

Total No. of Printed Pages:01

SUBJECT CODE NO:- H-656
FACULTY OF SCIENCE AND TECHNOLOGY
B.E. (CSE) (Sem-I)
Elective-I Remote Sensing & Geographical Information Systems
[CGPA]

[Time: Three Hours]**[Max.Marks:80]**

Please check whether you have got the right question paper.

N.B

- 1) Question no 1 from section A & Question no.6 from section B are compulsory. From remaining questions solve any two questions in section A & B.

Section A

- | | | |
|-----|---|----|
| Q.1 | a. Write a note on active & passive remote sensing systems. | 05 |
| | b. Write a note on basic elements of image interpretation. | 05 |
| Q.2 | a. Explain the role of remote sensing in environment management | 07 |
| | b. Give an account on the historical development of remote sensing as a technology. | 08 |
| Q.3 | a. Define remote sensing & explain various stages of remote sensing system. | 08 |
| | b. Differentiate between electromagnetic radiation & spectrum. | 07 |
| Q.4 | a. Discuss the various theories and laws governing Electro Magnetic Radiation. Explain with the help of a diagram the EMR spectrum. | 08 |
| | b. Explain with examples the characteristic features of remote sensing sensors. | 07 |
| Q.5 | a. Explain various platforms used in remote sensing. | 08 |
| | b. Explain the interaction of electromagnetic energy with Earth surface in terms of reflected, transmitted & absorbed energy. | 07 |

Section B

- | | | |
|------|---|----|
| Q.6 | Write in detail about vector data analysis & raster data analysis. | 10 |
| Q.7 | a. Discuss in detail about supervised and unsupervised clarification. | 08 |
| | b. Discuss various techniques used in digital image processing. | 07 |
| Q.8 | a. Describe the basic principles and elements of geographical information system. | 08 |
| | b. What are the various types of aerial photograph? How are a photograph are interpreted. | 07 |
| Q.9 | a. Explain various types of data models used in GIS. | 08 |
| | b. Discuss GIS data acquisition in detail. | 07 |
| Q.10 | a. Explain various components used for integration of satellite image. | 08 |
| | b. What is meant by mapping? Explain the various types of mapping projections. | 07 |