

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2017

BUILDING MAINTENANCE AND SERVICES

[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. Define importance of durability.
2. Give the classification of maintenance.
3. Define corrosion mechanism.
4. List out defects in water supply system.
5. List out the need for retrofitting.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain the necessity of maintenance.
2. Discuss the factors leading to failure of foundation.
3. Explain the effect of fire in building.
4. Explain the common defects in sewage system.
5. List the requirement of lifts in a building.
6. List out the common methods adopted for retrofitting of structures.
7. Write a note about conservation of heritage buildings.

(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) Describe effect of environmental pollution on durability of structure. 8
 (b) Explain the economic aspects of maintenance. 7

OR

- IV (a) Explain the factors affecting life of buildings. 8
 (b) Describe the factors affecting durability of building. 7

UNIT -- II

- V (a) Explain the methods for prevention of corrosion of reinforcement. 8
 (b) Explain failure in plastering and its corrective measures. 7

OR

- VI (a) Explain in detail different types of failure of structures. 8
 (b) Discuss about the causes of deterioration of wooden structures. 7

UNIT -- III

- VII (a) Explain defects in electrical system and preventive measures. 8
 (b) Explain in detail about the requirement of domestic gas pipe lines. 7

OR

- VIII (a) Describe defects in sullage system and preventive measures. 8
 (b) Explain defects and its causes in drainage system. 7

UNIT -- IV

- IX (a) Explain with neat sketches, classification of underpinning and its functions. 8
 (b) Explain different methods for crack repair. 7

OR

- X (a) Explain with neat sketches, shotcrete / guniting. 8
 (b) Describe different methods for restoration of heritage structures. 7