

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 *****