(For candidates admitted from 2010 to 2015 Batch)

B.Sc./B.C.A. DEGREE EXAMINATION, APRIL 2022.

Part III —Computer Applications/Computer Science/ Major Based Elective

SOFTWARE ENGINEERING

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 2 = 20)$

Answer ALL questions.

- 1. What are the advantages of egoless team?
- 2. What are the objectives of Software Engineering?
- 3. List out any three cost estimation techniques.
- 4. Define project management.
- 5. What are the areas of effort in Software requirements analysis?
- 6. What do you mean by Cohesion?
- 7. List out the commonly used design notations

- 8. What is an abstract machine in bottom up design?
- 9. What is the objective of unit testing?
- 10. What do you mean by reliability of software system?

PART B —
$$(5 \times 5 = 25)$$

Answer ALL questions, choosing either (a) or (b).

11. (a) What are the development resources needed for software project?

Or

- (b) Write short notes on Project planning.
- 12. (a) Write note on staffing level estimation.

Or

- (b) Discuss empirical estimation models.
- 13. (a) Write short notes on the software requirement specification.

Or

(b) Explain the basic specification principles for representing software requirements.

14. (a) Explain about psychological characteristics of programming language design.

Or

- (b) What is a good coding style? Explain the element in coding style,
- 15. (a) Explain the need of unit test.

Or

(b) What is Software configuration management? What are the goals of Software configuration management?

PART C —
$$(3 \times 10 = 30)$$

Answer any THREE questions.

- 16. Discuss in detail about the roles of software development team
- 17. Discuss about factors involved in estimating software maintenance costs
- 18. Discuss in detail about Design Heuristics for Effective Modular Design
- 19. Discuss in detail about graphical design notations
- 20. Explain in detail about System testing.