



# CBCS SCHEME

15TE72

## Seventh Semester B.E. Degree Examination, Feb./Mar. 2022 Satellite Communication and Remote Sensing

Time: 3 hrs.

Max. Marks: 80

Note: Answer FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. Illustrate the main components associated with remote sensing activities with a neat diagram. (10 Marks)  
b. Explain the sources of information on remote sensing. (06 Marks)

OR

- 2 a. Explain the historical development of remote sensing systems with a neat diagram. (10 Marks)  
b. Explain the advantage of space based observations. (06 Marks)

### Module-2

- 3 a. Explain the electromagnetic spectrum with a neat diagram. (08 Marks)  
b. Explain the main type of radiation process in remote sensing with a neat diagram. (08 Marks)

OR

- 4 a. What is spectral signature? Enumerate the main factors affecting it in the solar region of the EM spectrum. (08 Marks)  
b. Explain the different types of atmospheric interactions. (08 Marks)

### Module-3

- 5 a. Explain the different types of sensors used to electromagnetic energy. (10 Marks)  
b. Explain the principles of radar altimetry with a neat diagram. (06 Marks)

OR

- 6 a. Explain the principle of working of a along-track scanner with the help of a neat diagram. (08 Marks)  
b. Explain the satellite remote sensing mission. (08 Marks)

### Module-4

- 7 a. Explain the types of image interpretation with a neat diagram. (08 Marks)  
b. With the help of a neat block diagram, explain the generalized procedure for the interpretation of remote sensing imagery. (08 Marks)

OR

- 8 a. Explain the organization of remote sensing project. (10 Marks)  
b. With a neat diagram, explain the common format of photographic products. (06 Marks)

### Module-5

- 9 a. Explain the processes in color formation with the help of a neat diagram. (08 Marks)  
b. With a neat diagram, explain the hierarchical organization of visual interpretation criteria. (08 Marks)

OR

- 10 a. Explain the elements of visual analysis. (10 Marks)  
b. With a neat diagram, explain the temporal dimensions in image interpretation. (06 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.