

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE – NOVEMBER -2020.

CONSTRUCTION MATERIALS AND ENGINEERING

(Maximum Marks : 100)

[Time : 3 hours]

PART-A
(Maximum marks: 10)

Marks

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

1. List the four varieties of stone.
2. Identify four clay products.
3. Name the basic ingredients of an oil paint.
4. State the concept of pre-stressing in concrete.
5. Differentiate shallow foundation and deep foundation. (5x2=10)

PART - B
(Maximum Marks : 30)

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

1. State the characteristics of good bricks.
2. Explain the types of plastics.
3. Distinguish the plastering and pointing.
4. List the use of (i)Thermocole (ii)Cork (iii) Plaster of Paris
5. Compare brick masonry and stone masonry.
6. Explain the different types of windows.
7. Explain ceiling and its types. [5x6 =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 characteristics of good building stone. (8)
- (b) Illustrate the flow diagram of cement manufacturing by wet process. (5)

OR

- IV** (a) Explain the ingredients of cement with their functions. (8)
(b) Explain the methods of seasoning timber. (7)

UNIT- II

- V** (a) Explain the types and uses of plastics. (8)
(b) Explain the types of glass. (7)

OR

- VI** (a) Explain the properties and uses of rubber. (8)
(b) Explain Plywood and Veneers. (7)

UNIT- III

- VII** (a) Compare the English and Flemish bond in brick masonry. (8)
(b) Explain the causes of dampness. (7)

OR

- VIII** (a) Explain the requirements of good partition wall. (8)
(b) Explain Scaffolding and Shoring. (7)

UNIT – IV

- IX** (a) Explain the component parts of building and their functions. (8)
(b) State the component parts of stair. (7)

OR

- X** (a) Explain the functions of foundation. (8)
(b) Explain the different types of trusses for pitched roof. (7)
