Code: 13A01803

R13

B.Tech IV Year II Semester (R13) Advanced Supplementary Examinations July 2018
REMOTE SENSING & GIS
(Civil Engineering)

Time: 3 hours   Max. Marks: 70

PART – A
(Compulsory Question)
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1   Answer the following: (10 X 02 = 20 Marks)
   (a)   Write short notes on principal point and principal length.
   (b)   Write short notes on parallax.
   (c)   What are the advantages and limitations of remote sensing?
   (d)   Write short notes on Swath and Nadir.
   (e)   What are the limitations of GIS?
   (f)   Write short notes on data capture.
   (g)   Give an overview on data manipulation and analysis.
   (h)   Differentiate between vector data storage and attribute data storage.
   (i)   Define fluvial geomorphology.
   (j)   What is a watershed? Write their characteristics.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2   What are the types of aerial photography? Explain.
OR
3   What is fundamental stereoscopy? Explain in detail.

UNIT – II

4   What is resolution of a sensor? Describe all sensor resolutions.
OR
5   (a)   What is orbit of a satellite? Explain geosynchronous and sun-synchronous orbits.
   (b)   Discuss on the spectral reflectance characteristics of water and vegetation in different spectral bands.

UNIT – III

6   Define GIS. Describe the key components of GIS.
OR
7   Define spatial data. Explain the types of spatial data.

UNIT – IV

8   What do you understand by spatial data and attribute data? How are they integrated to make a GIS?
OR
9   What do you understand by geospatial analysis? Why is it required? Mention six basic geospatial analysis techniques.

UNIT – V

10   Explain in detail the water resources management and monitoring.
OR
11   How impact assessment and monitoring is done for flood and drought? Explain.

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