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B.C.A. CBCS (SEMESTER II) END EXAMINATION, JUNE, 2022
CORE COURSE

CAC-106 OPERATING SYSTEMS CONCEPTS

Duration: 2 hours

Total Marks: 60

Instructions: *i) All questions are compulsory.*
ii) Figures to the right indicate full marks.

- Q.1. A. Select the correct option and rewrite the statement. (5x1=05)
- i. The potential of security violation is _____.
 - ii. The extension for print is _____.
 - iii. The region of fast memory that holds copies of data is _____.
 - iv. Fully utilization of more than one processor is _____.
 - v. Allocate the smallest hole that is big enough is _____.

- B. Answer the following. (5x1=05)
- i. What is Error Handling ?
 - ii. What is Thrashing ?
 - iii. What is Safe State ?
 - iv. What is Operating System ?
 - v. What is Buffering ?

- Q.2. A. What is Two Level Directory ? (02)
B. Explain how Information can be Accessed in the computer memory ?(03)
C. With neat labeled diagram.Explain Process States ?(05)

- Q.3. A.Explain Page Fault ?(02)
B.Explain the different ways of Authenticating User ?(03)
C. Define Round Robin scheduling algorithm. Consider the following three processes, with the length of the CPU burst given in milliseconds.

| Process Queue | Burst time |
|---------------|------------|
| P1 | 4 |
| P2 | 3 |
| P3 | 5 |

Find out the average waiting time for this Round Robin Schedule with the Quantum number 2ms by giving Gantt chart, illustrate the execution of these jobs. (05)

- Q.4.A.Explain conditions how Deadlock can be prevented ?(02)
B.Explain Process Swapping with diagram ?(03)
C. Explain the C-SCAN Scheduling with example ?(05)

