Code No: 871AD

R20

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA I Semester Examinations, October/November - 2022
OPERATING SYSTEMS

Time: 3 Hours   Max.Marks:75

Answer any five questions
All questions carry equal marks
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1.a) Distinguish between parallel and distributed systems.
  b) What are the services provided by operating systems?   [7+8]

2. What are real time systems? What are different types of real time systems? Explain.[15]

3.a) List and explain various scheduling criteria.
  b) What is multiple processor scheduling?   [7+8]

4. Explain various system calls for process management.   [15]

5. Explain how synchronization is achieved through monitors.   [15]

6. What is a deadlock? How can it be prevented?   [15]

7. Simulate page replacement algorithms on following reference string:
        1,2,3,4,2,3,1,5,6,3,5,2,7,4,5,3   [15]

8. Explain write, close, lseek, stat and ioctl system calls.   [15]

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