

TED (15/19) - 3011
(REVISION-2015/19)

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Reg.No.....
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**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER - 2024**

CONSTRUCTION MATERIALS AND ENGINEERING

(Maximum Marks:100)

(Time: 3 Hours)

PART - A

(Maximum Marks : 10)

Marks

- I. Answer **all** the questions in one or two sentences. Each question carries 2 marks.
1. List any two methods of curing of concrete.
 2. Define bulking of sand.
 3. List the various uses of rubber.
 4. Define composite masonry.
 5. Differentiate between lift and escalator (5 x 2 = 10)

PART - B

(Maximum Marks: 30)

- II Answer **any five** questions from the following. Each question carries 6 marks.
1. Show the structural classification of timber with neat sketch.
 2. Describe good characteristics of tiles.
 3. Discuss on the properties and uses of asbestos.
 4. Describe the characteristics and types of paint.
 5. Describe about the different types of bonds used in brick masonry.
 6. Enumerate the functions of foundation.
 7. Explain underpinning. (5 x 6 = 30)

PART - C

(Maximum Marks: 60)

(Answer **one full** question from each unit. Each full question carries 15 marks.)

UNIT - I

- III (a) .Describe the classification of stone. (7)
(b) Enumerate the characteristics of good bricks. (8)

OR

- IV (a) Explain the specific gravity test on cement. (7)
(b) Differentiate between Ferrous and nonferrous metal. (8)

UNIT – II

- V (a) Discuss on the ingredients of paint with their functions. (7)
(b) List the properties and uses of rubber. (8)

OR

- VI (a) Describe the uses of aluminum in building construction. (7)
(b) Explain different types of wood products. (8)

UNIT – III

- VII (a) List the advantages and disadvantages of hollow block masonry. (7)
(b) Write the advantageous of steel formwork. (8)

OR

- VIII (a) Describe general principles of brick masonry construction. (7)
(b) Describe the following (i) scaffolding, (ii) shoring. (8)

UNIT – IV

- IX (a) List the requirements of a good floor. Describe the different types of flooring material. (7)
(b) List the different types of arches based on the shape of construction. Draw the sketch of an Arch and explain all its components. (8)

OR

- X (a) Explain the classification of roofs. (7)
(b) Explain with sketches Revolving door and Bay window. (8)
