

6TH SEM. /CIVIL / 2023(S)

TH-4 Concrete Technology

Full Marks: 80

Time- 3 Hrs

Answer any five Questions including Q No.1& 2
Figures in the right hand margin indicates marks

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| 1. | Answer All questions | 2 x 10 |
| | a. What do you mean by nominal mix. | |
| | b. What is hydration of cement ? | |
| | c. Define fineness modulus ? | |
| | d. What do you mean by efflorescence ? | |
| | e. What are the types of deterioration ? | |
| | f. What is the effect of sulphate if present in concrete? | |
| | g. What do you mean by accelerator? | |
| | h. What is gunitting ? | |
| | i. Define creep and shrinkage of concrete? | |
| | j. What is workability of concrete? | |
| 2. | Answer Any Six Questions | 6 x 5 |
| | a. Explain about types cement? | |
| | b. Write the short notes on shotcrete concrete and ready mix concrete. | |
| | c. Explain about different types of admixtures? | |
| | d. Write the difference between nominal and design mix concrete.. | |
| | e. What are the types of formwork ? | |
| | f. What are various factors causing variation in quality of concrete? | |
| | g. How cracks are repaired in concrete? | |
| 3 | Write down different tests of cement ? | 10 |
| 4 | Write the requirement of mix design and give a brief about I .S .code method of mix design. | 10 |
| 5 | What are the methods to determine workability of concrete? | 10 |
| 6 | Explain about deterioration of concrete and its prevention? | 10 |
| 7 | What is inspection and testing and durability requirement as per I S 456 ? | 10 |