

Total number of printed pages-3

53 (CE 304) BMAC

2018

**BUILDING MATERIAL
AND CONSTRUCTION**

Paper : CE 304

Full Marks : 100

Time : Three hours

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

Answer all questions.

1. Answer the following questions :

1×10=10

- (i) What are the methods of quarrying the stones ?
- (ii) State the various constituents of earth for good brick.
- (iii) What do you mean by M20 grade concrete ?

Contd.

- (iv) What do you mean by hydration of Portland Cement?
- (v) What is the difference between nominal mix and design mix?
- (vi) What are the composition of paints?
- (vii) What do you mean by spinning point of an arch?
- (viii) What are the uses of cavity wall in the building?
- (ix) What do you mean by ledgers in the scaffolding?
- (x) What is the use of purlins in the wooden roof?

2. Write down short notes on the following:
(draw the figure, if necessary)

6×5=30

- (i) Rotary Kiln
- (ii) Water-cement ratio in concrete
- (iii) Lime Cycle
- (iv) Preservative treatment of timber against of its decay
- (v) Component of an arch
- (vi) Scaffolding.

3. What are the harmful ingredients present in the earth that affect the qualities of brick? Describe the different processes of moulding of bricks.
3+7=10

4. What do you mean by initial setting time in concrete? Discuss in details the different constituents of portland cement along with their functions.
2+8=10

5. What are the causes of dampness in the RCC building? Also state the respective effects along with remedy for it.
4+6=10

6. Classify the different types of foundation used in the practice. Explain in details about any one of them.
5+10=15

7. Explain the different types of loads on the structure with figure.
15
