QP Code: 10348QP

Seat No.	

Total No. of Pages: 2

Winter Examination Oct/Nov 2023

Subject Name: B.Tech. CBCS_63348/79116/79404 - Building Design and Drawing_01.01.2024_02.30 PM To 05.30 PM

Subject Code: 79116

Day and Date: - Monday, 01-01-2024 **Total Marks: 70**
Time: - 02:30 pm to 05:30 pm

Instructions.:
1) Figures to the right indicate full marks
2) Assume suitable data wherever necessary and mention it boldly
Special Instruction.:
1) Attempt any two questions from Q. No. 1, 3 and 4. 2) Q.No. 2 is Compulsory 3) Attempt any three from Q. No. 5,6,7 & 8.

Q.1. **a) What do you mean by orientation of a building? State the factors affecting orientation of a building.[7]** **[7]**

OR

b) Expalin Site Plan in detail. [7]

Q.2. **It is proposed to construct G+1 residential building on a plot size 16m X 24m. A 16 m side of the plot facing 6 m wide road on eastern side. Following accomodation is to be provided:** **[21]**
- **Entrance & Porch - 10 to 15 Sq.m**
- **Living- 15 to 20 Sq.m**
- **Kitchen -10 to 12 Sq.m**
- **Dining -10 to 12 Sq.m**
- **Master Bed (With attached toilet) -15 to 20 Sq.m**
- **Children Bed- 12 to 14 Sq.m**
- **Guest Bed With attached toilet - 13 Sq.m**
- **Staircase**
- **Sanitary block as per requirement**

Draw to a suitable scale the following: i) Detailed Building Plans for Ground floor and First Floor [18]

ii) Furniture layout of Living Hall [3]

Q.3. **Write a short note on any One :** **[7]**
a) Explain importance of repairs and maintenance of a residential building. [7]
b) Explain concept of 'Green Building' [7]

Q.4. **a) Explain significance of sun path diagram and wind diagram. [7]** **[7]**

OR

b) What do you understand by low cost housing? Enlist some materials and methods. [7]

Q.5. **a) What are the functions of traps? Desribe P, Q and S traps with sketches. [6]** **[12]**
b) Explain the various systems of wiring. [6]

10029

Q.6. **a) What do you mean by Ventilation? Explain systems of ventilation. [6]** **[12]**
b) What do you mean by sound insulation? State advantages and disadvantages of sound insulation. [6]

Q.7. **a) State the purpose of plaster. What are the points which will you check for the plastering activity? [6]** **[11]**
b) Explain the various types of flooring and skirting materials & state their application at different locations in residential building. [5]

Q.8. **Write a short note on any two** **[11]**
a) Fire resisting building materials.[6]
b) Characteristics of acoustic materials. [5]
c) POP & Gypsum plaster [5]

10629