

SUBJECT: FUNDAMENTALS OF GEOINFORMATICS

Day: **Friday**
Date: **24/11/2017**

Time: **10.00 AM TO 01.00 PM**
Max Marks. 60

W-2017-0984

N.B.

- 1) Answer any **FIVE** questions.
 - 2) Figures to the right indicate **FULL** marks.
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- Q.1 a)** What is the concept of a geodetic datum? Explain any one type in detail. **(06)**
- b)** Describe atleast three applications of satellite navigation systems in civilian society. **(06)**
- Q.2 a)** Write a note on symbolization, its significance and general rules in map making. **(06)**
- b)** What are the various components of geospatial data quality? **(06)**
- Q.3 a)** Describe the four properties that map projections can preserve. Why it is not possible to maintain all the properties in a single map projection. **(06)**
- b)** Explain the different overlay functions with diagrams. **(06)**
- Q.4 a)** What are the characteristics of a raster data model? Why is compression necessary? Describe any one type of raster compression with diagram. **(06)**
- b)** What is network analysis? Discuss its application using two case studies. **(06)**
- Q.5 a)** What is 'buffering'? Describe the various applications of buffering with examples. **(06)**
- b)** Discuss the various steps involved in designing a GIS based project for setting up primary health care center. **(06)**
- Q.6** Write short notes on any **THREE** **(12)**
- a)** TIN and DEM
 - b)** Topology
 - c)** DGPS
 - d)** Advantages and disadvantages of vector data models
 - e)** Map scale