

TED (15/19) - 5011
(REVISION-2015/19)

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Reg.No.....
Signature.....

**DIPLMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER - 2023**

BUILDING MAINTENANCE AND SERVICES

(Maximum Marks:100)

(Time: 3 Hours)

PART - A
(Maximum Mark : 10)

Marks

- I. Answer all the questions in one or two sentences. Each question carries 2 marks.
1. List the factors affecting durability of a structure.
 2. State the defects in foundation.
 3. List any two defects in staircase.
 4. What are the needs of retrofitting?
 5. State the purpose of planning aspects in maintenance. (5 x 2 = 10)

PART - B
(Maximum Mark: 30)

- II Answer *any five* questions from the following. Each question carries 6 marks.
1. What are the common defects in flooring?
 2. Explain the necessity of maintenance.
 3. Explain the different types of retrofitting works.
 4. Explain the defects in water supply system.
 5. Explain underpinning.
 6. List the causes of a fire.
 7. Explain the requirements of domestic gas pipeline. (5 x 6 = 30)

P.T.O

PART – C

(Maximum Mark: 60)

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

UNIT - I

- III (a) Discuss the importance and economic aspects of maintenance. (8)
(b) State the effect of various environmental factors that affect the durability of structure. (7)

OR

- IV (a) Discuss the environmental factors that affect the durability of structure and remedial measures. (8)
(b) Explain each type of maintenance with an example. (7)

UNIT – II

- V (a) What are the factors that cause corrosion of steel structure and reinforcement? How it can be prevented? (8)
(b) Explain the method of rectification of structures subjected to fire. (7)

OR

- VI (a) Explain the various factors influencing the defects of building components. (8)
(b) Identify the common defects in doors and windows. Suggest remedial measures. (7)

UNIT – III

- VII (a) Explain the common terminologies and uses of components used in lifts, electrical installation, domestic wiring and LPG connection. (8)
(b) Explain the rectification measures for the common defects in building service. (7)

OR

- VIII (a) Explain the common defects in electric system. (8)
(b) Explain the RTT of a lift and explain factors to be considered in selecting the lift location. (7)

UNIT – IV

- IX (a) Explain the need for restoration and retrofitting of structure. (8)
(b) What are the common retrofitting work carried out. (7)

OR

- X (a) Explain the challenges in retrofitting and restoration work. (8)
(b) List the causes for deterioration of monumental and Historical buildings and suggest remedial measures. (7)

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