| Reg. No.: |  |  |  |  |  |
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**Question Paper Code: 42105** 

## B.E. / B.Tech. DEGREE EXAMINATION, JUNE 2021

Second Semester

Civil Engineering

## 14UCE205 – CONSTRUCTION MATERIALS

(Regulation 2014)

Duration: 1.45 hours Maximum: 50 Marks

PART A -  $(10 \times 2 = 20 \text{ Marks})$ 

|             | (Answer any TEN of the following questions)                          |
|-------------|----------------------------------------------------------------------|
| 1.          | For one cubic metre of brick masonry, number of bricks required, is  |
| 2.          | Excess of alumina in the clay                                        |
| 3.          | What are the defects in brick masonry?                               |
| 4.          | The commonly used raw material in the manufacture of cement is what? |
| 5.          | State Bulking of sand.                                               |
| 6.          | What is meant by hydration of cement? What is its importance?        |
| 7.          | Vicat's apparatus is used to perform                                 |
| 8.          | The slump test of concrete is used to measure its                    |
| 9. <b>V</b> | When RMC is recommended?                                             |
| 10.         | Seasoning of timber is the process of                                |

11. What is the Purpose of seasoning.

- 12. What is timber?
- 13. The property which a steel can withstand blows of hammer is \_\_\_\_\_
- 14. The carbon content in mild steel is in the range of \_\_\_\_\_
- 15. What is the difference between steel and cast iron?

$$PART - B$$
 (3 X 10 = 30 Marks)

## (Answer any THREE of the following questions)

- 16. List the criteria for selection of stone as a building material.
- 17. Construct a flow diagram for dry and wet process of manufacture of cement with brief explanation.
- 18. Explain in detail the various factors affecting workability of concrete.
- 19. What are the characteristics of good timber? What is the object of seasoning it? Explain briefly the different methods of seasoning timber.
- 20. Describe the types of hot rolled steel sections and cold formed steel sections.