

c09-c-**606C**

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BOARD DIPLOMA EXAMINATION, (C-09) SEPTEMBER/OCTOBER - 2020 DCE—SIXTH SEMESTER EXAMINATION

MAINTENANCE OF BUILDINGS

Time: 3 hours]

[Total Marks : 80

PART-A

3×10=30

Instructions : (1) Answer **all** questions.

- (2) Each question carries **three** marks.
- (3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.
- 1. Explain the term 'maintenance of buildings'.
- **2.** List any six defects that are covered under annual repairs of buildings.
- **3.** List the basic equipment required for investigation of defects in buildings.
- 4. What is the necessity for demolition of buildings?
- 5. What are the various methods of underpinning?
- 6. List any four waterproofing chemicals.
- 7. Explain nest treatment of timber.
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- 8. Explain the term 'earthing' in electrical services of a building.
- 9. List the common defects in the sanitary layout.
- **10.** Write a short note on departmental execution of maintenance works.

PART—B

10×5=50

Instructions : (1) Answer any **five** questions.

- (2) Each question carries ten marks.
- (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- **11.** List out the factors affecting durability of building materials.
- **12.** Explain in detail various causes for formation of cracks in buildings.
- **13.** What are the various safety aspects to be considered in HEMM operations?
- **14.** Explain the failure of foundations and remedial measures to be taken due to *(a)* lateral failure and *(b)* unequal supports.

5+5=10

- 15. (a) Give the classification of cracks as per SP 25–1984.
 (b) Briefly explain the method of shotcrete.
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- **16.** Mention the causes, prevention and solution for (*a*) spalling of concrete and (*b*) honeycombing in concrete. 5+5=10
- **17.** Explain in detail the maintenance of soak pik and septic tank.
- **18.** What are the various details that a tender document should contain?

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