

11N506

Roll No. _____

Total No of Pages: **2****11N506****B. Tech. I - Sem. (New Scheme) Main Exam., July – 2022
1FY2 – 06 Introduction to Built Environment (Civil)
Common to all Branches****Time: 2 Hours****Maximum Marks: 70****Min. Passing Marks:****Instructions to Candidates:**

Part – A: Short answer questions (up to 25 words) 5 × 3 marks = 15 marks. Candidates have to answer 5 questions out of 10.

Part – B: Analytical/Problem Solving questions 3 × 5 marks = 15 marks. Candidates have to answer 3 questions out of 7.

Part – C: Descriptive/Analytical/Problem Solving questions 2 × 20 marks = 40 marks. Candidates have to answer 2 questions out of 5.

Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

*Use of following supporting material is permitted during examination.
(Mentioned in form No. 205)*

1. NIL2. NIL**PART– A**

- Q.1 Write importance of built environment.
Q.2 Define Internet of Thing towards built environment.
Q.3 What are the benefits of irrigation?
Q.4 What are the elements of built environment?
Q.5 What is meant by seasoning of timber?
Q.6 What are the different types of brick masonry?

- Q.7 What do you understand by energy flow in eco-system?
Q.8 What are the ingredients of concrete and their functions?
Q.9 Write objectives of building planning.
Q.10 What are the benefits of green building?

PART- B

- Q.1 Write role of transportation with respect to socio – economic conditions.
Q.2 Explain building components and their basic requirements.
Q.3 Describe Internet of Things for the smart built environment.
Q.4 Explain various types of foundation with sketches.
Q.5 Describe various types of buildings. Also write concept of sunlight and ventilation.
Q.6 Explain functional concepts of Ecology.
Q.7 What are the causes of water pollution? Explain reuse and saving of water.

PART-C

- Q.1 What is the modern world approach towards Built Environment? Explain in detail by giving examples.
Q.2 Describe civil engineering divisions and their roles in built environment.
Q.3 Explain various steps of building planning. Also discuss building bye-laws and their role in controlled development of built-environment.
Q.4 What do you understand by building physics? Discuss thermal and lighting aspects of building.
Q.5 Write short notes on any four -
(a) 3D Printed Building
(b) Road traffic signs
(c) Rain-water harvesting
(d) Hydrological cycle
(e) Field-water storage structures
(f) Conventional constructions