

B.E.Eighth Semester (Civil Engineering) (C.B.S.)
Elective - III : Applied Remote Sensing & GIS

P. Pages : 2

Time : Three Hours



NKT/KS/17/7546

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Assume suitable data whenever necessary.
 9. Illustrate your answers whenever necessary with the help of neat sketches.

1. What is Remote sensing? Describe the advantages and disadvantages of remote sensing techniques. **13**

OR

2. Write short note on: **13**

- a) Electromagnetic spectrum and its wavelength.
- b) Radiometers.

3. Describe the classification of satellite. Write in brief the sun synchronous and geostationary satellite. **13**

OR

4. Write short note on. **13**

- a) Indian Remote sensing program.
- b) Analogue and Digital data formats.
- c) Satellite launch vehicles.
- d) Remote Sensing data products.

5. Describe the types of aerial photographs. Add a note on elements of photo and image interpretation. **14**

OR

6. Write short note on. 14
- a) Orientation of aerial photographs.
 - b) Flight planning.
 - c) Parallax and vertical exaggeration.
 - d) Aerial Mosaic.
7. Describe the image rectification and restoration. Add a note on Image Enhancement. 13
- OR**
8. Write note on: 13
- a) Accuracy assessments and data merging.
 - b) Multi image manipulation.
 - c) Image classification.
9. What is G.I.S.? Describe the components of G.I.S. and Add a note on raster and vector data formats. 13
- OR**
10. Write short note on: 13
- a) Classification of G.P.S.
 - b) G.P.S system elements and Signals.
 - c) Data input and editing.
11. What is Remote sensing? How this techniques is useful in civil engineering projects. Study. 14
- OR**
12. Write short note on: 14
- a) Water Resources management.
 - b) Land use planning.
 - c) Soil studies and Transportation planning.
