

MA/ M.SC. GEOGRAPHY
SECOND SEMESTER
FUNDAMENTALS OF CARTOGRAPHY
MGE - 204 [SPECIAL REPEAT]
[USE OMR FOR OBJECTIVE PART]

**SET
A**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

[Objective]

Marks: 20

Choose the correct answer from the following:

1X20=20

1. The method of mapping depends on the-
 - a. Size of the area
 - b. Degree of accuracy aimed at
 - c. Amount of details required
 - d. All of the above.
2. How would you measure the location of a place on the earth's surface?
 - a. Using latitude
 - b. Using longitude
 - c. Using longitude and latitude
 - d. Using scale
3. Maps that shows detailed physical features of particular place are called-
 - a. Topographical maps
 - b. Atmospheric maps
 - c. Economic maps
 - d. Symbolic maps
4. Line of latitude and longitude cross each other forming a:
 - a. Table system
 - b. Geographical system
 - c. Magnetic system
 - d. Grid system
5. 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
6. In geodetic surveys higher accuracy is achieved, if _____
 - a. Curvature of the earth surface is ignored
 - b. Curvature of the earth surface is taken into account
 - c. Angles between the curved lines are treated as plane angles
 - d. None of these
7. When the bubble of the level tube of a level, remains central _____
 - a. Line of sight is horizontal
 - b. Axis of the telescope is horizontal
 - c. Line of collimation is horizontal
 - d. Geometrical axis of the telescope is horizontal
8. Back bearing of a line is equal to _____
 - a. Fore bearing $\pm 90^\circ$
 - b. Fore bearing $\pm 180^\circ$
 - c. Fore bearing $\pm 360^\circ$
 - d. Fore bearing $\pm 270^\circ$
9. Dumpy level is used for _____
 - a. Finding point to point distance
 - b. Finding the elevation difference
 - c. Finding the traverse area
 - d. Finding the perimeter of area

10. The process of turning the telescope about the vertical axis in horizontal plane is known as _____
- Transiting
 - Reversing
 - Plunging
 - Swinging
11. A fixed point on Earth's surface from which direction and location can be described is known as :
- Landmark
 - Reference Point
 - Perfect Point
 - Fixed point
12. Most distorted area in projection is area :
- Far from latitude
 - Close to the latitude
 - Far from longitude
 - Close to longitude
13. In Mercator Projection, distance between lines of longitude is:
- Equal
 - Variable
 - More in northern hemisphere
 - More in southern hemisphere
14. Point of contact of azimuthal plane is usually the:
- Tropic
 - Equator
 - Axis
 - Pole
15. Large maps like maps showing countries or continents would have:
- Less distortion
 - More distortion
 - Zero distortion
 - Distortion depending on the map scale.
16. GIS uses the information from which of the following sources?
- Non-spatial information system
 - Spatial information system
 - Global information system
 - Position information system
17. Among the following which do not come under the components of GIS?
- Hardware
 - Software
 - Compiler
 - Data
18. Digital Elevation Model is best represented using:
- Vector Data Models
 - Raster Data Models
 - Coverage Data Structure
 - Non-Topological Data Structure
19. The smaller the cell size for the raster layer:
- The lower the resolution and the more detailed the map
 - The lower the resolution and without the detailed map
 - The higher the resolution and the more detailed the map
 - The higher the resolution and without the detailed map
20. Web GIS introduces distinct advantages over traditional desktop GIS because _____
- It is borderless and have a global reach
 - A large number of users
 - Better cross-platform capability
 - All of these

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(Descriptive)

Time : 2 hrs. 30 mins.

Marks : 50

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

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| 1. Discuss with necessary illustrations the role of cartographic methods in depicting various geographical phenomena from proper perspectives. | 10 |
| 2. Distinguish between general purpose map and thematic map. Discuss the problems associated with the construction of various types of thematic map. | 5+5=10 |
| 3. What do you mean by surveying? Explain different types of surveying and illustrate your answer with examples. | 2+8=10 |
| 4. Discuss the principles and procedures associated with topographic surveying of a small area using Dumpy level. | 3+7=10 |
| 5. Classify projections and discuss the merits and demerits of cylindrical projections. | 4+6=10 |
| 6. What is a Zenithal map projection? Briefly discuss the utilities of this type of map projection for mapping different parts of the world. | 2+8=10 |
| 7. Differentiate between raster and vector-based GIS. Explain the concept of 'time' and 'space' and their role in spatial data. | 5+5=10 |
| 8. Briefly discuss the DEM and DTM approaches that can be used to generate and compare map surfaces. | 5+5=10 |

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