2E3208

Roll No. _____ Total No. of Pages: 2

2E3208

B. Tech. II - Sem. (Main / Back) Exam., - 2023

2FY3 – 09 Basic Civil Engineering

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

Instructions to Candidates:

Attempt all ten questions from Part A. All five 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 Discuss about scope of civil engineering.

Q.2 Define levelling and any one objects of levelling.

Q.3 Discuss basic concept of R.C.C.

Q.4 Write down the different units of measurement.

Q.5 Discuss about various road traffic signs.

Q.6 Explain in brief the functional concepts of ecology.

Q.7 Discuss about classification of solid waste.

Q.8 Discuss about greenhouse effects.

Q.9 Explain about global warming & climate change.

Q.10 Discuss about energy flow in eco-systems.

PART – B

[5×4=20]

(Analytical/Problem solving questions)

Attempt all five questions

Q.1 Describe various modes of transportation.

Q.2 Explain types of buildings and building byelaws.

Q.3 Explain about rain water harvesting with a neat sketch.

Q.4 Describe surveying tap corrections and conventional systems.

Q.5 What are the various safety measures will you take during accidents in civil construction?

PART – C

[3×10=30]

(Descriptive/Analytical/Problem Solving/Design Questions)

Attempt any three questions

Q.1 Explain the importance of a Civil Engineer in society, also explain ranging out survey lines.

Q.2 Describe reuse and saving of water, also explain control of noise pollution and air pollution.

Q.3 Explain various components of buildings along with their functions.

Q.4 The following readings are taken from a level: 1.885, 2.770, 1.585, 1.985, 2.115, 1.660, 0.985, 1.110, 0.765, 0.885 and 1.005. Instrument is shifted once after sixth reading.

Enter the above reading in a level field book and compute the reduced level of all stations using height of instrument method. The first reading was taken when a staff was held at a bench mark of 101.500 meter.

Q.5 Write short note on -

(a) Types of tapes

(b) Properties of concrete

(c) Types of foundations

(d) Floor space index
