



17308

16172

3 Hours / 100 Marks

Seat No.

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- 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.*
 - (5) *Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.*

Marks

1. A) Attempt **any six** of the following : **12**
- i) Define Neeru finishing.
 - ii) Define :
 - i) Weathering
 - ii) Through stone.
 - iii) Give four components of door frame.
 - iv) What is purpose of winder step ?
 - v) List any four forms of stairs.
 - vi) State any four characteristics of good paint.
 - vii) Define term :
 - i) Guniting
 - ii) Grouting.
 - viii) Name any four accessories required for prestressing work.
- B) Attempt **any two** of the following : **8**
- i) State the suitability of load bearing and framed structure.
 - ii) What is necessity of dewatering of foundation trenches ?
 - iii) Explain timbering and strutting in excavation.
2. Attempt **any four** of the following. **16**
- a) Discuss general rules of earthquake resistant building.
 - b) Explain the function of the following components of superstructure :
 - i) Wall
 - ii) Sill
 - iii) Lintel
 - iv) Parapet.
 - c) Explain timbering and strutting for foundation trench.
 - d) What are requirements of good foundation ?
 - e) Draw neat sketch of under-reamed pile foundation and state situation under which it is adopted.
 - f) What are the requirements of good stone masonry ?

P.T.O.



3. Attempt **any four** of the following. 16
- a) Explain English bond and Flemish bond in brickwork with neat sketches.
 - b) State four types of doors used in residential buildings and draw sketches of any two types.
 - c) Explain procedure for replacing glass of existing sliding window.
 - d) Mention suitability and draw neat labelled sketch of bifurcated staircase.
 - e) State any four advantages of steel roof trusses.
 - f) Explain king post truss and queen post truss with suitability of each.
4. Attempt **any four** of the following. 16
- a) Describe the procedure of laying shahabad stone floor.
 - b) Explain any two defects in plastering with its neat sketch.
 - c) Discuss in detail the procedure of pointing.
 - d) Differentiate between white wash and distemper.
 - e) Describe any two causes of formation of cracks in walls and measures adopted to prevent them.
 - f) Explain water proofing with respect to necessity and importance.
5. Attempt **any four** of the following. 16
- a) Draw the sketches of formwork for column and beam.
 - b) Define pre-fabricated structures. Mention any four advantages and disadvantages of pre-fabrication.
 - c) State the precautions to be taken while constructing a foundation in black cotton soil.
 - d) What is roller compacted concrete ? State the properties and uses of roller compacted concrete.
 - e) Explain meaning and application of tremix concreting.
 - f) Describe properties and uses of steel fibre reinforced concrete.
6. Attempt **any two** of the following. 16
- a) Explain with sketch :
 - i) Friction piles
 - ii) End bearing piles.
 - b) Make the comparison between brick masonry and stone masonry.
 - c) Explain pre-tensioning and post-tensioning methods of prestressed concrete.
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