

TED (15) -3011
(Revision- 2015)

N20-08090

Reg.No.....
Signature.

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

CONSTRUCTION MATERIALS AND ENGINEERING

(Maximum Marks: 75)

[Time: 2.15 hours]

PART–A

Marks

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

1. List the ingredients of ordinary Portland cement with their approximate proportion.
2. State any two uses of plaster of Paris.
3. What is prestressed concrete?
4. List any four types of foundation.
5. List any four types of arches. (3x2=6)

PART - B

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

1. Write the characteristics of a good building stone.
2. List the factors affecting workability of concrete.
3. What are the constituents of a paint?
4. Explain the limitations of using plastics.
5. Differentiate stone masonry from brick masonry.
6. What are the causes of dampness in a building?
7. Explain the requirements of a good floor.

[4x6 =24]

PART - C

(Answer **any of the three units** from the following. Each full question carries 15 marks)

UNIT I

- III** (a) Describe wet process of cement manufacture with the help of a flow chart. (7)
- (b) Explain the different methods of preservation of timber. (8)

OR

- IV** (a) Explain slump test for determining workability of concrete. (7)
(b) Write a note on any four types of cement. (8)

UNIT- II

- V** (a) Briefly explain the classification of plastics based on their behavior with respect to heating with examples. (7)
(b) Write a note on (a) Plywood (b) Bitumen (8)

OR

- VI** (a) Describe the properties and uses of asbestos. (7)
(b) Explain different types of glass used in construction. (8)

UNIT- III

- VII** (a) What is a partition wall? What are the requirements of a good partition wall? (7)
(b) Describe the effects of dampness on buildings. (8)

OR

- VIII** (a) What are the advantages of hollow block masonry? (7)
(b) (i) Define king closer and queen closer.
(ii) Compare English bond and Flemish bond. (8)

UNIT – IV

- IX** (a) Describe raft foundation with the help of a sketch. (7)
(b) Write a note on different types of floors. (8)

OR

- X** (a) What are the functions of a foundation? What are the different types of foundations? (7)
(b) Write a note on different types of windows. (8)
