

TED (15) – 6181

(REVISION — 2015)

Reg. No.....

Signature .....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2019

**BUILDING SERVICE**

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. Draw the symbols of  
S.P.D.T. switches  
Ceiling fan
2. State function of fuse in a circuit.
3. Differentiate between
  - Potable water
  - Polluted water
  - Wholesome water
4. Define sullage.
5. Define vertical transportation, give examples.

(5×2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. Explain the working of ELCB with diagram.
2. State the advantages of XLPE cable than all other cables.
3. Explain check valve with neat sketch.
4. Define the terms : waste pipe, vent pipe and soil pipe.
5. Name different mechanical ventilating systems.
6. Point out the factors to be considered in the acoustical design of concert halls.
7. Write on echo and sound foci.

(5×6 = 30)

## PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

## UNIT — I

- III (a) Explain with neat figure the plate earthing used in electrical installations. 8
- (b) Draw the neat circuit diagram of a house wiring system with three lamps controlled by three independent switches. 7

OR

- IV (a) Draw a typical house wiring circuit showing meter board, DPIC switch and main distribution board. 8
- (b) Enlist the factors affecting earth resistance. 7

## UNIT — II

- V (a) Explain functions and type of storage tanks. 7
- (b) Explain following pipe fittings with its objectives.  
Tee, Reducer, Cross, Coupling 8

OR

- VI (a) Draw neatly layout of water supply system in a house. 8
- (b) Explain layout of distribution systems. 7

## UNIT — III

- VII (a) Explain how sanitary fittings are classified. 5
- (b) Define manhole. List out different types of manholes. 10

OR

- VIII (a) What is meant by dehumidification ? Describe it. 5
- (b) Write on stack effect and wind effect. 10

## UNIT — IV

- IX (a) What is hydraulic lift ? Explain. 10
- (b) Explain the following parts of a lift:  
Lift pit and machine room. 5

OR

- X (a) Discuss important considerations on planning, materials of construction and construction technique to ensure adequate protection of structure against fire. 8
- (b) Write short notes on fire resistant construction of walls and columns. 7