

Total No. of Questions : 6]

SEAT No. :

P1186

[Total No. of Pages : 3

[4659] - 25

B.E. (Civil)

B : GEOINFORMATICS

(2008 Pattern) (Semester - II) (Open Elective)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Answer three questions from each section.*
- 2) *Answers to the two sections should be written in separate books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*
- 5) *Assume suitable data, if necessary.*

SECTION - I

- Q1)** a) Explain EMR. State the characteristics of different frequencies. [8]
b) Define resolution and explain any 2 types. [8]

OR

- a) Describe characteristics of LANDSAT 1, 2 & 3. [8]
b) What are the elements of Visual Image Interpretation? Explain their significance and factors influencing them. [8]

- Q2)** a) What is false colour composite (FCC) Images? What are its advantages? [8]
b) Write a note on : [8]
i) Image Rectification.
ii) Geo referencing.

P.T.O.

OR

- a) Explain supervised and unsupervised classification. [8]
- b) Explain any two satellite images and its application. [8]

- Q3)**
- a) Describe Characteristics of IR Images. [10]
 - b) “Geometric” Corrections in Images under processing. [8]

OR

- a) What is Digital Image processing and briefly explain its application.[10]
- b) Write a note on ‘System Pour 1’ observation de la Terre. [8]

SECTION - II

- Q4)**
- a) What is ‘MAP’? Describe different types of maps in brief. What are its limitations? [8]
 - b) Explain : [8]
 - i) Vector Model
 - ii) Resolution

OR

- a) Define GIS? Explain in detail its components. [8]
- b) Write a note on : [8]
 - i) Data types in DBMS.
 - ii) Attributes

- Q5)**
- a) Explain any one GIS software’s and write a detail account on its Modules. [8]
 - b) What is RDBMS? Explain the Normal form with one example. [8]

OR

- a) Write a note ‘Buffering’. [8]
- b) Describe ‘Raster’ data structure. Write advantages and disadvantages.[8]

- Q6)** a) Explain application of Geo Informatics in following areas : [10]
- i) Geotechnical Engineering
 - ii) Water Resource management through canal irrigation
- b) Write a brief note on “Role of GIS in Terrain Analysis”. [8]

OR

- a) Explain application of Geo Informatics with working flow charts in following areas : [10]
- i) Road Survey and Investigations.
 - ii) Infrastructure Development.
- b) Write in detail Satellite Data acquisition. [8]

