

**BA/B.Sc. GEOGRAPHY
FOURTH SEMESTER
FUNDAMENTALS OF CARTOGRAPHY
BGE – 401**

**SET
A**

[USE OMR FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

(Objective)

Marks: 20

Choose the correct answer from the following:

1×20=20

1. A map with a scale of 1:50,000 means
 - a. One unit on the map represents 50000 units on the ground
 - b. One unit on the ground represents 50,000 units on the map
 - c. The map covers an area of 50,000 square units
 - d. The map is 50,000 units long
2. Radius of the earth equals
 - a. 250,000,000 cm
 - b. 350,000,000 cm
 - c. 640,000,000 cm
 - d. 540,000,000 cm
3. The cadastral maps, topographical maps and the city plans come under the category of
 - a. Large scale maps
 - b. Small scale maps
 - c. Medium scale map
 - d. All of the above
4. The network of the parallels and meridians so formed in a map projection is called
 - a. Graticule
 - b. Latitude
 - c. Longitude
 - d. Equator
5. Mercator Projection is a type of -----Projection
 - a. Cylindrical
 - b. Conical
 - c. Gnomonic
 - d. None of the above
6. Mercator projection is most suitable for
 - a. Navigation and sea travel
 - b. Representing polar region
 - c. Depicting accurate and areas
 - d. Showing accurate distances and angles.
7. Orthomorphic denotes in map projection is
 - a. True bearing
 - b. True shape
 - c. True distance
 - d. True direction
8. Which is not component of map?
 - a. Distance
 - b. direction
 - c. scale
 - d. symbol

9. Which type of map is primarily used to represent elevation and terrain?
 - a. Political map
 - b. Topographic map
 - c. Climate map
 - d. Economic map
10. A map with a scale of 1:1,000,000 would be considered:
 - a. Large scale
 - b. Small scale
 - c. Medium scale
 - d. No scale
11. Which type of thematic map uses shading to represent different values in different areas?
 - a. Choropleth Map
 - b. Dot Map
 - c. Isoline Map
 - d. Flow Map
12. When creating a contour map, lines of equal elevation are known as _____.
 - a. Isolines
 - b. Isopleths
 - c. Isobars
 - d. Isotherms
13. Qualitative data can be graphically represented by using a _____.
 - a. Histogram
 - b. Frequency polygon
 - c. Ogive
 - d. Bar graph
14. In any thematic map which of the following methods are used to record presence of phenomenon; its spatial pattern, distribution and dispersion.
 - a. Isopleth mapping
 - b. Isoline mapping
 - c. Choropleth mapping
 - d. Dot method mapping
15. Transport routes of a region can be shown by which of the following methods?
 - a. Choropleth maps
 - b. Graded Symbol maps
 - c. Chorochromatic maps
 - d. Flow maps
16. In surveying, what is the purpose of the technique known as triangulation?
 - a. Measuring elevations
 - b. Estimating distances
 - c. Establishing control points
 - d. Creating contour lines
17. Which surveying technique involves measuring distances using a sighting device attached to a flat table?
 - a. Plane Table Surveying
 - b. Triangulation Surveying
 - c. Contouring Surveying
 - d. Profile Drawing Surveying
18. During a traverse survey, what instrument is commonly used to measure horizontal angles?
 - a. Total Station
 - b. Prismatic Compass
 - c. Theodolite
 - d. Alidade
19. An imaginary line joining the point of intersection of the cross-hairs of the diaphragm and the optical centre of the object glass is known as _____.
 - a. Fundamental line
 - b. Axis of telescope
 - c. Axis of level tube
 - d. Line of collimation

20. An arbitrary surface with reference to which the elevation of points are measured and compared is called _____
- a. Datum surface
 - b. Level surface
 - c. Horizontal surface
 - d. Vertical surface

(Descriptive)

Time : 2 hrs. 30 mins.

Marks : 50

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

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| 1. Describe the difference between the diagram and graph. Explain the types of diagrams based on the composition method. | 3+7=10 |
| 2. Explain the concept of map projection and discuss its types? | 3+7=10 |
| 3. What is map scale? Discuss the different types of map scales and highlighting the application of map scale. | 2+4+4
=10 |
| 4. What is Mercator's projection? Explain its properties, uses and limitations. | 2+4+2+2
=10 |
| 5. Explain the factors that influence the selection of a map projection in cartography? | 10 |
| 6. Write brief notes on:
a. Types of thematic maps
b. Advantages and disadvantages of isopleth maps | 5+5=10 |
| 7. What do you mean by surveying? Explain different types of surveying and illustrate your answer with examples. | 2+8=10 |
| 8. What do you mean by prismatic compass survey? Explain in detail the methods of prismatic compass survey. | 3+7=10 |

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