

Roll No.

TCE-101

**B. TECH. (FIRST SEMESTER)
END SEMESTER EXAMINATION, Jan., 2023**

BASIC CIVIL ENGINEERING

Time : Three Hours

Maximum Marks : 100

Note : (i) All questions are compulsory.

(ii) Answer any *two* sub-questions among (a), (b) and (c) in each main question.

(iii) Total marks in each main question are twenty.

(iv) Each sub-question carries 10 marks.

1. (a) Elaborate the contribution of Ancient India in science and technology. (CO1)
(b) Write in detail about any one civil engineering marvel in India. (CO1)
(c) Give the detailed classification of branches of civil engineering. (CO1)
2. (a) Define surveying and discuss the objects of surveying. (CO2)
(b) Distinguish between plane surveying and geodetic surveying. (CO2)
(c) Explain the working of Global Positioning System. (CO2)
3. (a) Draw and label the internal structure of timber. What are the various methods of seasoning of timber? (CO3)

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(2)

- (b) Discuss the various field test of bricks. What are the characteristics of good bricks ? (CO3)
- (c) Discuss the classification of aggregates based on their particle size. What are the various tests mentioned in IS codes for testing of aggregates ? (CO3)
4. (a) Classify the buildings based upon occupancy as per national building code of India. (CO4)
- (b) Mention the factors governing the planning of building. (CO4)
- (c) Enlist the functions of foundation. Discuss the criteria for selection of suitable foundation. (CO4)
5. (a) Enlist some applications of transportation engineering around you and how it is useful in your daily routine. (CO5)
- (b) Write down some water quality parameters along with the standard values assigned to them. If not what will be its impact on human ? (CO5)
- (c) Draw a flow chart to explain how a raw water is treated before it is supplied to the society. (CO5)