

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

B.Tech-VI Semester (CE)

COURSE CODE (CREDITS): 18B11CE611

MAX. MARKS: 15

COURSE NAME: Concrete Technology

COURSE INSTRUCTORS: Akash Bhardwaj

MAX. TIME: 1 Hour

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

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

Q.No	Question	CO	Marks
Q1	Explain the process of manufacturing OPC by wet process with neat and clean figure.	1	3
Q2	Write four key compounds of OPC. How C3A affects the hydration process in cement.	1	2
Q3	For Calcium Oxide (CaO): 65%, Silicon Dioxide (SiO <sub>2</sub> ): 22%, Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> ): 5%, Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> ): 3% and Sulfur Trioxide (SO <sub>3</sub> ): 2%. Calculate C2S using Bogue's equations.	2	3
Q4	What are SCMs ? Write its various types. Explain the source, properties and applications of any one.	1	3
Q5	Write the classification of aggregates on various basis. Explain flakiness index test.	2	4