

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Fourth semester B.Tech examinations (S), September 2020

Course Code: CE204**Course Name: CONSTRUCTION TECHNOLOGY (CE)**

Max. Marks: 100

Duration: 3 Hours

PART A*Answer any two full questions, each carries 15 marks*

Marks

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|---|---|----|
| 1 | a) Define seasoning of timber. Why this is required? Explain the methods of natural seasoning. | 6 |
| | b) How steel is classified based on its carbon content? | 3 |
| | c) Discuss the important types of glasses and their uses in construction industry | 6 |
| 2 | a) How will you classify sand on the basis of its source? | 3 |
| | b) Why is it necessary to compact freshly laid concrete? Explain the methods used for compaction. | 5 |
| | c) What are admixtures? Explain its types and uses. | 7 |
| 3 | a) What are the factors affecting workability of concrete? | 5 |
| | b) Explain the mix proportioning of concrete by BIS method. | 10 |

PART B*Answer any two full questions, each carries 15 marks*

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|---|---|----|
| 4 | a) Explain the various types of foundations with neat sketches. | 10 |
| | b) What are cavity walls? What are its advantages? | 5 |
| 5 | a) What is scaffoldings? Explain its types. | 7 |
| | b) What is DPC? With neat sketches explain how it is provided at different levels of a building. | 8 |
| 6 | a) Enumerate the essential requirements of a good floor. | 5 |
| | b) State the purpose of using arches in buildings. With neat sketches explain its classification on the basis of shape. | 7 |
| | c) What is distempering? List down the desirable properties of a good distemper. | 3 |

PART C*Answer any two full questions, each carries 20 marks*

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| 7 | a) Draw a typical cross-section of a stair. Label and explain the parts. | 10 |
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- b) Write a short note on slip form construction. 5
- c) Discuss the advantages and disadvantages of steel framed structures. 5
- 8 a) Write short notes on
- i) Elevators ii) Escalators iii) Ramp 10
- b) What are the advantages of steel formwork over wooden formworks? 5
- c) Explain the mistakes leading to cracking/collapse of structure due to poor workmanship. 5
- 9 a) Discuss the general reasons for the failure of buildings. 10
- b) Explain the major techniques used for retrofitting RCC slabs. 10
