

# CBCS SCHEME



15ENG27

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## Second Semester B.Arch. Degree Examination, Feb./Mar. 2022 Site Surveying and Analysis

Time: 3 hrs.

Max. Marks: 100

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

### MODULE - 1

- 1 a. Define Surveying. Give the classification of Surveying. (08 Marks)
- b. Differentiate between Plane Surveying and Geodetic Surveying. (06 Marks)
- c. Explain Principles of Surveying. (06 Marks)

OR

- 2 a. What are the instruments used in Chain Surveying? Explain. (15 Marks)
- b. Briefly explain the different types of Chains. (05 Marks)

### MODULE - 2

- 3 a. With neat sketch, explain the methods of Erecting perpendiculars. (10 Marks)
- b. Explain Plane table Accessories with sketches. (10 Marks)

OR

- 4 a. Define the following terms : i) Back sight ii) Bench mark iii) Reduced level  
iv) Change point v) Foresight. (10 Marks)
- b. The following staff readings were observed successively with a level, the instrument was shifted after third, sixth and eighth readings.  
2.228, 1.606, 0.988, 2.090, 2.864, 1.262, 0.602, 1.982, 1.044, 2.684 meters.  
Enter the above readings on a page of a level book and calculate the RL of points. If the first reading was taken with a staff held on a bench mark of 432.384 meter. Use Rise and Fall method. (10 Marks)

### MODULE - 3

- 5 a. Explain with neat sketches, characteristics of Contours. (15 Marks)
- b. What are the uses of Contours Maps? (05 Marks)

OR

- 6 a. Explain methods of measuring horizontal and vertical angles using Theodolite. (15 Marks)
- b. Write a note on Total Station. (05 Marks)

### MODULE - 4

- 7 a. Explain how the analysis of site is done with respect to the following factors : i) Soil  
ii) Climate iii) Topography iv) Vegetation v) Influence on water bodies. (15 Marks)
- b. Explain Aerial Photogrammetry. (05 Marks)

OR

- 8 a. Explain Survey method instruments using geometry and one's own body. (15 Marks)
- b. Explain how to read the terrain. (05 Marks)

### MODULE - 5

- 9 Write the Conventional symbols used in maps any ten. (20 Marks)

OR

- 10 With a neat sketch, explain the Setting out of Centre line of a building. (20 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.