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

Total No. of Questions : 09

M.Sc.(IT)/PGDCA (Sem.–1)
OPERATING SYSTEM
Subject Code : PGCA-1903
M.Code : 76973
Date of Examination : 20-05-2023

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

1.   **Explain the following :**

a) Shell

b) PCB

c) Kernel

d) LRU

e) Context Switch

f) RTS

g) Paging

h) DMA

i) Trashing

j) Long Term Scheduler.

SECTION-B

2. Define Operating Systems and its types.

3. Find response and turnaround time for the given processes using FCFS and SCF algorithms

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

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

5. Write a note on bounded buffer problem and reader writer problem.

SECTION-C

6. Define segmentation. Explain paging with segmentation.

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

8. Discuss basic memory management techniques and their advantages and disadvantages.

9. Write a detailed note on protection and security.

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.