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**SUBJECT CODE NO: E-251**  
**FACULTY OF ENGINEERING AND TECHNOLOGY**  
**T.E.(CIVIL) Examination Nov/Dec 2017**  
**Building Planning & Design**  
**(REVISED)**

[Time: 3 Hours]

[Max.Marks:80]

Please check whether you have got the right question paper.

- N.B
- i. Question no. 1 and question no. 6 are compulsory.
  - ii. Solve any two questions from question no. 2 to 5 and any one from question no.7 to 8.
  - iii. Figures to right indicate the maximum marks.

**SECTION- A**

- Q.1 Attempt any FIVE. 10
- a) Enlist the different types of architectural composition.
  - b) Define circulation. How it is achieved.
  - c) Define FAR. How the different road width affects the maximum permissible limits of FAR.
  - d) Differentiate between detached house and semi-detached house.
  - e) What are the thumb rules for selecting the rise and tread?
  - f) Draw a net sketch of Nahani trap.
  - g) Enlist the different types of buildings.
- Q.2
- a) Enlist the different principles of architectural composition and explain Contrast and Rhythm. 07
  - b) Explain in detail different climatic zones of India. 08
- Q.3
- a) What are the objectives of building byelaws? 08
  - b) Explain in detail factors affecting the selection of site for residential building. 07
- Q.4
- a) Explain with neat sketch how to prepare a plan. 08
  - b) Explain in detail testing of drains and maintenance of drains. 07
- Q.5 Write a short note on (any three): 15
- a) Sun shading devices
  - b) Byelaws for height limitation
  - c) Privacy as a principle of building planning
  - d) Drafting material and its utilization

## SECTION-B

- Q.6 Plan and design a residential building for a family in new Aurangabad town using the following data.
- i) plot size 12m × 17m
  - ii) Scale 1:50
  - iii) plinth height 0.6m
  - iv) Required components: Ent Verandah, Living Room, Bedroom, master bed, separate W.C, bath, kitchen –cum-dining room and stair case- doglegged. Draw:
    - a) Working plan 05
    - b) Locate the position of columns in plan 03
    - c) Elevation 04
    - d) Section through staircase 06
    - e) Schedule of opening 03
    - f) Area statement (block plan calculations) 04
- Q.7 By assuming suitable data and standard norms list-out the requirement and draw a line plan of Primary school building for 320 no. Of students. 15
- Q.8
- a) Explain with neat sketch two point perspectives. 08
  - b) Write a short note on materials used in landscape design. 07