PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2024
(Second Semester)

Branch – NETWORKING & MOBILE APPLICATION

OPERATING SYSTEM CONCEPTS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)
Answer ALL questions
ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	The operating system that allows multiple programs to run at same time is_____ a. Batch processing b. Multithreading c. Real time d. Multitasking	K1	CO1
	2	The number of processes completed per unit time is known as _____ a. Output b. Throughput c. Efficiency d. Capacity	K2	CO1
2	3	Termination of the process terminates a. first thread of the process b. First two threads of the proces c. All threads within the process d. Type	K1	CO2
	4	To avoid deadlock_____ a. there must be a fixed number of resources to allocate b. resources allocation must be done only once c. all deadlock process must be aborted. d. inversion technique can be used.	K2	CO2
3	5	A memory buffer used to accommodate a speed differential is called a. Stack pointer b. Cache c. Accumulator d. Disk buffer	K1	CO3
	6	When does page fault occur? a. The page is Present in memory b. The deadlock occurs c. The page does not Present in memory d. The buffering occurs	K2	CO3
4	7	The host sets _____ bit when a command is available for the controller to execute. a. Write b. Status c. Command-ready d. Control	K1	CO4
	8	A disk that has a boot partition is called a _____ a. Boot disk b. End disk c. Start disk d. Track	K1	CO4
5	9	Which is a unique tag, usually a number identifies the file within the file system? a. File name b. File Type c. File identifier d. File object	K2	CO5
	10	Which of the following file attribute access-control information determines who can do reading, writing, executing and so on? a. Protection b. Identifier c. Type d. Time & date	K2	CO5

SECTION - B (35 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks   (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Explain process states in process life cycle.	K2	CO1
		(OR)		
	11.b.	Formulate and develop the Evolution of operating system.	K2	CO1
2	12.a.	List the main difference and similarities between Threads and Process.	K3	CO2
		(OR)		
	12.b.	Elaborate about the Deadlock Detection in detail.	K3	CO2
3	13.a.	Identify and explain the Short-term Scheduling Criteria.	K3	CO3
		(OR)		
	13.b.	Justify about the Memory Partitioning.	K3	CO3
4	14.a.	Illustrate the Double Buffer and Circular Buffer.	K4	CO4
		(OR)		
	14.b.	Categorize about the Input Devices.	K4	CO4
5	15.a.	Explain about the File System Security.	K4	CO5
		(OR)		
	15.b.	Discuss in detail about the Secondary Storage Management.	K4	CO5

SECTION -C (30 Marks)
Answer **ANY THREE** questions
ALL questions carry **EQUAL** Marks   (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Determine about the Process Description with diagram.	K4	CO1
2	17	Explain Deadlock avoidance using banker's algorithm with an example.	K4	CO2
3	18	Develop the Basic Paging Techniques in detail.	K4	CO3
4	19	Write a detailed note on RAID. Classify the RAID.	K4	CO4
5	20	Organize and utilize about the B-trees	K4	CO5

Z-Z-Z   END