

**POST GRADUATE CERTIFICATE IN
GEOINFORMATICS (PGCI)**

00244

Term-End Examination

December, 2016

**MGY-003 : GLOBAL NAVIGATION SATELLITE
SYSTEM AND GEOGRAPHIC INFORMATION SYSTEM**

Time : 2 hours

Maximum Marks : 50

Note : All questions are compulsory. Internal choices are given in Questions no. 2 to 4. The marks for each question are indicated against it.

1. Answer *all* parts :

(a) Fill in the blank spaces with appropriate word(s). 3×1=3

(i) The word DBMS stands for _____ .

(ii) DEM stands for _____ .

(iii) The word GAGAN stands for _____ .

(b) State if the following statements are *True (T)* or *False (F)* : 3×1=3

(i) Attribute is a set or collection of data that describes the characteristics of real world entities.

(ii) Buffer operation is an important spatial analysis function for point and line in GIS.

(iii) Data integration is a process of transformation of spatial and non-spatial data from one form to the other.

(c) Match the items given in Column A with those given in Column B : 4×1=4

Column A

Column B

- | | |
|----------------------|---|
| (i) Polygon | (1) Exactness of measured data |
| (ii) Object-Oriented | (2) Closeness between digital database and real world |
| (iii) Precision | (3) Vector Data |
| (iv) Accuracy | (4) Database Model |

2. Write short notes on any *four* of the following : 4×5=20

- (a) Database Creation
- (b) Spatial Elements and their Representation
- (c) GLONASS
- (d) Georeferencing
- (e) Raster to Vector Data Conversion
- (f) Spiral GIS Design Model
- (g) Data Consistency

3. Discuss the basic steps to find User's Location using a GPS device. 10

OR

- (a) What do you understand by Topological Modelling ? 5
- (b) Write about the three segments of GPS. 5

4. Discuss the five components of GIS. 10

OR

- (a) Write about the different types of GIS output. 5
- (b) State the advantages and disadvantages of raster and vector GIS data models. 5