MGY-003

Post Graduate Certificate in Geo-Informatics (P. G. C. G. I)
Term-End Examination
June, 2020

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 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) :   1 each

        (i) .... is satellite based radio navigation system operated by the

Ministry of Defense of the Russian Federation.

(ii) The .... is a measure of the range or distance, between GPS receiver and the GPS satellite.

(iii) SQL stands for ....

(iv) .... converts the data from various formats into GIS in discrete vector formats.

(b) State if the following statements are True (T) or False (F) :   1 each

(i) Global positioning system needs minimum of five satellites to provide 3D position.

(ii) Nominal is a quantitative and non-ranking scale of measurement that classifies features on intrinsic characteristics.

(iii) Rasterisation is the conversion of raster data to vector data.

(c) Match the items given in column A with those in Column B :　　　1 each

Column A		Column B	
(i)	Precision	(i)	Reconstruction of contour maps
(ii)	Database Model	(ii)	Exactness of measured data
(iii)	DEM	(iii)	Hierarchical

2. Write short notes on any *four* of the following :

5 each

(a) Computer Hardware Module in GIS

(b) Map digitisation

(c) Surface modelling

(d) Data accuracy

(e) Non-cartographic outputs

(f) Spiral GIS design model

(g) Types of GPS receivers

3. Discuss the steps you would follow for carrying out GPS survey. Give well labelled diagrams where ever required.　　　10

Or

Briefly discuss the types of vector data structure with the help of well labelled diagrams, where ever required.

4. Give an account of various operations involved in vector data analysis. Give neat well labelled diagram wherever required.   10

Or

Explain elaborately the Waterfall model of system life cycle.

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