

Roll No.

Total Pages : 2

CMDQ/M-24

5561

**FUNDAMENTAL OF GEOGRAPHICAL
INFORMATION SYSTEMS (THEORY)**

Paper–M-GEO-405

Time Allowed : 2½ Hours]

[Maximum Marks : 35

Note : Attempt **four** questions in all, selecting at least **one** question from each Unit. Question No. **1** is compulsory.

Compulsory Question

1. Answer the following (in brief) : 8
 - (a) Ephemeris.
 - (b) Tessellation.
 - (c) Spatial reference system.
 - (d) DBMS.

UNIT-I

2. Define GIS. Discuss the key components and elements of GIS in detail. 9
3. Describe the planar and spherical coordinate system and their specific advantages in GIS. 9

4. What is block encoding and quadtree data model ? Answer with illustrations. 9

UNIT-II

5. What do you understand by spatial analysis in GIS? Discuss in detail with examples and illustrations. 9
6. Discuss the applications of GIS in management of water resources in detail. 9
7. What do you understand by GNSS/? Describe the space and control segment of NAVSTAR GPS in detail. 9