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:

- 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

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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.

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