



QP CODE: 19102711



19102711

Reg No :

Name :

BSc DEGREE (CBCS) EXAMINATION, OCTOBER 2019

Fifth Semester

B.Sc Computer Science Model III

Core Course - CC5CRT04 - SYSTEM SOFTWARE AND OPERATING SYSTEM

2017 Admission Onwards

FFF4C954

Maximum Marks: 80

Time: 3 Hours

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What is a language translator?
2. How are macros defined?
3. Define DFA.
4. What is a compiler?
5. What is process management?
6. Explain how multiprogramming increases the utilization of CPU?
7. Define wait and signal operations.
8. What is Banker's algorithm?
9. Differentiate between deadlock detection and recovery.
10. Define TLB. What are its uses?
11. What is paging?
12. How can index blocks be implemented in indexed allocation scheme?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain the phases and passes of a language processor
14. How assembler handles forward reference instruction?





15. Compare local and global code optimization
16. Write down program relocation algorithm.
17. Explain Process States
18. Explain direct and indirect communication
19. Illustrate deadlock-system model with an example.
20. How can we remove deadlock using resource preemption?
21. Describe the following.a) Linked scheme b) Multilevel indexc) Combined scheme
(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain different types of loaders?
23. Explain the role of operating system as a resource manager
24. Explain about process synchronization and various synchronization techniques.
25. Explain the hardware of segmentation.
(2×15=30)

