

M.E. First Semester (Civil Engg. (Construction Engg. & Managt.)) (CGS)  
**13066 : Elective : Building Repair & Maintenance Management : 1 CM 05**

P. Pages : 2

Time : Three Hours



**AW - 3787**

Max. Marks : 80

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- Notes : 1. Answer **Three** question from Section A and **Three** question from Section B.  
2. Due credit will be given to neatness and adequate dimensions.  
3. Assume suitable data wherever necessary.  
4. Use of pen Blue/Black ink/refill only for writing the answer book.

**SECTION - A**

1. a) Write a short note on - 6  
i) Restoration  
ii) Retrofitting  
b) Explain in detail Agencies causing deterioration mechanism and effect. 7

**OR**

2. a) What are the principles of Maintenance management and Quality Assurance. 6  
b) Explain in detail property inspection report. 7  
3. a) Explain in detail Investigation of defects in building. 7  
b) State Non destructive tests with the help of diagram. 7

**OR**

4. a) Explain in detail Actual loads and environmental effects. 7  
b) Write a short note on 7  
i) Maintenance problems  
5. a) What are the common materials and techniques for Repair and maintenance? 6  
b) Explain in detail selection of material. 7

**OR**

6. a) What are the preventive maintenance and special precautions? 6  
b) Explain in details water supply and sanitary systems. 7

## SECTION - B

- |    |    |   |   |
|----|----|---|---|
| 7. | a) | Explain in briefly structural Audit.      | 7 |
|    | b) | Explain in detail Repair of Existing DPC. | 7 |

**OR**

- |    |    |  |   |
|----|----|--|---|
| 8. | a) | Describe in briefly about maintenance of RCC elements                    | 7 |
|    | b) | What are the repair of surface defects?                                  | 7 |
| 9. | a) | Explain in detail Repair and maintenance of foundations.                 | 6 |
|    | b) | How will you carry out the procedure of repair of raft slab foundations? | 7 |

**OR**

- |     |    |  |   |
|-----|----|--|---|
| 10. | a) | Describe prevention of corrosion and its repair.         | 6 |
|     | b) | Explain in detail concrete placement techniques.         | 7 |
| 11. | a) | Write a short note on                                    | 6 |
|     | i) | Repair of building joint.                                |   |
|     | b) | What are the safety precautions taken in joint sealants? | 7 |

**OR**

- |     |     |   |   |
|-----|-----|---|---|
| 12. | a)  | Explain in details common strengthening techniques. | 6 |
|     | b)  | Write a short note on                               | 7 |
|     | i)  | Brackets  |   |
|     | ii) | Collars   |   |

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