COURSE CODE(CREDITS): 19B11CI411(3)

COURSE NAME: Software Engineering Practices

COURSE INSTRUCTORS: Seema Rani

MAX. MARKS: 25

MAX. TIME: 1 Hour 30 Minutes

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

1. What is CMM? Explain each level of CMM in correct order along with diagram.

[CO-3] [5M]

2. What is COCOMO model and types of COCOMO model with formula. Also define the Unified Modeling Language (UML).

[CO-3] [3M]

3. Explain the difference between Verification and Validation technique in software engineering.

[CO-2] [2M]

4. What is modularity, explain coupling and cohesion in software engineering, its types and significance in software design.

[CO-4] [5M]

5. A software project was estimated at 352 Function Points (FP). A four-person team will be assigned to this project consisting of an architect, two programmers, and a tester. The salary of the architect is 80,000 per month, the programmer 60,000 per month and the tester 50,000 per month. The average productivity for the team is 8 FP per person month. What is cost of the project?

[CO-4] [5M]

6. Consider a project with the following functional units: Number of user inputs=35 Number of user outputs=105, Number of user enquiries=56, Number of user files=7, Number of external interfaces=19.

Assume all complexity adjustment factors are significant and weighting factors are average. Compute the function points for the project.

[CO-3] [5M]