

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER – 2024**

BUILDING MAINTENANCE & SERVICES

[Maximum Marks : 100]

[Time : 3 hours]

PART – A
(Maximum Marks : 10)

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

1. What is remedial maintenance?
2. Define obsolescence.
3. What are the requirements of good flooring?
4. Define plug and socket.
5. Define conservation.

(5x2=10)

PART – B
(Maximum Marks : 30)

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

1. State the importance of durability of structure.
2. Explain the effect of usage of structures on its durability.
3. What are the common defects in masonry?
4. What are the common causes of defects in staircase?
5. What are preventive measures adopted in water supply system?
6. List the common retrofitting works usually carried out.
7. Define shoring and underpinning.

(5x6=30)

PART – C

(Maximum Marks : 60)

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

UNIT – I

- III.** (a) What are the general factors that affect the durability of structures? (8)
(b) What are the planning aspects involved in maintenance? (7)

OR

- IV.** (a) List the classification of maintenance and explain any three. (8)
(b) What are the factors considering about the life expectancy of the different structures? (7)

UNIT – II

- V.** (a) Explain the common defects in foundation. (8)
(b) How can we prevent the deterioration of wooden roofs? (7)

OR

- VI.** (a) Explain the preventions from corrosion of reinforcement and steel structures. (8)
(b) Discuss different means to measure crack. (7)

UNIT –III

- VII.** (a) Summarize the commonly adopted building services that are used to add utility to the building. (8)
(b) Explain the factors to be considered while deciding the location of lift. (7)

OR

- VIII.** (a) Summarize the requirements of domestic gas pipeline. (8)
(b) What are the remedial measures adopted in electrical system? (7)

UNIT – IV

- IX.** (a) Discuss how retrofitting is carried out when the foundation is subjected to repair. (8)
(b) Discuss the need for retrofitting and restoration work. (7)

OR

- X.** (a) Identify the challenges of retrofitting and restoration work. (8)
(b) Discuss the causes for the deterioration of monumental or heritage structure. (7)
