

W -.560

Total No. of Pages : 2

Seat No.	
-------------	--

**S.E. (CIVIL) (Semester - IV) Examination, May - 2014**  
**BUILDING DESIGN (New Course)**

**Sub. Code : 43589**

**Day and Date : Thursday 22-05-2014**

**Time : 9.00 a.m. to 1.00 p.m.**

**Total Marks : 100**

- Instructions :**
- 1) Q. No. 1 is compulsory.
  - 2) Attempt any three questions from section II.
  - 3) Assume suitable data if necessary.

**SECTION - I**

**Q1)** Design a Three storied Apartment to be constructed on a plot of 40 m × 30 m, The details are as follows:

- i) Four flats each of B.U.A area of 90 m<sup>2</sup> on each floor.
- ii) Divide the following units keeping principles of planning in mind for each flat Living Room, Kitchen, Dining, Master bedroom with attached toilet, children bedroom, common toilet circulation spaces etc.
- iii) A central staircase of min 1.20m width.
- iv) Suitable side margins as per for byelaws.

\* A deviation of  $\pm 10\%$  in B.U.A is allowable.

Draw to a suitable scale :

- a) Typical floor plan [25]
- b) Front Elevation [8]
- c) Block plan with Area [10]
- d) Electrical fittings in any one flat [7]

**P.T.O.**

**SECTION - II**

- Q2) a)** What do you understand by Low cost housing. Name some materials and methods. [8]
- b)** Explain all the principles of planning you will consider for a residential Building. [8]
- Q3) a)** Explain different types of sanitary fittings in plumbing. Draw sketches with their standard dimensions. [8]
- b)** What characteristics should fire resisting building materials possess? Justify preference of R.CC / stone / bricks / steel over the other w.r.t. use in bldg construction. [8]
- Q4) a)** Explain the difference between plastering and pointing. Explain the different types of pointing with neat sketches? [8]
- b)** What are the characteristics of an ideal paint? Explain any constituent of paint. [8]
- Q5) a)** What do you mean by sound insulation? What are the advantages of sound insulation? What are the Acceptable indoor noise levels for various buildings. [8]
- b)** What are the systems of ventilation? Differentiate between artificial and natural ventilation. [8]
- Q6) Write short notes on any three:** [18]
- Extraction system and A.C system of ventilation
  - Significance Sun diagram
  - Miscellaneous finishes - POP, sand blasting techniques, wall paper
  - Tile cladding, skirting, dado work with various materials