

**END SEMESTER/ RE-TEST EXAMINATION, 2020**

**Semester: 5<sup>th</sup>**

**Subject code: CT 501**

**Subject: Construction Technology**

**Full Marks: 70**

**Duration: 3 hours**

**Instructions:**

- 1. Questions on Part A are compulsory**
- 2. Answer any five questions from Part B**

**PART-A**

**1. Answer the following**

**(1 X 15 = 15)**

- i). The value of Metre gauge is \_\_\_\_\_ mm
- ii). Gauge is the centre to centre distance between two rails.  
(a) True (b) False
- iii). ISD stands for \_\_\_\_\_
- iv). Reservoir is an artificial lake  
(a) True (b) False
- v). Gravity dams are less strong and stable than earthen dams  
(a) True (b) False
- vi). Earthen dams can be constructed on weak foundation.  
(a) True (b) False
- vii). Arch dams thickness is less than gravity dam.  
(a) True (b) False
- viii). Gravity dam need strong foundation.  
(a) True (b) False
- ix). Railway maintenance cost is higher than roads.  
(a) True (b) False
- x). Ballast acts as cushion in railway track.



(a) True (b) False

xi). Cement concrete roads require less camber than bituminous roads.

(a) True (b) False

xii). Wooden sleepers results in less vibration and noise in railway tracks.

(a) True (b) False

xiii). Sand can be used as railway ballast.

(a) True (b) False

xiv). Flat footed rails are better than bull headed rail.

(a) True (b) False

xv). Major part of India adopted Broad Gauge railway track.

(a) True (b) False

## 2. Define the following

(1 X 10 = 10)

i). Camber

ii). Sight distance

iii). SSD

iv). Gauge

v). Dam

vi). Bridge

vii). Culvert

viii). Canal

ix). OSD

x). Reservoir

## Part B

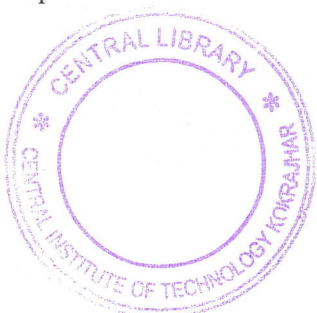
### 3. Answer any five from the following

ia) Draw the cross section of a railway track and mention its various components.

5

ib) Explain the factors to be considered while fixing canal alignment.

4



ii a) What are the functions of various railway components?	4
ii b) What are the advantages and disadvantages of concrete sleeper?	5
iii a) Explain different zones of storage in a reservoir	4
iii b) Explain classification of dam according to materials of construction.	5
iv a) What are the advantages and disadvantages of earthen dam?	4
iv b) With neat sketch show different components of bridge.	5
v a) Explain sand and brick ballast	4
v b) Explain construction of earthen dams	5
vi a) Explain buttress dam	5
vi b) Write any four uses of reservoir	4

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