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SEAT No. :

PD-4042

[Total No. of Pages : 2

[6402]-1

S.E. (Civil Engineering)

**BUILDING TECHNOLOGY AND ARCHITECTURAL
PLANNING**

(2019 Pattern) (Semester - III) (201001)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) Attempt Q.1 or Q.2, Q.3 or Q.4. Q.5. or Q.6 Q.7 or Q.8.
- 2) Figures to the right indicate full marks.
- 3) Draw neat figures wherever necessary.
- 4) Assume Suitable data if necessary.
- 5) Use of scientific calculator is allowed.

- Q1)** a) Illustrate the procedure of Door Installation. [6]
b) What are basic functional requirement of flooring? [6]
c) Enlist any four types of roofing materials and explain galvanized iron sheets. [6]

OR

- Q2)** a) What are the functions of arches and lintels? [6]
b) Enlist any four types of floor finishes and explain mosaic flooring. [6]
c) Enlist any six types of doors and explain paneled door with neat sketch. [6]

- Q3)** a) List out the documents and drawings required for submitting plan to the plan Sanctioning authorities. [6]
b) Explain steps for design of dog legged staircase. [6]
c) Write a short note on green building certification process. [5]

OR

- Q4)** a) Mention Functional requirements and dimensions of Residential Buildings of Row house and Apartment. [6]
b) What do you understand by Leadership in Energy and Environmental Design (LEED)? [5]
c) Explain with a suitable example, design of dog legged staircase. [6]

- Q5) a)** Draw a line plan of School building. [6]
b) It is proposed to construct a bungalow with the following are the requirements for accommodation [12]

- i) A drawing hall - 15m^2
- ii) Living room - 20m^2
- iii) Kitchen cum dining room - 15m^2
- iv) Guest bedroom - 15m^2
- v) Children's room - 20m^2
- vi) Master bedroom - 20m^2

Provide adequate verandahs, passages, sanitary units, staircase etc. The structure may be planned as G +1 RCC framed structure. Draw detailed ground floor plan.

OR

- Q6) a)** Draw a line plan for a single storeyed hostel building. [12]

- i) Number of students - 100
- ii) 20 rooms are two seated with 7.5 sq.m. area per student and 10 single seated with 9.5 sq.m area
- iii) Recreation room approx. area - 45 m^2
- iv) Gymnasium approx. area - 20m^2
- v) Office space approx. area - 12m^2
- vi) Store room approx. area - 10m^2
- vii) Verandah, passage, staircase, WC, bath, etc. of suitable size should be provided

- b) Enlist design elements of auditorium building. [6]

- Q7) a)** Explain Necessity of town planning. [6]

- b) Write note on: acoustical defects. [6]

- c) Write a note on 7/12 extract, its importance. [5]

OR

- Q8) a)** What is Sabine's formula, sound absorbents, planning for good acoustics? [6]

- b) Explain 1 pipe and 2 pipe plumbing system with sketches. [6]

- c) Write a short note: RERA act. [5]

