

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

**Term-End Examination**

**December, 2017**

01122

**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 of the following :

- (a) Fill in the blank spaces with appropriate word(s). *4×1=4*
- (i) The abbreviation GAGAN stands for \_\_\_\_\_ .
- (ii) The orbiting satellites transmitting radio-navigation signals are referred to as \_\_\_\_\_ segment of GPS.
- (iii) Points, lines and polygons are discrete features represented by \_\_\_\_\_ data model.
- (iv) \_\_\_\_\_ is data about data.

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

- (i) GRASS is a free and open source GIS software.
- (ii) Surface modelling represents the Earth's surface in digital form by taking information of latitude, longitude and altitude.
- (iii) The integration of spatial and non-spatial data is not required for analysing any data in a GIS platform.

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

<i>Column A</i>	<i>Column B</i>
(i) Hierarchical model	(1) Non-cartographic output
(ii) Shaded relief map	(2) Proximity analysis
(iii) Buffer operation	(3) Organising data in a tree-like structure

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

- (a) GLONASS
- (b) GPS Segments
- (c) Database Management System
- (d) Data Quality
- (e) Cartographic GIS Outputs
- (f) Georeferencing

3. Discuss in detail the applications of GPS in any five fields giving suitable examples. 10

**OR**

Define GIS models. Describe network and surface modelling in GIS. 10

4. What is GIS ? Explain in detail the components and organisational aspects of GIS. 10

**OR**

Discuss the components and models of GIS design with suitable examples. 10

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