

Dr. Gaurav Jaiswal

Roll No:.....

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION-September 2017

M. Tech. III/Ph. D. I-Semester

COURSE CODE: 11M1WCE332

MAX. MARKS: 15

COURSE NAME: Advanced in Construction Material

COURSE CREDITS: 03

MAX. TIME: 1:0 Hrs

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Assume any missing data suitably.

1. Define the corrosion according to ASTM manual. Write electrochemical process involve in the corrosion of steel along with volumetric change occurred after completion of the phenomenon. [5]
2. Describe the factor accelerating the corrosion along with their cause in a structure. How corrosion affect the serviceability of the structures. Also write the possible structural damage by corrosion incorporating heavy steel reinforcement. [6]
3. Write the possible prevention measure adopted regarding corrosion for the safe service life of a structure. [4]

CE-24, MT Ph.D