Roll No. Total No. of Pages: 02 **Total No. of Questions: 09** M.Sc.(IT)/MCA/PGDCA (2019 Batch) (Sem.-1) **OPERATION SYSTEM** Subject Code: PGCA-1903 M.Code: 76973 Time: 3 Hrs. Max. Marks: 70 **INSTRUCTIONS TO CANDIDATES:** SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks SECTION - B & C. have FOUR questions each. Attempt any FIVE questions from SECTION B & C carrying TEN marks each. Select atleast TWO questions from SECTION - B & C. **SECTION-A Q1. Explain the following:** Moaded from SUN a) PCB b) LRU c) Paging d) DMA Trashing Scheduling g) System call h) Throughput i) Deadlock

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j) Fragmentation

SECTION-B

- Q2. Define Operating Systems and its types.
- Q3. 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
Р3	2	7
P4	3	2

- Q4. Differentiate between preemptive and non-preemptive scheduling.
- Q5. What is round robin scheduling? Explain it with help of an example.

SECTION-C

- Q6. Discuss basic memory management techniques and their advantages and dis-advantages.
- Q7. Differentiate between LRU and optimal replacement algorithms with help of example.
- Q8. What is a page fault? Also describe locality of reference.
- Q9. Explain various levels of RAID structure.

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

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