



CBCS SCHEME

15CV743

Seventh Semester B.E. Degree Examination, July/August 2021

Design Concept of Building Services

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions.

1.
 - a. Mention the water requirement for different types of buildings and simple methods of removal of impurities. (08 Marks)
 - b. What is rain water harvesting? Explain roof top rain water harvesting. (08 Marks)
2.
 - a. Explain the types, sizes of pipes and special in multistoried building. (08 Marks)
 - b. Explain in brief about solid waste collection and removal from the building. (08 Marks)
3.
 - a. Define thermal conductivity and explain conductivity of building materials. (08 Marks)
 - b. Define ventilation and explain different types of ventilation system in the buildings. (08 Marks)
4.
 - a. What are the principles of air conditioning and essential of air conditioning system? (08 Marks)
 - b. Describe different systems of ducting and distribution of air conditioning. (08 Marks)
5.
 - a. What do you mean electrical systems and basic of electricity? (06 Marks)
 - b. Explain and draw neat sketches of single phase and three phase supply. (10 Marks)
6.
 - a. Explain the planning of electrical wiring and installation in a building. (08 Marks)
 - b. List the types of fire fighting equipments and different methods of fighting fire. (08 Marks)
7. Prepare the plumbing layout for a residential building shown in Fig.Q7 with suitable notations. (16 Marks)

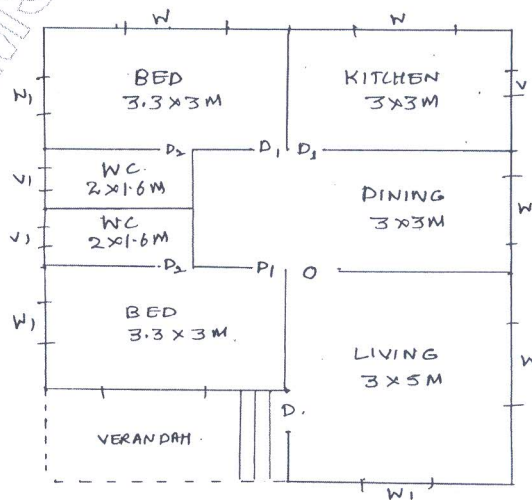
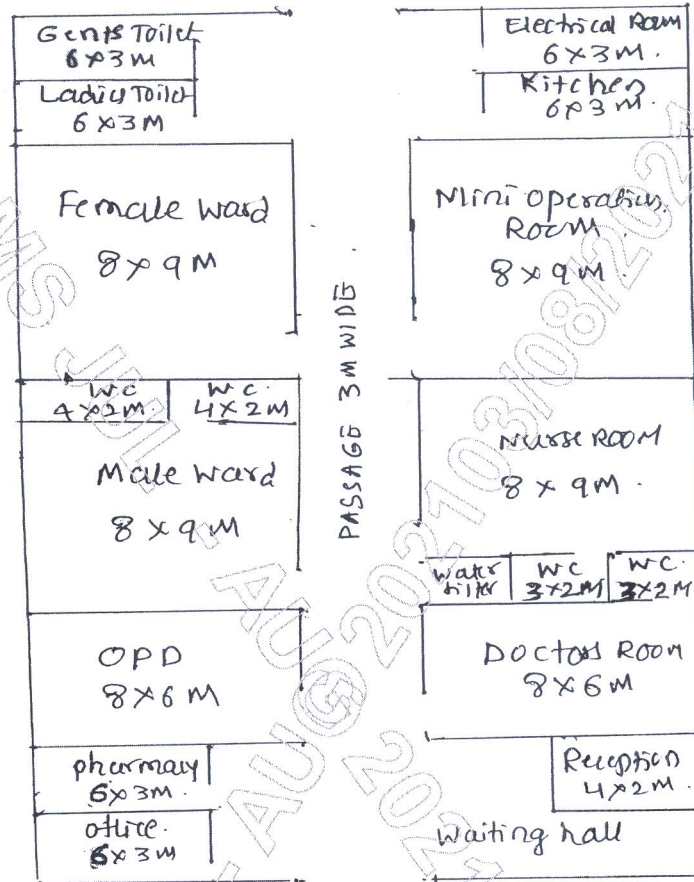


Fig.Q7

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.

- 8 Prepare the fire fighting layout for a hospital building shown in the Fig.Q8 with suitable notations.



MAIN ENTRANCE

Fig.Q8

(16 Marks)

- 9 a. List and explain the engineering services in a building. (08 Marks)
 b. Mention the different types of pumps with their advantages and disadvantages. (08 Marks)
- 10 a. Mention the classification, types, sizes and uses of lifts and escalators. (08 Marks)
 b. Explain the social features required for physically handicapped and elder one. (08 Marks)
