

 $(10 \times 2 = 20)$

Part B

Answer any **six** questions.

Each question carries 5 marks.

2017 ADMISSION ONWARDS

Time: 3 Hours

Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. Describe any two functions of an operating system.
- 2. Explain personal computer systems.
- 3. Explain the types of OS operations.
- What is the function of a scheduler? 4.
- What is turn around time? 5.
- What is race condition? 6.
- 7. Define critical section problem.
- Explain any one method of deadlock prevention. 8.
- 9. What is the use of TLB?
- 10. Define demand paging.
- 11. What is meant by an identifier in files?
- 12. What is the use of free space list?

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B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, MAY 2024

Second Semester

B.Sc Information Technology Model III

Core Course - IT2CRT02 - OPERATING SYSTEMS

846F3EC7

Max. Marks: 80



- 13. Distinguish between single processor system and clustered systems.
- 14. Discuss about different approches in OS interface.
- 15. What is meant by creating a process?
- 16. Write a note on interprocess communication.
- 17. What are the different condition to arise a deadlock situation in a systems?
- 18. Explain Resource preemption.
- 19. What is fragmentation and how it can be tackled?
- 20. Differentiate between optimal page replacement and LRU page replacement with suitable example.
- 21. Describe different schemes for defining the logical structure of a directory.

(6×5=30)

Part C

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

- 22. Explain the role of system calls. Give examples.
- 23. Briefly discuss the CPU scheduling algorithms.
- 24. Describe bankers algorithm to avoid deadlock.
- 25. Explain the mapping of virtual addresses to real addresses under combined segmentation and paging.

(2×15=30)