

Reg. No. \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
FOURTH SEMESTER B.TECH DEGREE EXAMINATION, JULY 2017

Course Code: **CE 204**Course Name: **CONSTRUCTION TECHNOLOGY (CE)**

Max. Marks: 100

Duration: 3 Hours

**PART A**

*Answer any two questions.*

1. a) What is seasoning of timber? Explain any one method of seasoning. (5)  
b) What are the types of reinforcing steel used in construction? Explain their features. (5)  
c) Describe the features and use of glass as a construction material. (5)
2. a) What are the processes involved in the manufacture of concrete? (5)  
b) Explain any one test performed in fresh concrete. (5)  
c) Describe the need to use chemical admixture in concrete. (5)
3. a) Differentiate between segregation and bleeding. (5)  
b) Explain the mix proportioning of concrete by IS method. (10)

**PART B**

*Answer any two questions.*

4. a) What are the requirements of a good foundation? (5)  
b) Explain with figures, any four types of foundation. (10)
5. a) Explain the principle of filler slab. (5)  
b) Explain with figure, the constructional features of rat-trap bond masonry. (5)  
c) What are cavity walls? Explain their advantages and disadvantages. (5)
6. a) Sketch any two types of steel roof truss. (5)  
b) Sketch and mark the different parts of a typical arch. (5)  
c) Explain any one damp proofing method (5)

**PART C**

*Answer any two questions.*

7. a) What is slip form construction? Describe its features. (5)  
b) What is prefabrication? What are the advantages and disadvantages of prefabricated construction? (5)  
c) Explain the need for providing construction joint. Draw and explain any two types of construction joints. (10)
8. a) What are the major reasons for failures in RCC structures? (5)  
b) Describe any three causes of foundation failure. (15)
9. a) What is retrofitting? What is meant by global and local retrofitting? (5)  
b) Explain any three methods to retrofit a reinforced concrete column. (15)

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