

Roll No.

OLE-3025

B. Tech. 3rd Sem. (Civil Engg.) Examination – April, 2021

INTRODUCTION TO CIVIL ENGINEERING

Paper : PCC-CE-201-G

Time : Three Hours]

[Maximum Marks : 75

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Section. Question No. 1 is *compulsory*. All questions carry equal marks.

1. Write short notes on the following : (any *six*)

2.5 × 6 = 15

- (i) Explains various defects in paints.
- (ii) How do you insulate wall of a room/hall against external sound ?
- (iii) Briefly describe the seasoning of stone.

- (iv) Explain importance of location of doors and windows and their specification.
- (v) What do you understand by a water proof plaster ?
- (vi) Define fire hydrants.
- (vii) State under what condition pile and mat foundations are adopted.

SECTION – A

- 2. (a) Enumerate the various functional or basic requirements that a building should satisfy for performing its basic functions. 7.5
- (b) What is importance of Civil Engineering for the development of country ? Also explain history in early construction. 7.5
- 3. (a) What are the various defects in brick masonry ? 7.5
- (b) Name the various type of Ashlars masonry. Describe in brief the construction of wall with Ashlar fine masonry. 7.5

SECTION – B

4. (a) What do you mean by quarrying of stones ? 7.5
(b) Define terra-cotta and its types. 7.5
5. (a) What do you mean by Decay in Timber ? How the seasoning of Timber is done naturally. 7.5
(b) What are the constituent or ingredients of an oil paint ? Describe the role of each constituent in the painting process. 7.5

SECTION – C

6. (a) Discuss the various factors which requires due consideration while selecting a roof covering for a building. 7.5
(b) Name and describe the function of the various fasteners as used for a high class building doors. 7.5
7. (a) Define a partition. What are its advantages ? 7.5
(b) Briefly explain the term Foundation. Enumerate the various types of building foundation. 7.5

SECTION – D

8. (a) Mention the precaution that should be taken for preventing leakage from roof. What are various water proofing treatment ? 7.5
- (b) How do you grade building according to fire resistance ? 7.5
9. (a) What is reverberation? How is reverberation time calculated ? 7.5
- (b) Mention basic requirements and condition to be fulfilled for good acoustics of an Lecture Hall. 7.5
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