

Total No. of Questions : 4]

SEAT No. :

PE-551

[Total No. of Pages : 1

[6578]-24

S.E. (Artificial Intelligence and Data Science) (Insem.)

OPERATING SYSTEMS

(2019 Pattern) (Semester - III) (217521)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) Solve Q.1 or Q.2, Q.3 or Q.4.
- 2) Figures to the right indicate full marks.
- 3) Assume suitable data, if necessary.

- Q1)** a) State and explain different services provided by an operating system. [6]
b) What is System call? Explain its types. [5]
c) What is Operating System? Describe in detail the functions of OS as a resource manager. [4]

OR

- Q2)** a) Describe the components of OS in detail. [6]
b) Explain Batch OS in detail. [5]
c) State the function of following shell commands: [4]
i) cat ii) mkdir
iii) grep iv) cd

- Q3)** a) Explain SJF (preemptive) scheduling algorithm with suitable example. [6]
b) Explain the different process states with the help of state diagram. [5]
c) What is scheduler? Explain its types. [4]

OR

- Q4)** a) What is Process Control Block (PCB)? Explain in detail. [6]
b) Define thread. Explain multithreaded model. [5]
c) What is Scheduling? Explain its types. [4]

