SHIVAJI COLLEGE, UNIVERSITY OF DELHI
DEPARTMENT OF COMPUTER SCIENCE
INTERNAL TEST (Academic Year 2023-24)

Name of the Course   : B.Sc. (Prog.) with Computer Science   Semester : IV

Name of the Paper   : Operating Systems   Faculty Name : Mr. Rakesh Yadav

Duration   : 1 Hour   Maximum Marks: 20
Date of Test   : 11.03.2024

Attempt all Questions

Q NO 1

(a)   Name two services provided by O S for Users   (2)
(b)   How does an operating system prevent the CPU from being infinitely over run by user program? (2)
(c)   Differentiate between pre-emptive and non-pre-emptive job scheduling schemes?   (3)
(d)   Differentiate between multi programming and multi-tasking?   (3)

Q NO 2   (6)

Consider the following set of processes:

Process id	Arrival time	Burst Time
P1	2	3
P2	0	5
P3	1	3
P4	3	6

(i)   Draw Gantt charts showing execution of these processes using FCFS, RR (Quantum = 2) scheduling schemes.
(ii)   Compute response time and average waiting time in each scheme

Q NO 3   Define process. Explain different process states.   (4)

Faculty Signature: