

22304

21819

3 Hours / 70 Marks

Seat No.

--	--	--	--	--	--	--	--

- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following: 10**
- State any two building components with their function.
 - State any two purposes of foundation.
 - Describe the terms facing and hearting in stone masonry.
 - Define the terms Newel post and Headroom in vertical Communication.
 - State the functions of window sill and lintel.
 - Define job layout and site clearance.
 - State the classification of building as per type of construction.
- 2. Attempt any THREE of the following: 12**
- Differentiate between load bearing structure and framed structure (any four points).
 - State any four precautions to be taken while marking layout on ground.
 - Describe any eight characteristics of good stone masonry.
 - Draw a neat sketch of fully panelled door in elevation for opening size 1200 × 2100 mm.

P.T.O.

- 3. Attempt any THREE of the following:** **12**
- a) Draw a neat sketch of scaffolding for stone masonry construction work.
 - b) Explain four defects in plastering with neat sketch.
 - c) Explain the types of probable causes of non structural cracks observed in building construction along with the preventive measures for any one of crack.
 - d) Describe the procedure of water proofing used in slabs stating its importance in building construction.
- 4. Attempt any THREE of the following:** **12**
- a) Define substructure and superstructure. Give their components also.
 - b) Explain the procedure of preparation of surface along with the method of application of color wash paint on the wall.
 - c) Suggest precautions to be taken during demolition.
 - d) State any four precautions to be taken while plastering.
 - e) Differentiate between brick masonry and stone masonry.
- 5. Attempt any TWO of the following:** **12**
- a) Suggest relevant type of foundation with sketch for educational building on black cotton soil with justification
 - b) Define shoring. Enlist type of shoring. Explain any one type with neat sketch.
 - c) Suggest suitable type of window for the following buildings:
 - (i) Cinema hall
 - (ii) School
 - (iii) Enclosed staircase
 - (iv) Bathroom
 - (v) Cement godown
 - (vi) Sloping roof.

22304

[3]

Marks

6. Attempt any TWO of the following:

12

- a) Explain raft foundation with neat sketch and explain its suitability
 - b) Explain the requirements of good form work with names and material proposed for beam of size 300×450 mm with neat labelled sketch.
 - c) Draw plan and elevation of Dog-legged staircase for floor to floor height of 3.0 m.
-