**20CE204**

**Hall Ticket Number:**

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| **I/IV B.Tech (Regular) DEGREE EXAMINATION** | | | |
| **October, 2021** | **Civil Engineering** | | |
| **Second Semester** | **Building Materials, Planning and Construction** | | |
| **Time:** Three Hours | | **Maximum: 7**0 Marks | |
| *Answer Question* ***No. 1*** *Compulsorily.* | | | (14X1 = 14 Marks) |
| *Answer* ***ANY ONE*** *question from each* ***Unit.*** | | | (4X14=56Marks) |

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| 1. | Answer the following. | | | | | |
|  | a) | What is the standard size of a brick? | CO1 | | |  |
|  | b) | Name any two defects of timber. | CO1 | | |  |
|  | c) | What is meant by seasoning? | CO1 | | |  |
|  | d) | What is meant by calcination? | CO1 | | |  |
|  | e) | What are the advantages of R.C.C. floors? | CO2 | | |  |
|  | f) | Define Flemish bond | CO2 | | |  |
|  | g) | What is the use of Lintels in buildings? | CO2 | | |  |
|  | h) | Draw kingpost roof? | CO2 | | |  |
|  | i) | Define the following: (i) step (ii)Riser | CO3 | | |  |
|  | j) | What is the purpose of damp proofing in buildings? | CO3 | | |  |
|  | k) | Define form work. | CO3 | | |  |
|  | l) | Define the term Layout of Building | CO4 | | |  |
|  | m) | Define ventilation | CO4 | | |  |
|  | n) | Write any two specifications to be considered in step. | CO4 | | |  |
| **UNIT-I** | | | | | | |  |  |
| 2. | a) | Write about the qualities of a good building stone. | | CO1 | 7M | |
|  | b) | Explain about clamp burning with a neat sketch. | | CO1 | 7M | |
|  |  | **(OR)** | |  |  | |
| 3. | a) | Distinguish between fat and hydraulic lime. | | CO1 | 7M | |
|  | b) | Draw the cross section of a tree and explain the structure of timber | | CO1 | 7M | |
|  |  | **UNIT-II** | |  |  | |
| 4. |  | Describe about various types of brick masonry with neat sketches. | | CO2 | 14M | |
|  |  | **(OR)** | |  |  | |
| 5. | a) | List out different types of floors and explain any two floors in detail. | | CO2 | 7M | |
|  | b) | Explain about various types of walls. | | CO2 | 7M | |
|  |  | **UNIT-III** | |  |  | |
| 6. | a) | Explain various types of stair cases. | | CO3 | 7M | |
|  | b) | What is scaffolding? State different types of scaffolding? | | CO3 | 7M | |
|  |  | **(OR)** | |  |  | |
| 7. | a) | Discuss the various materials used for damp proofing course. | | CO3 | 7M | |
|  | b) | Discuss the various methods used for damp proofing course. | | CO3 | 7M | |
|  |  | **UNIT-IV** | |  |  | |
| 8. | a) | What are the objectives and principles of building bye laws? | | CO4 | 7M | |
|  | b) | Mention about various conventional signs used in building planning. | | CO4 | 7M | |
|  |  | **(OR)** | |  |  | |
| 9. |  | Explain the following principles of planning of building:   1. Aspect (ii) prospect (iii) privacy (iv) Grouping (v) Flexibility | | CO4 | 14M | |
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