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**END SEMESTER EXAMINATION – 2021**

Semester : 5th

Subject Code : CT-501

**CONSTRUCTION TECHNOLOGY**

Full Marks – 70

Time – Three hours

The figures in the margin indicate full marks  
for the questions.

**Instructions :**

1. *All* questions of PART–A are compulsory.
2. Answer *any five* questions from PART–B.

PART – A

Marks – 25

1. Answer the following questions as directed :  
1×15=15
  - (i) The value of reaction time of driver for SSD is \_\_\_\_\_ seconds. (Fill in the blank.)
  - (ii) Abutments are intermediate supports to bridge deck. (Write true/false.)

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(xiii) Protective canals does not generate revenue.

(Write true/false.)

(xiv) Lining of canal reduces water logging.

(Write true/false.)

(xv) Broad gauge is widely adopted in India.

(Write true/false.)

2. Define the following :

1×10=10

(i) Pier

(ii) Abutment

(iii) Wing wall

(iv) Afflux

(v) Headroom

(vi) Bridge

(vii) Culvert

(viii) High level bridge

(ix) Deck

(x) Submersible bridge

PART – B

Marks – 45

3. (i) (a) Draw the neat sketch of a bridge and mention its various parts. 5

(b) Give the classification of bridges. 4

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- (ii) (a) What are the uses of dam ? 4  
(b) What are the requirements of a site for a bridge ? 5
- (iii) (a) What are the factors governing selection of a type of a dam ? 4  
(b) What are the causes of failure of earthen dam ? 5
- (iv) (a) What are the advantages and disadvantages of arch dam ? 4  
(b) Explain the method of dam construction. 5
- (v) (a) How to control weed growth in a canal ? 4  
(b) Show the various components of a railway track with a neat sketch. 5
- (vi) (a) What are the requirements of a canal lining material ? 5  
(b) Explain Shotcrete lining. 4

