

CBCS Scheme

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15ENG2.7

Second Semester B.Arch. Degree Examination, June/July 2018

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 is surveying? Explain the classifications of surveying. (08 Marks)
- b. List the applications of surveying. (06 Marks)
- c. Explain the principles of surveying. (06 Marks)

OR

- 2 a. What is ranging? With a neat sketch, explain indirect ranging. (07 Marks)
- b. List the different types of chains used in surveying. Explain any one with a neat sketch. (06 Marks)
- c. A 20 m chain was found to be 15 cm too long after chaining a distance of 1500 m. It was found to be 20 cm too long at the end of days work after chaining a total distance of 3200 m. Find the true distance if the chain was correct before starting of work. (07 Marks)

Module-2

- 3 a. Explain any three methods of correcting perpendicular to a chain line. (09 Marks)
- b. Explain the temporary adjustment with respect to plane table surveying. (06 Marks)
- c. What are the advantages and disadvantages of plane table surveying? (05 Marks)

OR

- 4 a. Define the following terms used in leveling:
i) Bench mark ii) Fore sight iii) Elevation (06 Marks)
- b. Following were readings obtained from the leveling operation. Compute the levels of all the points. The instrument was shifted after 5th and 11th reading. RL of BM is 100 m. Apply the check.
0.505, 1.010, 1.735, 3.295, 3.775, 0.350, 1.300,
1.795, 2.575, 3.375, 3.895, 1.735, 0.635, 1.605. (14 Marks)

Module-3

- 5 a. What is a contour? What are the characteristics of a contour? (10 Marks)
- b. Explain any two indirect methods of locating contour. (10 Marks)

OR

- 6 a. Explain the temporary adjustments of a theodolite. (08 Marks)
- b. Explain repetition method of measuring horizontal angle using theodolites. (06 Marks)
- c. What are the uses of total station? (06 Marks)

Module-4

- 7 a. Explain in detail the reconnaissance survey during the observation of a site. (08 Marks)
- b. Explain aerial and terrestrial photogrammetry. (12 Marks)

OR

- 8 Explain how the analysis of a site is done with respect to the following factors:
- i) soil
 - ii) climate
 - iii) topography
 - iv) vegetation
 - v) influence of water bodies

(20 Marks)

Module-5

- 9 a. Explain any ten notations used in land survey drawings.
b. Explain briefly types of land survey maps.

(10 Marks)

(10 Marks)

OR

- 10 a. Explain the following terms used in setting out works:
i) Reference grids
ii) Horizontal and vertical controls
b. With a neat sketch briefly explain the setting out of center line of a building.

(08 Marks)

(12 Marks)

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