

Total No. of Questions : 5]

SEAT No. :

PB830

[Total No. of Pages : 2

[6204]-14

First Year M.C.A. (Management)

IT-14 : OPERATING SYSTEM CONCEPTS

(Revised 2020 Pattern) (Semester - I)

Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Draw the diagram wherever necessary.

- Q1) a) Explain first come first serve (FCFS) CPU scheduling algorithm with the set of 5 processes whose arrival time and CPU execution time [5]

Process	Arrival Time (ms)	CPU execution (ms)
P1	0	8
P2	1	7
P3	2	5
P4	3	4
P5	4	2

Calculate the average waiting time & average turnaround time

- b) Explain process states in detail [5]

OR

- a) Explain contiguous and non-contiguous memory allocation. [5]
 b) Write a shell script program to print even numbers between 1 to 20. [5]

- Q2) a) What are semaphores? Explain types of semaphores. [5]

- b) What is paging? Discuss basic paging technique in details. [5]

OR

- a) What are various criteria for a good process scheduling process scheduling algorithm? Explain any two preemptive scheduling algorithms in brief. [5]
 b) Explain features of Android OS. [5]

P.T.O.