

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018**

**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. List the two factors effect durability of buildings.
2. What is understood by cracks in walls ?
3. What is routine maintenance ?
4. Name two methods adopted for cleaning small sewers.
5. Define Shoring.

(5 × 2 = 10)

**PART — B**

(Maximum marks : 30)

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

1. What are the Role of maintenance in durability and serviceability of buildings ?
2. State the defects in foundations.
3. State two methods for preventing leakage in RCC roof slab.
4. Explain two reasons in drainage defective system and its preventive measures.
5. Write the names of water supply fittings.
6. What are the Challenges in retrofitting in existing building ?
7. What is under pinning and list different methods of Shoring ?

(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 the factors effect of pollution on buildings. 9  
 (b) Explain the Environmental factors affecting durability of building. 6

OR

- IV (a) Explain the economic aspect of maintenance. 6  
 (b) Identify the planning aspect of maintenance. 9

## UNIT — II

- V (a) Identify corrosion in Steel structures and reinforcement. 9  
 (b) Explain the structural damages due to fire. 6

OR

- VI (a) What are the causes of cracks in concrete ? 9  
 (b) Identify the types of cracks in building. 6

## UNIT — III

- VII (a) Identify the common defects in water supply and drainage system. 6  
 (b) List out the common defects in building services. 9

OR

- VIII (a) Explain the rectification measures in Building service for common defects. 8  
 (b) List the components used in lift. 7

## UNIT — IV

- IX (a) Explain retrofitting, restoration and conservation. 7  
 (b) State the need for retrofitting, restoration and conservation. 8

OR

- X (a) What are the common causes in deterioration of historical building ? 6  
 (b) Explain different methods of retrofitting and restoration. 9

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