

R18

Code No: 154BR

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech II Year II Semester Examinations, August/September - 2022

OPERATING SYSTEMS

**(Common to CSE, IT, CSBS, CSIT, ITE, CSE(SE), CSE(CS), CSE(AIML), CSE(DS),
CSE(IOT), CSE(N))**

Time: 3 hours

Max. Marks: 75

**Answer any five questions
All questions carry equal marks**

- 1.a) Explain about time-sharing operating systems.
- b) Define real time system. Explain about real time operating system. [7+8]
- 2.a) Briefly explain about system calls.
- b) Explain about the system components of OS. [9+6]
- 3.a) Discuss about Process Control Block with a neat diagram.
- b) Explain about shortest Job First Scheduling algorithm with an example. [7+8]
- 4.a) Describe Round Robin scheduling algorithm with example.
- b) Explain about fork and exit system calls with examples. [8+7]
- 5.a) Discuss about resuming processes within a Monitor.
- b) Explain about deadlock detection. [7+8]
- 6.a) Describe IPC between processes on a single computer system.
- b) Discuss about implementation of Semaphores. [7+8]
- 7.a) Describe basic method of segmentation.
- b) Explain about performance of demand paging. [8+7]
8. Explain the following:
 - a) Virtual file systems
 - b) Indexed allocation. [8+7]

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