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Roll No.

TCE-201

B. TECH. (SECOND SEMESTER) END SEMESTER

EXAMINATION, June, 2023

(For Physics Group Only)

BASICS OF 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) Write down short notes on the following :
(CO1)

(i) Towers

(ii) Silos

(iii) Naval Structures

(iv) Inland Waterways

(v) Cable/Rope ways

P. T. O.

(2)•

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- (b) What is Civil Engineering ? Explain any *five* broad disciplines in civil engineering with suitable examples. (CO1)
- (c) What is the impact of Civil Engineering in the economy of a nation ? (CO1)
2. (a) Convert the following bearings : (CO2)
- (i) $135^{\circ} 56'$
 - (ii) $270^{\circ} 24'$
 - (iii) S 90° W
 - (iv) N $33^{\circ} 54'$ W
 - (v) 270°
- (b) What does GIS stand for ? What are major components of GIS ? (CO2)
- (c) What does GPS stand for ? Write down its application in modern world. (CO2)
3. (a) What is R. C. C. ? Briefly write on desirable properties and uses of concrete. (CO3)
- (b) What are the requirements of a good building stones ? (CO3)
- (c) Write short notes on the following : (CO3)
- (i) PSC

(3)

- (ii) Green Concrete
 - (iii) Structural Steel
 - (iv) Thermosetting plastics
4. (a) What are building Bye-laws ? Give the objectives of bye-laws. (CO4)
- (b) What are the various principles of planning of a residential and public building ? (CO4)
- (c) Briefly explain the different types of intelligent transport system to be installed for road safety. (CO4)
5. (a) Explain the processes involved in treatment of wastewater. (CO5)
- (b) Define noise pollution. What are the different measures to be taken for its control ? (CO5)
- (c) What is the importance and functions of the Traffic signs ? Draw and explain any *five*. (CO5)

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