

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT  
TEST -1 EXAMINATION- 2024

Ph.D

COURSE CODE (CREDITS) : 11M1WCE332

MAX. MARKS: 15

COURSE NAME : ADVANCES IN CONSTRUCTION MATERIALS

COURSE INSTRUCTORS: Dr. Saurav

MAX. TIME: 1 Hour

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*Note: (a) All questions are compulsory.*

*(b) Marks are indicated against each question in square brackets.*

*(c) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems*

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**Q1.** Using a schematic diagram discuss the effect of surface-active agents on deflocculating of cement grains. **[CO1, 5]**

**Q2.** What are the critical role of retarders and accelerators in construction materials? **[CO1, 5]**

**Q3.** Discuss Air-entraining Admixture. What are various factors affecting amount of air entrainment? **[CO1, 5]**