

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

Term-End Examination

00554

June, 2018

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

Time : 2 hours

Maximum Marks : 50

Note : All questions are compulsory. Marks for each question are indicated against it.

1. Answer **all** parts of the following :

(a) Fill in the blank spaces with appropriate word(s) : 4×1=4

(i) GPS receiver uses the concept of _____ to determine its position on the Earth's surface.

(ii) GAGAN is the navigation satellite system of _____ country.

(iii) The word 'OGC' stands for _____.

(iv) _____ data describes attributes of the geographic features.

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

- (i) GPS technology offers a solution for all survey tasks.
- (ii) Analog data needs to be converted into digital format before using it in any GIS platform.
- (iii) Vertical data integration is a process of merging spatial data of all the adjacent areas.

(c) Match the items given in Column A with those given in Column B : 3×1=3

Column A

Column B

- | | |
|-------------------------|---|
| (i) GIS design | (1) Focal operation |
| (ii) Raster analysis | (2) Location interconnected with routes and lines |
| (iii) Network modelling | (3) Waterfall model |

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

- (a) GPS Survey
- (b) Geospatial Data Input
- (c) Components of GIS
- (d) Differential GPS
- (e) Data Quality
- (f) Raster Analysis

3. What is GPS ? Give a comparative account of various principles of GPS operation. 10

OR

Discuss in detail, data conversion methods in GIS. 10

4. What are GIS data models ? Explain raster and vector data models. 10

OR

Give a brief account of various types of GIS outputs with suitable examples. 10