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 : SUMMER - 2018

SUBJECT: FUNDAMENTALS OF GEOINFORMATICS

Day: **Thursday** | Time: **10.00 AM TO 01.00 PM**

Date: **12/04/2018** | Max Marks. 60

S-2018-1099

N.B.

1) Answer any **FIVE** questions.
2) Figures to the right indicate **FULL** marks.

Q.1 a) What are the different ways in which objects are represented in a map? Give a diagrammatic representation of the real world phenomena as point, line, area and volumetric representation. **(06)**

b) What do understand by data quality? Why is it important? How is it measured? **(06)**

Q.2 a) What are the principles of map composition? Use examples to support your answer. **(06)**

b) Explain the principle and working of a satellite navigation system. **(06)**

Q.3 a) Describe the different types and sources of errors in GIS. **(06)**

b) What is database structure? Discuss relational database structure and their advantages over hierarchical and network database structure. **(06)**

Q.4 a) What is multicriteria analysis? Describe the methodology of multicriteria analysis. Add a note on the pros and cons of MCA. **(06)**

b) Describe pseudo and carrier phase measurements in satellite navigations systems. **(06)**

Q.5 a) Describe the salient features of the UTM projections. **(06)**

b) Describe the four generic measures of data quality. **(06)**

Q.6 Write short notes on any **THREE** **(12)**

a) Geographic and projected coordinate systems
b) Methods of data capture
c) VDOP and HDOP
d) Network elements
e) Union and intersection operations in GIS

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