

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

Term-End Examination

June, 2019

00941

**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 question nos. 2 to 4. The marks for each question is indicated against it.

1. Answer **all** parts :

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

(i) _____ is useful for overlaying and spatial analysis in GIS.

(ii) _____ is a flat board used for vectorisation of any map object.

(iii) PPS stands for _____.

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

(i) A TIN surface is composed of points, lines, triangles, hull polygon and topology.

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

(iii) Planimeter is an instrument for measuring 3-D figures.

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

<i>Column A</i>	<i>Column B</i>
(i) Address interpolation	(1) Geocoding
(ii) Accuracy	(2) Redlands, California
(iii) ESRI	(3) India
(iv) GAGAN	(4) Exactness of manual data

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

- (a) Error and its Types
- (b) Geographic Data and Geographic Information
- (c) Advantages and Disadvantages of Raster Data
- (d) Formats and Accuracy of GPS Data
- (e) Cartographic Outputs
- (f) Components of GIS Design
- (g) Surface Modelling

3. Elaborate the reference framework in 2-dimensional and 3-dimensional mapping. 10

OR

Discuss the advantages and disadvantages of GPS over conventional surveying. 10

4. What is metadata ? Elaborate metadata standards, formats and creation. 10

OR

Discuss in detail, applications of GNSS. 10