

Total No. of Questions : 8]

PE4235

SEAT No. :

[Total No. of Pages : 3

[6582]-6

S.E. (Civil)

**BUILDING TECHNOLOGY AND ARCHITECTURAL PLANNING
(2019 Pattern) (Semester - III) (201001) (Theory)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Figures to the right indicates full marks.
- 3) Neat Diagram must be drawn wherever necessary.
- 4) Assume Suitable data if necessary.
- 5) Use of scientific calculator is allowed.

- Q1)** a) Explain paneled door with a neat labelled sketch. [6]
b) State the various requirements of good roof. [6]
c) Explain the defects in plastering. [5]

OR

- Q2)** a) Enlist various types of fixtures for door and explain anyone with a neat sketch. [6]
b) Write a short note on protective coatings, its necessity and types. [6]
c) Explain in brief, the following: [5]
i) Timber Lintel
ii) Stone lintel

- Q3)** a) A ground floor line plan is to be proposed to a client. Following are requirements [13]
Living room - 25 sq. mt
Kitchen plus Dining - 15 sq. mt
Bedroom - 20 sq. mt
Master Bedroom - 20 sq. mt
Common Bathroom - 2.5 sq. mt
Common WC - 1.2 sq. mt
Assume Circulation width, staircase, etc. as per the bye laws.
Also mention opening schedule. Assume suitable scale and suitable data if necessary.
- b) Write a short note on Green Building certification in India. [5]

OR

P.T.O.

- Q4) a)** Write a note on rating system for green building. [6]
- b)** Draw a neat labeled sketch of following stairs, [6]
- Spiral stair
 - Half turn geometrical stair
 - Three-Quarter-Turn stair
- c)** What are the salient features of Green Building? [6]

- Q5) a)** Draw a line plan of the Post Office using suitable scale. [13]
- Entrance and circulation area - 30 sq. mt
Counters - Height 1.6 m, Width 0.7m
Post Master Cabin - 15 sq. mt
Staff working area - 30 sq. mt
Post Sorting area - 30 sq. mt
Sanitary block for staffs - 7.5 sq. mt
Custody area - 10 sq. mt
Speed Post section - 12 sq. mt
Cash transaction room - 12 sq. mt
- b)** Explain in brief functional components and dimensions of Cinema Hall. [5]

OR

- Q6) a)** It is proposed to construct a bungalow for a Superintendent of Police. [13]
- The following are the requirements for accommodation :
- A drawing hall - 20 m²
 - Living room - 30 m²
 - Kitchen cum dining room - 20 m²
 - Guest bedroom - 20 m²
 - Children's room - 20 m²
 - Master bedroom - 20 m²
- Provide adequate verandahs, passages, sanitary units, staircase etc.
 - The structure may be planned as G + 1 RCC framed structure.
 - Draw detailed "ground floor plan" and give schedule of openings and minimum three construction notes.
- b)** What are the salient features of engineering student's hostel building? [5]

- Q7) a) What do you understand by Master Plan? [5]**
- b) Write a short note on TDR explaining eligibility criteria and documents required for the same. [6]
- c) What are Acoustic Defects? Explain any two in short. [6]

OR

- Q8) a) Write a short note on 7/12 abstract, it's important and meaning of every term on it? [6]**
- b) Explain with sketches, wind and stack effect. [6]
- c) Write a short note on land use zoning and mention the requirements of each. [5]