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2E3208

Roll No. _____ Total No. of Pages: 2

2E3208

B. Tech. II - Sem. (Main / Back) Exam. - 2024

2FY3-09 Basic Civil Engineering

Time: 3 Hours **Maximum Marks: 70**

Instructions to Candidates:

Attempt all ten questions from Part A, five questions out of seven questions from Part B and three questions out of five questions from Part C.

Schematic diagrams must be shown wherever necessary. Any data you feel missing may 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

PART – A

[10×2=20]

(Answer should be given up to 25 words only)

All questions are compulsory

Q.1 Explain the term plinth area and carpet area.

Q.2 Write down the principles of surveying.

Q.3 Explain the term contour and contour maps.

Q.4 Differentiate between fore bearing and back bearing.

Q.5 What do you understand by floor space index?

Q.6 Define Building Byelaws.

Q.7 What is rain water harvesting?

Q.8 What do you mean by Ecosystem?

Q.9 What do you mean by 'Geodetic Surveying'?

Q.10 Define benchmark and reduced level.

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PART – B

[5×4=20]

(Analytical/Problem solving questions)

Attempt any five questions

Q.1 What is Site Plan? Which is the information to be included in a site plan?

Q.2 What is Water Pollution? What are its sources and effects?

Q.3 Explain the methods to control noise pollution.

Q.4 Draw any five traffic signs and explain the meaning of each.

Q.5 In a levelling work, sum of the back sight & fore sight have been found to be 4.055 & 6.155 respectively. If the reduced level of the starting station is 100m, then the reduced level (in m.) of the last station is?

Q.6 Discuss the preventions for noise pollution.

Q.7 Convert the following quadrantal bearings to whole circle bearing -

(i) N 39° 29'E

(ii) S 73° 15'W

(iii) S 49° 49'E

(iv) N 11° 19'W

(v) N 41° 15'W

PART – C

[3×10=30]

(Descriptive/Analytical/Problem Solving/Design Question)

Attempt any three questions

Q.1 Explain various tape corrections.

Q.2 Explain the types and characteristics of various modes of transportation.

Q.3 Draw and label the different parts of 'Dumpy Level'.

Q.4 The following readings are taken from a level –
0.655, 1.335, 2.555, 0.345, 0.920, 1.885, 2.955, 0.610, 1.795 & 2.855. Instrument is shifted after second, fourth & ninth reading. Compute the reduced level of all stations using rise and fall method. The first reading was taken on benchmark of 100m.

Q.5 Write short notes on the following -

(a) Nitrogen Cycle & Carbon Cycle

(b) Environmental Engineering
