

Reg No : Name :

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2

Third Semester

B.Sc Cyber Forensic Model III

Core Course - CF3CRT05 - OPERATING SYSTEMS AND SYSTEM SOFTWARE

2019 Admission Onwards

95F8615E

Time: 3 Hours

QP CODE: 24027877

Part A

Answer any **ten** questions. Each question carries **2** marks.

- 1. Define simple structure of an operating system.
- 2. What is kernel of an operating system?
- 3. What is semaphores?
- 4. What is safe state?
- 5. What is the various Page Replacement Algorithms used for Page Replacement?
- 6. What is mean by stable storage?
- 7. What is a software?What are different types of software?
- 8. What is an assembler?
- 9. What are expansion time variables?
- 10. What is a Linker?
- 11. What are Relocatable programs?
- 12. What informations should the assembler give to the direct linking loader for performing Relocation?

Part B

Answer any **six** questions.

Each question carries **5** marks.

- 13. Differentiate Job scheduling and CPU Scheduling.
- 14. Compare hard and soft real time systems.
- 15. What are the operations on processes?
- 16. Explain communication in client server systems.
- 17. Explain the advantages and disadvantages of segmentation.



Max. Marks

^

- 18. What is linked allocation what are the advantages of linked allocation?
- 19. What is the difference between macro and functions?
- 20. Explain a)Dynamic binder b) Design of an absolute loader.
- 21. Explain Syntax analysis and Semantic analysis phase of a compiler.

Part C

Answer any **two** questions. Each question carries **15** marks.

- 22. Explain different functions of an operating system.
- 23. Explain different CPU scheduling algorithms.
- 24. Explain contiguous memory allocation.Explain different fragmentation problems. Explain one technique to solve this problems.
- 25. Explain the task performed by passes of a two pass assembler.

(2×15

(6×5