JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS-2022

B.Tech-IV Semester

COURSE CODE: 19B11CI411   MAX. MARKS: 25

COURSE NAME: Software Engineering Practices

COURSE CREDITS: 03   MAX. TIME: 1 Hour 30 Min

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1. What is the significance of CMM in software industry? Show all the CMM levels with the help of a diagram.   [2+3]

Q2. Name different kind of risks in software projects with one example of each. How priority of risks is computed to rank them in terms of their damage causing potential?   [2+3]

Q3. Name any five software configuration items. Name and explain two principal activities to manage software configuration management with suitable examples.   [2+3]

Q4. Prove that Halstead software science length estimation formula $N = \eta_1 \log_2 \eta_1 + \eta_2 \log_2 \eta_2$ where N is the length of the software to be developed and η_1 and η_2 be the number of unique operators and operands to be used in the software project.   [5]

Q5. Assume that the size of an organic type software product has been estimated to be 32,000 lines of source code. Assume that the average salary of software engineers be Rs. 15,000/- per month. Determine the effort required to develop the software product and the nominal development time as per basic COCOMO model.   [5]