Reg. No	Name	22U522

# B. Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022 SEMESTER 5 : COMPUTER APPLICATIONS

#### COURSE: 19U5CRCAP10: SOFTWARE ENGINEERING AND ENVIRONMENTAL STUDIES

(For Regular - 2020 Admission and Supplementary - 2019 Admission)

Time: Three Hours Max. Marks: 75

### PART A Answer All (1 mark each)

- 1. What are the two types of software interfaces?
- 2. Define coupling.
- 3. What is the benefit of modular design?
- 4. List out the software life cycle models.
- 5. Define the predicate node?
- 6. What is the meaning of renewable resources?
- 7. What do you mean by functional requirements?
- 8. What is meant by structural analysis?
- 9. What is software?
- 10. Distinguish between process and methods.

 $(1 \times 10 = 10)$ 

## PART B Answer any 8 (2 marks each)

- 11. What are the benefits of horizontal partitioning?
- 12. What are the different steps involved in requirement engineering process?
- 13. What is the use of User Interface prototyping?
- 14. Distinguish between hard and soft real-time systems.
- 15. Why testing is important with respect to software?
- 16. Outline the system engineering hierarchy.
- 17. Write an account on the issues related to waste diposal
- 18. What are the commonly found errors during 'client testing'?
- 19. What are the drawbacks of RAD models?
- 20. What are the characteristics of SRS?

 $(2 \times 8 = 16)$ 

#### PART C Answer any 5 (5 marks each)

- 21. What are the quality parameters considered for effective modular design?
- 22. Explore different feasibility studies to be conducted in the analysis.
- 23. Explain the preventive measures of deforestation.
- 24. Explain the components of real-time executives with a neat diagram.
- 25. Explain the software requirement specifications.
- 26. The spiral model is one of the most effective life cycle models. Why?
- 27. Explain the testing procedures for boundary conditions.

 $(5 \times 5 = 25)$ 

## PART D Answer any 2 (12 marks each)

- 28. Discuss structured analysis and data dictionary.
- 29. Explain with advantages and disadvantages
  - 1. Spiral Model
  - 2. V-Model
  - 3. Agile Model
- 30. Explain black box testing methods and its advantages and disadvantages?
- 31. Explain in detail about the design concepts and design principles.

 $(12 \times 2 = 24)$