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14ENG2.7

Second Semester B.Arch. Degree Examination, June/July 2018
Site Surveying and Analysis

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer FIVE full questions, selecting at least ONE questions from each module.
2. Missing data may be suitably assumed.

Module – 1

- 1 a. Explain the two principles of surveying. (08 Marks)
 b. Define surveying and levelling. (04 Marks)
 c. The area of the plan of an old survey plotted to a scale of 10 meters to 1cm measures now as 100.2 cm². The plan is found to shrunk so that a line originally 10cm now measures 9.7cm only. Find: i) The shrunk scale ii) The true area of survey. (08 Marks)

OR

- 2 a. Describe Instruments for chaining. (10 Marks)
 b. Explain Direct and Indirect ranging. (10 Marks)

Module – 2

- 3 a. How do you erect perpendicular to a chain line from a point outside it? (09 Marks)
 b. Enumerate plane table accessories. (07 Marks)
 c. Explain two methods of orienting plane table. (04 Marks)

OR

- 4 a. Define the following terms in Levelling
 i) Station ii) H.I iii) B.S iv) F.S v) T.P. (10 Marks)
 b. What are the advantages of Rise and fall method over HI method of booking and reducing levels? (05 Marks)
 c. List instrumental and natural errors in leveling. (05 Marks)

Module – 3

- 5 a. Enumerate the characteristics of contours. (08 Marks)
 b. Explain Indirect method of contouring. (06 Marks)
 c. Describe uses of contour maps. (06 Marks)

OR

- 6 a. Define the following terms with respect to theodolite
 i) The line of sight ii) Transiting iii) Swinging the telescope
 iv) Changing face v) The axis of level tube. (10 Marks)
 b. How do you measure horizontal angle by repetition method in case of theodolite? Describe. (10 Marks)

Module – 4

- 7 You visit an undeveloped plot of area 1acre in an urban locality without any instrument. List out your surveying observations. (20 Marks)

OR

- 8 Explain the analysis of following natural factors on a site.
 a. Topography b. Hydrology c. Vegetation d. Microclimate (20 Marks)

Module – 5

- 9 a. Explain types of land survey drawings. (15 Marks)
 b. List ten standard symbols used in above drawings. (05 Marks)

OR

- 10 Draw detailed plan of a two bed room 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.