## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT **TEST-3 EXAMINATION-2024**

B. TECH-IV Semester (IT/BI)

COURSE CODE(CREDITS): 19B11CI411(3)

MAX. MARKS: 35

COURSE NAME: Software Engineering Practices

COURSE INSTRUCTORS: Ms. Seema Rani

MAX. TIME: 2 Hours

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 resolving problems

1. Explain the following terms with specific points:

- a) Alpha-Beta Testing
- b) Legacy System
- c) Load Testing
- d) Stress Testing
- e) Stubs and Drivers
- 2. Write the difference between Black Box and White Box software Testing.

[CO-8] [3M]

- 3. Consider a project with the following functional units: Number of user inputs=24 Number of user outputs=14, Number of user enquiries=22, Number of user files=5, Number of external interfaces=6. Assume all complexity adjustment factors are essential and weighting factors are complex. Compute the function points for the project. [CO-6] [5M]
- 4. How do software re-engineering and reverse engineering differ from each other? Write down the differences. [CO-5] [2M]
- 5. What is software maintenance? Describe its different types and explain the ratio of distribution of activities that occur during software maintenance. [CO-8] [4M]
- 6. The software project was estimated at 400 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 45,000 per month, the programmer 45,000 per month and the tester 89,000 per month. The average productivity for the team is 7 FP per person month. What is the cost of the project? [CO-7] [5M]
- Define Cyclomatic Complexity, calculate complexity with all three methods and write all predicate nodes and independent paths. [CO-7] [6M]

[P.T.O.]

