Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 18

M.Sc. (IT)/MCA/PGDCA (2019 Batch) (Sem.–1)

OPERATING SYSTEM

Subject Code : PGCA1903

M.Code : 76973

Time : 3 Hrs. Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C. have FOUR questions each.
3. Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
4. Select atleast TWO questions from SECTION - B & C.

SECTION-A

Write briefly :

1. RTS
2. Thread
3. Segmentation
4. RAID
5. Virtual memory
6. Time sharing
7. Context switch
8. Distributed OS
9. Mutual exclusion
10. Dirty bit

SECTION-B

11. Why OS is termed as resource allocator? Also compare RTS and Time sharing systems.

12. Write overviews of Inter process Communication and synchronization.

13. What is deadlock? How it is prevented and avoided?

14. Find waiting and turnaround time for the given processes using FCFS and SCF algorithms.

Process	Arrival Time (ms)	Burst Time (ms)
P1	1	5
P2	2	4
P3	2	7
P4	3	2

SECTION-C

15. Explain various page replacement algorithms used in demand paging.

16. Explain various levels of RAID structure.

17. Write a detailed note on security threats on Operating System.

18. Explain various types of fragmentation algorithms.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.