

**M. Sc. (Environment Science and Technology) Sem - I (CBCS) (2013 Course) / M. Sc. (Geoinformatics) SEM-I (CBCS) (2013 Course) / DIPLOMA IN WILDLIFE CONSERVATION ACTION SEM – I (CBCS)/ M. Sc. (Wildlife Conservation Action) Sem – I (CBCS) 2015**  
**Course : WINTER - 2018**

**SUBJECT: FUNDAMENTALS OF GEOINFORMATICS**

Day: Saturday  
Date: 24/11/2018

**W-2018-1228**

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

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**N.B.:**

- 1) Attempt any **FIVE** questions.
  - 2) Figures to the **RIGHT** indicate full marks.
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- Q.1** a) What is the significance of map projection in geospatial technologies? (06)
- b) With the help of a simple diagram explain the components of a DBMS. (06)
- Q.2** a) Geographic data in general contain a variety of errors. Define inherent and operational errors giving samples of when each of these two types of errors are generated during the data acquisition process. (06)
- b) Explain the difference in the overlay operation between local OR, logical AND. Illustrate your answer with an example each. (06)
- Q.3** a) What is topology? Explain the importance of this process in the building of a geospatial database. (06)
- b) What are the uses of cartographic generalization? With the aid of a simple diagram explain:  
i) Simplification                      ii) Aggregation (06)
- Q.4** a) What do you understand by network analysis in GIS? Using an example illustrate its utility. (06)
- b) What is a datum? What is its significance in geospatial technologies? (06)
- Q.5** a) Describe three uses of a satellite navigation system. (06)
- b) What is the utility of buffering as a tool in planning? Describe with atleast two examples. (06)
- Q.6** Write short notes on any **THREE** of the following: (12)
- a) Root mean square errors
  - b) Reclassification
  - c) UTM projection
  - d) Error is digitization