

# CBCS SCHEME

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15ENG2.7

## Second Semester B.Arch. Degree Examination, June/July 2019 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. What are the principles of surveying? Explain each. (08 Marks)  
b. Explain the classification of survey based on nature of field. (08 Marks)  
c. Define Shrunken scale. (04 Marks)

OR

- 2 a. What are the instruments used in chain survey. (04 Marks)  
b. What are the different methods of ranging? (08 Marks)  
c. A line has been measured by 20m chain. The chain was accurate before starting the work. After chaining 1200m, the chain was found to be 6cm too long. After chaining a total distance of 1800m, the chain was found to be 14cm too long. Find the true distance of line (08 Marks)

### Module-2

- 3 a. What are the different methods of setting out perpendicular line to given line? (10 Marks)  
b. Explain radiation method of plane tabling. (10 Marks)

OR

- 4 a. Define the following:  
i) Mean sea level  
ii) Line of collimation  
iii) Benchmark  
iv) Parallax  
v) Reduced level. (10 Marks)  
b. The following consecutive readings were taken with level and a 4m staff, on continuously sloping ground at a common interval of 30m:  
0.580 on A, 0.935, 1.95, 2.840, 3.665, 3.90, 0.96, 1.040, 1.700, 2.55, 3.85, 0.955, 1.780, 3.02 on B.  
The elevation of A is 520.4m. Enter the readings in a level book by line of collimation method and apply usual check. (10 Marks)

### Module-3

- 5 a. Define contour, what are the characteristics of contour. (10 Marks)  
b. What are the uses of contour? (10 Marks)

OR

- 6 a. Explain the repetition method of measuring the horizontal angle. (10 Marks)  
b. What are the temporary adjustments of theodolite explain each. (10 Marks)

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.

**Module-4**

- 7 a. Explain in detail the reconnaissance survey during observation of site. (10 Marks)  
b. What are the advantages of modern instrument? (10 Marks)

**OR**

- 8 Explain how the analysis of site is done with respect to the following factors:  
i) Topography  
ii) Site soil  
iii) Vegetation  
iv) Climate  
v) Water bodies. (20 Marks)

**Module-5**

- 9 What are the various notations to be indicated on a land survey drawing? Draw any 10 notations. (20 Marks)

**OR**

- 10 Sketch the plan of a small residence to suitable scale indicate all dimensions including centre line. (20 Marks)

