### CT-301/CM/3rd Sem/2018/M

### CONSTRUCTION MATERIALS

Full Marks - 70

Time - Three hours

The figures in the margin indicate full marks for the questions.

## PART - A Thinner in paint (i)

- 1. Answer the following questions :  $2 \times 10 = 20$ 
  - (i) Describe the composition of brick earth.
  - (ii) Write short notes on Soundness of cement.
  - (iii) What do you mean by Knot in Timber?
  - (iv) Write down the engineering properties of plastics.
  - (v) Describe the characteristics of good paint.
  - (vi) What do you mean by Seasoning of timber?

- (vii) What do you mean by Efflorescence?
- (viii) Write down the example of artificial seasoning.
- (ix) Write down the composition of distemper.
- (x) Excess of which ingredient makes the brick dark blue in colour?
- 2. Write down the uses of following:  $1 \times 5=5$ 
  - (i) Thinner in paint
  - (ii) Calcium oxide in cement
  - (iii) Alumina in earth brick
  - (iv) Water in concrete mix
  - (v) Mortar in RCC

# PART - B

- 1. (i) Describe the various stages of manufacturing cement with proper diagram (if required).
  - (ii) Classify the cement based on source, application and constituents. 9+6=15

- 2. (i) What are the comparison between Cast Iron, Wrought Iron and Steel?
  - (ii) What are the characteristic of good varnish?
- 3. Discuss in brief the operation involved in the manufacture of ordinary Portland cement by dry process.

#### SURVEYING - I

Full Marks - 70

Pass Marks - 28

Time - Three hours

The figures in the margin indicate full marks for the questions.

## PART - A

- 1. Choose the correct answer from the given options: 1×5=5
  - (i) If the whole circle bearing of a line is 237° 45' 30", its quadrantal bearing is
  - (a) S 57° 45' 30" W
    - (b) S 47° 45' 30" E
    - (c) S 32° 14' 30" W
    - (d) S 32° 14' 30" E