region   B) Chotanagpur Industrial Region
   C) Hugli Industrial Region   D) Mumbai-Pune Industrial Region

111. Which spatial entity represents the feature that has an area?
   A) Line   B) Closely spaced points
   C) Polygon   D) Surface

112. Identify the dams which are part of the Damodar Valley Project.
   1. Tilaiya Dam   2. Maithan dam
   3. Rihand Dam   4. Sardar Sarovar Dam

   A) 1&2   B) 1 &3   C) 2&4   D) 1&4

113. Thornthwait's Climatic Classification is based on the calculation of
   A) Index of Humidity   B) Index of Aridity
   C) Moisture Index   D) Index of Wetness

114. The cold strong north easterly wind that descends to the Adriatic Sea from the Alps Mountains is known as
   A) Foehn   B) Bora   C) Chinook   D) Mistral

115. The 12th Five Year Plan of India extended between
   A) 2002-2007   B) 2007-2012
   C) 2012-2017   D) 2016-2021

116. Which among the following are a mid-level clouds?
   1. Cirrocumulus   2. Altostratus
   3. Stratocumulus   4. Altocumulus

   A) 1 & 3   B) 1 & 4   C) 2 & 3   D) 2 & 4

117. The topological relationship that occurs when neighbouring polygons share a common boundary is known as
   A) Containment   B) Connectivity   C) Coverage   D) Adjacency

118. To which School of Geography does Halford J. Mackinder belongs to?
   A) German School   B) British School
   C) French School   D) American School

119. Fog that occurs when the sky is clear in relatively still air and the nocturnal cooling of the ground results in chilling of the layer of air near the ground surface is
   A) Radiation Fog   B) Advection Fog
   C) Adiabatic Fog   D) Frontal Fog

120. How many Census Towns are there in Kerala as per 2011 Census?
   A) 365   B) 218   C) 461   D) 378

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