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MGY-003

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

Term-End Examination

December, 2022

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

Time : 2 Hours

Maximum Marks : 50

Note : (i) *All questions are compulsory.*

(ii) *Internal choices are given in Question
Nos. 2 to 4.*

(iii) *The marks for each question are
indicated against it.*

1. Answer all parts :

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

(i) The process of locating any entity
in real world coordinates is
called

P. T. O.

- (ii) DBMS stands for
- (iii) DGPS stands for
- (iv) is measure of the range or distance between the GPS receiver and the GPS satellite.

(b) State if the following statements are True

(T) or False (F) : $3 \times 1 = 3$

- (i) Operational errors are the errors present in source geospatial data and which cannot be removed.
- (ii) Contiguity is a topological concept in GIS where only two areas are spatially continuous without any areal gap or disjoint.
- (iii) Validation ensures that the product actually meets the user's needs.

- (c) Match the items given in Column A with those in Column B : $3 \times 1 = 3$

Column A	Column B
(i) Interoperability	(1) Statistical interpolation technique
(ii) Kriging	(2) Data conversion
(iii) Optical character recognition	(3) Flexible mobility of GIS database

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

- (a) Sources of errors of DGPS
- (b) Kinematic GPS technique
- (c) Types of GPS receiver and data formats
- (d) Comparison of raster and vector data models
- (e) Waterfall model of system life cycle

- (f) Methods of raster data input
 - (g) Topological models
3. (a) How would you plan for GPS Survey ? 5
- (b) Explain briefly the organizational aspects
of GIS. 5

Or

- Discuss in detail the database models. 10
4. Explain the components of data quality. 10

Or

What is spatial analysis ? Describe the methods
and operation of overlay spatial analysis.