

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

**Term-End Examination**

00619

**December, 2015**

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

*Time : 2 hours*

*Maximum Marks : 50*

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

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

- (a) Fill in the blank spaces with appropriate word(s) : 4×1=4
- (i) GLONASS is the navigation satellite system of \_\_\_\_\_ .
- (ii) The abbreviation 'MCS' stands for \_\_\_\_\_ .
- (iii) The word 'RTK' stands for \_\_\_\_\_ .
- (iv) GIS is a computerised system that helps in evaluating \_\_\_\_\_ data.

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

- (i) GIS data model is a conceptual representation of geographic data of real world features into digitally and logically represented spatial objects.
- (ii) Geo-referencing is the process of assigning location to any entity in real world coordinates.
- (iii) Interoperability makes GIS database so rigid that it cannot be opened and analysed in any GIS environment.

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

*Column A*

*Column B*

- |                       |                              |
|-----------------------|------------------------------|
| (i) Data quality      | (1) Maps and tables          |
| (ii) GIS outputs      | (2) Global operations        |
| (iii) Raster analysis | (3) Accuracy and consistency |

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

- (a) Galileo
- (b) Applications of GPS
- (c) Network Modelling
- (d) Comparison of Raster and Vector Data Models
- (e) Data Integration
- (f) Cartographic GIS Output

3. Attempt any *one* part of the following :

- (a) Discuss the segments and principles of GPS operations. 10
- (b) What do you understand by data quality ? Explain in detail the various components of data quality. Add a note on the errors that occur while processing data. 10

4. Attempt any *one* part of the following :

- (a) Give a brief account of the various aspects of GIS design with suitable examples. 10
  - (b) What is a database ? Discuss the types and models of databases with suitable illustrations. 10
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