

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Regular End Semester Examination – Summer 2022

Course: B. Tech.

Branch : Civil Engineering

Semester: VI

Subject Code & Name: BTCVC606 Building Planning & Design

Max Marks: 60

Date: 26/08/2022

Duration: 5 Hrs.

Instructions to the Students:

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

(Level/CO) Marks

Q. 1 Solve Any Two of the following.

- A) Explain various planning principles that relates to building services. (CO1) 6
- B) Explain the green building concept. (CO1) 6
- C) Draw plan of a residential building as per sun wind diagram. (CO1) 6

Q.2 Solve Any Two of the following.

- A) Explain the standard dimensions of building components as per NBC. (CO1) 6
- B) Describe the process of obtaining building permission. (CO1) 6
- C) Draw a building plan as per the NBC guidelines. (CO1) 6

Q. 3 Solve Any Two of the following.

- A) Describe the traditional methods of building construction. (CO2) 6
- B) Discuss various low cost housing materials. (CO2) 6
- C) Draw single-line drainage plan of a residential building. (CO2) 6

Q.4 Solve Any Two of the following.

- A) Draw single-line electrification plan of a residential building. (CO2) 6
- B) Discuss various component parts of plumbing system. (CO2) 6
- C) Explain fire resistance system in detail. (CO2) 6

Q. 5 Solve Any Two of the following.

- A) Draw single-line furniture plan of a residential building. (CO3) 6
- B) Discuss the functional requirements of ventilation. (CO3) 6
- C) Explain Sabine's formula and discuss various materials to be used for better acoustics in a building. (CO3) 6

*** End ***