

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

N22-09627

Reg.No.....
Signature.....

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER - 2022**

CONSTRUCTION MATERIALS AND ENGINEERING

[Maximum marks: 100]

(Time: 3 Hours)

PART – A

Maximum marks : 10

I (Answer *all* the questions in one or two sentences. Each question carries 2 marks)

1. Write the functions of Alumina and Silica in Cement.
2. Distinguish between thermo plastics and thermo setting plastics.
3. Write down the uses of Aluminium Paint.
4. List different methods of damp proofing.
5. Write the requirements of a Good roof.

(5 x 2 = 10)

PART – B

Maximum marks : 30

II (Answer any *five* of the following questions. Each question carries 6 marks)

1. Explain the physical and chemical classification of stones.
2. Describe characteristics of Good bricks used for building purpose.
3. List the characteristics of Good paint.
4. Write the uses of Asphalt & Bitumen.
5. Discuss the advantages of Hollow block Masonry.
6. Explain different types of Pointing.
7. Write the functions of Foundation. Also list different types of foundations.

(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) Explain the properties and uses of Mild Steel.

(8)

(b) Define Workability. Explain Compaction Factor test to measure workability. (7)

OR

IV.(a) Explain Plasticizers and Super plasticizers. (9)

(b) Explain the Field tests of Cement. (6)

UNIT-II

V.(a) Write down the properties and uses of Asbestos. (8)

(b) Explain the process of Painting wood work. (7)

OR

VI. (a) Explain different types of Varnishes. (8)

(b) Write down the properties and uses of Enamel Paint. (7)

UNIT-III

VII.(a) Explain English bond and Flemish bond. Write the differences between them. (9)

(b) Explain defects in Plastering. (6)

OR

VIII.(a) Explain different methods of Underpinning. (9)

(b) Compare Brick masonry and Stone masonry. (6)

UNIT-IV

IX.(a) Write down the requirements of good floor. (8)

(b) Explain Couple roof and Couple close roof with neat sketches. (7)

OR

X. (a) List different classifications of Arches. (9)

(b) Write short notes on Sunshades and Sunbreakers. (6)
