

"Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules."

Roll No.

B.C.A. (II)

1716

Operat. Sys.

B.C.A. Part-II EXAMINATION - 2022

Paper - VII

BCA 201 - OPERATING SYSTEMS

Time Allowed : **Three** Hours

Maximum Marks : **80**

Note : 1. Question No. 1 is Compulsory. Attempt any **FOUR** from the remaining questions.

2. All questions carry equal marks.

1. (a) What is an Operating System?
- (b) What are the different operating systems?
- (c) What is a Socket?

- (d) What is Kernel?
 - (e) What do you mean by a process?
 - (f) What is the use of paging in operating system?
 - (g) What is the advantage of a multiprocessor system?
 - (h) What is Virtual Memory?
2. (a) What is deadlock? What are the four necessary and sufficient conditions behind the deadlock?
- (b) What is deadlock avoidance and prevention?
3. (a) What is Fragmentation? How many types of fragmentation occur in operation system?
- (b) What is Spooling? What is the difference between logical and physical address space?
4. What is Process Scheduling? Explain any two types of scheduling with example.
5. (a) Explain Process State with diagram?
- (b) What is Demand Paging? Explain with suitable example.
6. What is Semaphore? What are the different kinds of operations that are possible on semaphore? Explain with example.

7. Consider the following process with CPU burst time give in mili seconds.

Process	CPU Burst time	Priority
P ₁	11	2
P ₂	28	0
P ₃	2	3
P ₄	10	1
P ₅	16	4

8. Write short notes:

- (a) Swap Space Management
- (b) File system in Linux
- (c) Booting Process
- (d) XP operating system

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