REV-01
MGE/49/55

2022/07

MA/M.Sc. GEOGRAPHY
SECOND SEMESTER
FUNDAMENTALS OF CARTOGRAPHY
MGE-204

Duration : 3 hrs. **Full Marks: 70**

(PART-A: Objective)

Time : 20 min. **Marks : 20**

Choose the correct answer from the following: *1X20=20*

1. The place that is farthest from the earth's center is ----- and its elevation is ----.
   a. The peak of Chimorazo, 6267 mt
   b. The peak of Chimorazo,5970mt
   c. Ecuador,6267mt
   d. None of these

2. Shape of the earth is called------
   a. Geoid
   b. Geodesy
   c. Circumference
   d. Ellipsoid

3. Continuous surfaces can be best represented by
   a. Dot map
   b. Isolines
   c. Chloropleth map
   d. Proportional symbols

4. ------ is the science of earth measurement.
   a. Isopleth
   b. Geoid
   c. Geodesy
   d. Spheroid

5. The------ makes earth the densest of the planets.
   a. Lithosphere
   b. Core
   c. Mantle
   d. Hydrosphere

6. Which of the following is not a method of plane table surveying?
   a. Trisection
   b. Intersection
   c. Resection
   d. Radiation

7. Back bearing of a line is equal to _____
   a. Fore bearing ± 90°
   b. Fore bearing ± 180°
   c. Fore bearing ± 360°
   d. Fore bearing ± 270°

8. The magnetic meridian at any point, is the direction indicated by a freely suspended _____
   a. Magnetic needle
   b. Properly balanced magnetic needle
   c. Properly balanced and uninfluenced by local attractive force
   d. Magnetic needle over an iron pivot

9. Which of the following branch of surveying is used to find the elevations of given points with respect to given or assumed datum?
   a. Plane table surveying
   b. Traversing
   c. Contouring
   d. Levelling

10. Which of the following cannot be done with the help of theodolite in surveying?
    a. Measuring horizontal distances
    b. Prolonging survey lines
    c. Laying off horizontal angles
    d. Locating points on lines

11. Azimuthal projections are so named because
    a. The surface of projection is a plane
    b. The surface of projection is horizontal
    c. Directions from the centre remain correct
    d. Light is focused from the azimuth

12. A map projection that shows an area between latitude and longitude equal in size to the area on the globe is known as-
    a. Cylindrical projection
    b. Conic projection
    c. Azimuthal projection
    d. Equal-Area projection

13. Which of the following sets represent the correct set of map classification?
    a. Cadastral, thematic
    b. Thematic, geographic
    c. Cadastral, geographic
    d. Geographic, topographic

14. In which of the following ways, meridians are projected in cylindrical projection?
    a. Mathematically
    b. Geometrically
    c. Horizontally
    d. Vertically

15. Determine the scale of the map if the distance on the map is given as 2cm which is equal to 1km on the ground.
    a. 1: 50000
    b. 1: 5000
    c. 1: 100000
    d. 1: 500

16. GIS captures and analyses _____ data.
    a. Spatial
    b. Geographic
    c. Both a and b
    d. None of the above

17. Which among the following is not related to GIS software's?
    a. CAD
    b. ArcGIS
    c. ArcView
    d. STAAD Pro

18. Among the following which do not come under the components of GIS?
    a. Hardware
    b. Software
    c. Compiler
    d. Data

19. Web GIS introduces distinct advantages over traditional desktop GIS because _____
    a. It is borderless and have a global reach
    b. A large number of users
    c. Better cross-platform capability
    d. All of these

20. A way of collecting information about something without physically being there is known as:
    a. Detailed Image Processing
    b. Remote Sensing
    c. Digital Image Stabilizing
    d. Remote Image Generation

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(PART-B : Descriptive)

Time: 2 HRS 40 MINS Marks : 50

[Answer question no.(1) & any four (4) from the rest]

1. Write the nature of Cartography? Put forward an explanation regarding the changes of traditional vs modern cartography? 4+6=10

2. **Write short notes on:** 5+5=10
   a. Map design and layout

   b. Thematic mapping

3. Define surveying. Describe the classification of surveys based on instruments used. 3+7=10

4. Explain in detail the methods of prismatic compass survey. What are the sources of error in a prismatic compass survey? 6+4=10

5. Classify map projections based on their properties and explain with diagrams any one group of your choice. 5+5=10

6. Write the construction of cylindrical projections with support of required diagrams. Also write its properties, limitations and uses. 5+5=10

7. Define GIS and explain the components of GIS. 2+8=10

8. Differentiate between raster and vector-based GIS. Explain the concept of 'time' and 'space' and their role in spatial data. 5+5=10

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