320637(20)

B. E. (Sixth Semester) Examination, 2020

(Old Scheme)

(Civil Engg.)

GIS & its APPLICATIONS

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

*Note : Part (a) from each question is compulsory. Attempt any **two** parts from parts (b), (c) and (d) of each question.*

Unit-I

1. (a) Define GIS.   2

   (b) What are the key components of GIS?   7

(c) What are the different types of data products? 7

(d) Explain the different levels of measurements used in GIS. 7

Unit-II

2. (a) Define satellite data. 2

(b) Explain various functions of DBMS, in GIS. 7

(c) Describe different modes of input data in GIS. 7

(d) Describe the advantages and disadvantages of Vector and Raster data. 7

Unit-III

3. (a) Define DBMS. 2

(b) Explain how spatial and non-spatial data are linked in GIS. 7

(c) Give a brief acccount of smart features of DBMS. 7

(d) What are the advantages and limitations of data overlay and modelling? 7

Unit-IV

4. (a) Name any four GIS software. 2

(b) Discuss in detail the GIS application in water resources management. 7

(c) Discuss in detail the GIS applications in land suitability anlysis. 7

(d) Discuss in detail the GIS applications in agriculture and forestry. 7

Unit-V

5. (a) Define data layer. 2

(b) Describe, any one type of GIS analysis used for case study. 7

(c) Citing any example. Explain how GIS is useful for handling land information system. 7

(d) Draw a schematic draft for a GIS analysis. 7