SOFTWARE ENGINEERING

Time: Three hours Maximum: 100 marks $PART\ A - (6 \times 5 = 30\ marks)$ Answer any SIX questions.

- 1. Explain the primary goal of software engineering.
- 2. How programmers spend their time in the entire life cycle of project development?
- 3. Give the format of a system definition.
- 4. Explain maintenance phase.
- 5. A large software product is more expensive to develop than a small one justify.
- 6. Give the work break down structure of the process oriented project.
- 7. Explain HIPO charts.
- 8. How real time systems are designed?
- 9. Explain system testing.
- 10. Explain analysis phase of software maintenance.

PART B — $(4 \times 10 = 40 \text{ marks})$

Answer any FOUR questions.

- 11. Explain the factors to the considered in setting project goals.
- 12. Explain the evolution of the software project through successive versions.
- 13. How to estimate software maintenance cost?
- 14. Explain cohesion and its types.
- 15. Explain formal verification in testing.
- 16. Write short notes on:
 - (a) Symbolic execution.
 - (b) Debugging.

PART C — $(2 \times 15 = 30 \text{ marks})$

Answer any TWO questions.

- 17. Explain different cost estimation techniques.
- 18. Explain PSL/PSA.
- 19. Explain Jackson structured programming.