



17308

21415

3 Hours/100 Marks

Seat No.

| | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| | | | | | | | | |
|--|--|--|--|--|--|--|--|--|

-
- Instructions :** (1) **All** questions are **compulsory**.
(2) Illustrate your answers with **neat** sketches **wherever** necessary.
(3) Figures to the **right** indicate **full** marks.
(4) **Assume** suitable data, if **necessary**.
-

MARKS

1. A) Attempt **any six** questions.

12

- a) Define 'tread'.
- b) Enlist means of vertical communication.
- c) Define 'plastering'.
- d) State two purposes of termite proofing.
- e) Define 'workability of concrete'.
- f) What do you mean by steel fibre reinforced concrete ?
- g) Define 'scaffolding'.
- h) Suggest suitable size of door for
 - i) WC
 - ii) Living room.

B) Attempt **any two** questions :

8

- a) What is necessity of dewatering of foundation trenches ?
- b) What is DPC ? What is its necessity ?
- c) What are the various tools and plants used for excavation of foundation ?

P.T.O.

**MARKS**2. Attempt **any four** questions :**16**

- a) Explain the term timbering and strutting foundation trench.
- b) Draw flow diagram showing classification of foundation.
- c) Draw neat labelled sketch of 'raft foundation'.
- d) Draw neat labelled sketch of 'pile foundation'.
- e) Suggest suitable type of foundation for
 - i) Marshy land
 - ii) Black cotton soil.
- f) What are the requirements of good stone masonry ?

3. Attempt **any four** questions :**16**

- a) Explain expansion joint in SM with respect to purpose and procedure.
- b) Differentiate with respect to four points Brick Masonry and stone Masonry.
- c) Draw neat labelled sketch showing component parts of scaffolding.
- d) Draw neat labelled sketch of flush door.
- e) Explain procedure for replacing glass of existing sliding window.
- f) List various components of building and define 'composite structure'.

4. Attempt **any four** questions :**16**

- a) List four precautions to be taken while marking layout on ground.
- b) Define foundation and enlist two requirements of good foundation.



MARKS

- c) Mention suitability and draw neat labelled sketch of bifurcated staircase.
- d) Mention suitability of each type of floor finish with reason
 - i) Chequered tiles
 - ii) Caddappa.
- e) Draw neat labelled sketch of lean to roof.
- f) Explain concrete floor w.r.t. construction and suitability.

5. Attempt **any four** questions :

16

- a) Explain procedure of repainting after repairs.
- b) Explain pointing with respect to necessity, types and procedure.
- c) Enlist types of painting with suitability of each type.
- d) Draw neat labelled sketch of formwork for beam.
- e) Explain waterproofing with respect to necessity and importance.
- f) Suggest suitable maintenance procedure for the following :
 - i) leakage in slab
 - ii) ant attack in door frame
 - iii) cracks in wall
 - iv) settlement of building.

**MARKS****16**

6. Attempt **any two** questions :

- a) Define prefabricated structures. Mention any four advantages and disadvantages.
 - b) Explain Tremix concrete method w.r.t.
 - i) Definition
 - ii) Procedure
 - iii) Application
 - iv) Equipments used.
 - c)
 - i) Enlist soil reinforcing techniques and explain any one.
 - ii) 'Roller compacted concrete' is a special type of concrete. Justify the statement.
-