

5E1341

Roll No. \_\_\_\_\_

Total No. of Pages: 2

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B. Tech. V - Sem. (Back) Exam., February - 2023

ESC Civil Engineering

5CE3 – 01 Construction Technology & Equipments

Time: 2 Hours

Maximum Marks: 80  
Min. Passing Marks: 28

*Instructions to Candidates:*

*Attempt all five questions from Part A, four questions out of six questions from Part B and two questions out of three 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**

**(Answer should be given up to 25 words only)**

**[5×2=10]**

**All questions are compulsory**

Q.1 Describe the importance of construction management in national development.

Q.2 Define minimum cost point analysis with the help of graph.

Q.3 List items of works prone to severe accident.

Q.4 Describe the various resources required for construction.

Q.5 Give advantages of utilisation of construction equipments.

## PART - B

(Analytical/Problem solving questions)

[4×10=40]

Attempt any four questions

- Q.1 Define engineering economy. Explain principle of engineering economy.
- Q.2 Give difference between depreciation and depletion with example.
- Q.3 Write about causes of accidents on construction jobs.
- Q.4 Explain codal provisions for fire safety as per National Building Code of India.
- Q.5 Write about objectives and function of material management.
- Q.6 Write about selection criteria for earthwork equipments. Give neat sketch of tower cranes showing its parts.

## PART - C

(Descriptive/Analytical/Problem Solving/Design Questions)

[2×15=30]

Attempt any two questions

- Q.1 What do you understand by safety lacuna in Indian scenario? State codal requirements and important safety measures for demolition of buildings.
- Q.2 Define job layout. What are the purpose and factors affecting job layout. Prepare a typical layout for a three storeyed building block.
- Q.3 Give name of different types of earth moving equipments. Write about clamshells and its application with the help of neat sketch.