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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- Feb 2020

B.Tech /8th Semester

COURSE CODE: 18B1WCI834

MAX. MARKS: 15

COURSE NAME: Software Reliability

COURSE CREDITS: 03

MAX. TIME: 1 Hr

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

1. Discuss the relationship between quality factors and quality criteria in McCall Software Quality Model. (3 marks)
2. Explain the Boehm Software Quality Model with the help of the block diagram. (3 marks)
3. Discuss the various key process areas of CMM at various maturity levels. (3 marks)
4. Explain the significance of bathtub curve of reliability with the help of a diagram. (3 marks)
5. Assume that a program will experience 200 failures in infinite time. It has now experienced 100. The initial failure intensity was 20 failures/ CPU hr. (3 marks)
 - (i) Determine the current failure intensity
 - (ii) Find the decrement of failure intensity per failure
 - (iii) Calculate the failures experienced and the failure intensity after 20 and 100 CPU hrs of execution.