POST GRADUATE CERTIFICATE IN GEOINFORMATICS (PGCGI)

Term-End Examination

00168

June, 2015

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

Time : 2 hours   *Maximum Marks : 50*

Note : *All questions are* **compulsory***. The marks for each question are indicated against it.*

1. Answer *all* parts :

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

        (i) The word 'RTK' stands for _____ .

        (ii) The word 'TIGER' is an abbreviation of _____ .

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

        (iv) 'DLG' stands for _____ .

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

(i) Zonal operations do not perform operations on zones of contiguous blocks of pixels. (True/False)

(ii) Data structure is the format of the data as stored and manipulated on computer. (True/False)

(iii) Topology is the organisation of spatial relationships between features in a GIS. (True/False)

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

Column A	*Column B*
(i) Line-in-polygon	(1) Overlay
(ii) Spaghetti	(2) GNSS
(iii) Speed	(3) Vector data model

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

(a) Any five sources of error in GPS observations

(b) Spatial data structure

(c) Overlay analysis

(d) Geospatial data input

(e) GPS signal structure

(f) Raster to Vector data conversion

3. (a) Discuss in detail the GPS survey planning and procedures. *10*

OR

(b) What is GIS ? Describe in detail its components with suitable illustrations, wherever required. *10*

4. (a) What do you understand by data quality in the context of GIS ? Explain the components of data quality. *10*

OR

(b) Discuss in detail the approaches and models of GIS project design. *10*