

Total No. of Questions : 4]

SEAT No. :

**P1565**

[Total No. of Pages : 2

**[4962] - 1001**

**F.Y. B.Arch.**

**BUILDING TECHNOLOGY & MATERIALS - I**

**(2015 Pattern) (Semester - I)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates :-*

- 1) Answers to Section I, to be given on drawing sheets only.*
- 2) Answers to Section II to be given on answer sheets only.*
- 3) All questions are compulsory.*
- 4) Draw neat sketches wherever necessary.*
- 5) Figures to the right of each question indicate full marks.*
- 6) Assume suitable data wherever necessary.*

**SECTION - I**

**Q1) a)** Draw at scale of 1:10; plan, section, elevation of "Squared Rubble Masonary" Stop end wall of height 1.2 meters, length 2.5 meters and depth of foundation 0.6 meters. **[20]**

OR

b) Draw at scale of 1:10 - plans section. Elevation of 350 thick stop end wall in double flemish bond of height up to 10 courses length 1.8 meters and depth of foundation 0.6 meters.

**Q2)** Draw neat sketches (Any three) (on drawing sheet only) **[15]**

- a) Draw plans of foundation of 350 thick detached pier up to three courses.
- b) Draw neat sketch of segmental arch showing its components.
- c) Draw neat sketch of , alternate courses of "Cross" - junction in 230 thick brick wall.
- d) Draw neat sketch of cross section of internal wall.
- e) Draw neat sketches of Any three tools used for excavation.

**P.T.O.**

## SECTION - II

**Q3)** Explain in detail with sketches (Any two) **[20]**

- a) What is coping? Draw sketches of four types of coping.
- b) Plan of alternate courses of Attached pier in
  - i) Wall of one brick thick (230 thick)
  - ii) Wall of one and half brick thick (350 thick) in english bond.
- c) Explain with sketches Earthquake resistance measures for Load bearing construction.

**Q4)** Write short notes on (Any three) **[15]**

- a) Advantages of brick as construction material.
- b) Classification of rocks.
- c) Different types of soil.
- d) Qualities of good stone.
- e) Three types of stone dressing.

