2E2305

2E2305
B. Tech. II Sem. (Main) Exam., May – 2018
CE -103 Basic Civil Engineering

Time: 3 Hours

Maximum Marks: 80
Min. Passing Marks: 28

Instructions to Candidates:

*Attempt any **five questions** including Question No. 1, which is Compulsory.*
*All questions carry **equal** marks. Schematic diagrams must be shown wherever*
necessary. Any data you feel missing suitably be assumed and stated clearly.
Units of quantities used/calculated must be stated clearly.
Use of following supporting material is permitted during examination.
(Mentioned in form No.205)

1. NIL _____   2. NIL _____

Q.1 Compulsory, Answers for each sub-question be given in about 25 words.   [8×2=16]

(a) What is the object of surveying?

(b) What is Representative fraction?

(c) Explain the indirect ranging?

(d) What is Magnetic declination?

(e) Explain the height of instrument?

(f) Define the floor space index?

(g) What is the main function of alumina in brick?

(h) What is the initial setting time for ordinary portland cement as per IS

specifications?

Q.2 (a) What is local attraction? How is it detected and eliminated? [8]

(b) The length of a line measured with a 20 meter chain was found to be 250 meters.

Calculate the true length of the line, if the chain was 10 cm too long? [4]

(c) Write a short note on total station. [4]

Q.3 (a) Explain the importance of a Civil Engineer in society? [8]

(b) What are the various uses of stones? [4]

(c) Mention the uses of cement. [4]

Q.4 (a) What should be the planning for proper sunlight and ventilation in a

building? [8]

(b) Explain the basic concept of R.C.C.? [4]

(c) Write the components of a building. [4]

Q.5 (a) Explain the various road traffic signs. [8]

(b) Define levelling. Explain spirit levelling. [4]

(c) Write a short note on building bye-laws? [4]

Q.6 (a) Explain ranging out survey lines. [8]

(b) What are the impacts of infrastructural development on economy of country? [4]

(c) What are the qualities of good bricks? [4]

Q.7 (a) Write the characteristics of various modes of transportation [8]

(b) What are the basic systems of notation of bearings? [4]

(c) Write a short note on road safety measures [4]

[8020]