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10CV844

Eighth Semester B.E. Degree Examination, June/July 2018 Geographic Information System

Time: 3 hrs.

Max. Marks: 100

Note: Answer FIVE full questions, selecting at least FWO questions from each part.

PART - A

- a. What is Geographic Oc information system? Briefly explain its concept and spatial models.
 (12 Marks)
 - b Describe in detail about GIS basic functionality.

(08 Marks)

- 2 a. Define map and its types. What is the necessity of map projection and briefly explain different types of map projection. (12 Marks)
 - b. What are the methods of spatial referencing system explain them.

(08 Marks)

3 a. What GIS data structure? Enumerate different types of GIS data structure.

(10 Marks)

b. What is georelation vector model and its advantages.

(10 Marks)

4 a. Describe different method to link spatial data with non spatial data in GIS

(08 Marks)

b. Write a note on principles of digitizer and scanner.

(06 Marks)

c. Describe different types of data input method.

(06 Marks)

PART - B

5 a. What are different sources of errors in GIS data? Explain briefly.

(10 Marks)

b. What in overlay analysis? Describe different types of overlay analysis.

(10 Marks)

- 6 a. What are satellite data? Explain how satellite data are integrated using GIS for decision support system. (10 Marks)
 - b. Explain the following:
 - i) Multivariate evaluation
 - ii) Virtual GIS.

(10 Marks)

7 a. What is DBMS in GIS? Describe its components.

(05 Marks)

b. Explain the functions of DBMS.

(05 Marks)

c. List and explain briefly different database models.

(10 Marks)

- 8 a. What is Global positioning system? Describe its segments and major applications. (08 Marks)
 - b. What is Digital Image processing? Describe briefly different DIP techniques. (12 Marks)

