

S<sub>3</sub>-CE

Neethu parameswaran M  
Lecturer in CE

TED (10)-3023

Reg. No. ....

(REVISION-2010)

Signature .....

THIRD SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/  
TECHNOLOGY—OCTOBER, 2011

CONSTRUCTION MATERIALS AND ENGINEERING

(Common for CE, AR, QS, EN and WR)

[Time : 3 hours

(Maximum marks : 100)

PART—A

Marks

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

- Why stone is laid along the 'Bed of stone' in masonry?
- What are the applications of 'ceramics' in building construction?
- Draw the cross-section of a wood and mark pith and heart wood.
- What is the meaning of the term 'masonry'?
- Write any two functions of foundation.

(5×2=10)

PART—B

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

- Explain the physical classification of rocks with examples.
- Explain the requirements for a good roofing tile.
- What are the main objectives of painting?
- What are the different uses of timber products in construction work?
- Define :
  - Header course
  - Stretch course
  - Bat
  - Queen closer.

6. What are the points to be kept in mind in the positioning of doors and windows?

7. Write short note on scaffolding and underpinning.

(5×6=30)

## PART—C

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

## UNIT—I

- III 1. Illustrate the process of blasting of rock. 8  
2. What are the main objectives of seasoning of timber? 7

OR

- IV 1. What are the qualities required for a good building stone and mention its uses? 8  
2. Distinguish between earthenware and stoneware. Mention its uses. 7

## UNIT—II

- V 1. Compare and contrast painting and varnishing. 8  
2. List the uses of abrasive and adhesive with examples. 7

OR

- VI 1. Write short note on plywood, veneers and fibre board. 8  
2. What are the ingredients of an oil paint? Mention the functions of each ingredient. 7

## UNIT—III

- VII 1. What are the causes of dampness in building? 8  
2. What are the advantages of steel form work over wooden form work? 7

OR

- VIII 1. Explain the methods of prevention of dampness in building? 8  
2. What are the functions of plastering and write commonly used mortars for plastering? 7

## UNIT—IV

- IX 1. Write the necessity and functions of foundation. 8  
2. Enumerate the different type of doors and their suitability. 7

OR

- X 1. What are the essential requirements of a good foundation? 8  
2. Define the term pitch, reeper, common rafter and eaves board with respect to the sloped roof. 7