Cont...

PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BCA DEGREE EXAMINATION DECEMBER 2022

(Third Semester)

Branch - COMPUTER APPLICATIONS

LINUX PROGRAMMING

Γime:	Three Hours	Maximum: 50 Marks
	SECTION-A (5 Marks) Answer ALL questions ALL questions carry EQUAL marks	$(5 \times 1 = 5)$
1.	Which of the following command is used to count the towords, and characters contained in a file? (i) wcount (ii) countw (iii) wc (iv) wordcount	tal number of lines,
2.	Identify the command which is used to create a Linux fil (i) fsck (ii) mkfs (iii) fdisk (iv) mount	e system.
3.	The Kill system call is used to (i) Send shutdown messages to all by superuser (ii) Kill Processes (iii) Stop the processes (iv) Send a signal to a process	
	For semaphores and binary semaphores, a waiting on the semaphore (i) Queue (ii) Stack (iii) Tree (iv) Graph	_ is used to hold processes
5.	What is the persistency level of shared memory segments (i) Signal (ii) Kernel (iii) File System (iv) Process	s?
	SECTION - B (15 Marks) Answer ALL questions ALL questions carry EQUAL Marks	$(5 \times 3 = 15)$
6. a	Examine the purpose of Associative Arrays. (Or) Give any three examples of control structures in S	hell Programming.
7. a	 State the importance of File Locking. (Or) Examine the need of chmod and fchmod function 	
8. a		
9. a	1 1	
ł	(Or) Write short notes on File locking with Semanhore	

10. a. Write the difference between the Unix domain and the Inter-domain.

(Or)

b. Compare various IPC Mechanisms.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$

11. a. Explain the various file handling utilities and process utilities.

(Or)

- b. Describe the responsibilities of a shell.
- 12. a. Compare and contrast Soft Link and Hard Link.

(Or)

- b. Write the syntax for the following
 - (i) Opendir (ii) readdir (iii) Closedir (iv) rewinddir.
- 13. a. Differentiate Processes & Threads.

(Or)

- b. Explain the Kernel support for the file system.
- 14. a. Analyse the advantages and disadvantages of FIFO order.

(Or)

- b. What is Message Queue? Explain the concept of Kernel support for the message.
- 15. a. Write a program to copy file data from server to client using shared memory.

(Or)

b. Illustrate the working principle of connection-oriented protocol and connectionless protocol.

Z-Z-Z

END