

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**  
**END-OF-SEMESTER EXAMINATIONS : DECEMBER – 2022**  
**B.Sc. – COMPUTER TECHNOLOGY** **MAXIMUM MARKS: 70**  
**III SEMESTER** **TIME : 3 HOURS**

**PART – III**  
**OPERATING SYSTEM**

**SECTION – A** **(10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.**

**MULTIPLE CHOICE QUESTIONS.**

**(K1)**

1. Operating system is a collection of .....
  - a) software routines
  - b) input-output devices
  - c) Hardware components
  - d) computers
2. The model chosen for managing the creation of software from initial customer inception to the release of the finished product.....
  - a) protocol
  - b) process
  - c) stack
  - d) data base
3. A situation in which more than one process is blocked because it is holding a resource and also requires some resource that is acquired by some other process.....
  - a) deadlock
  - b) mutual exclusion
  - c) recursion
  - d) waiting
4. A memory system is used when running multiple applications simultaneously.....
  - a) virtual memory
  - b) cache memory
  - c) associative memory
  - d) all the above
5. Which of the following is not a multi user operating system?
  - a) Linux
  - b) Windows
  - c) Unix
  - d) Dos

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.**

**(K2)**

6. What is the purpose of operating system?
7. What is meant by thread?
8. Define paging.
9. Name any two file access method.
10. What is android?

**SECTION – B****(5 X 4 = 20 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

11. a) Discuss the Evolution of Operating system.

**(OR)**

- b) List the Services Operating System. .  
12. a) Explain the concept of Process.

**(OR)**

- b) Write a note on Semaphores.  
13. a) Outline various Deadlock handling methods.

**(OR)**

- b) Discuss Basic concepts of Segmentation.  
14. a) Explain about Demand Paging.

**(OR)**

- b) Write about Directory Structure.  
15. a) Describe the Disk Structure.

**(OR)**

- b) Write a short note on Linux.

**SECTION – C****(4 X 10 = 40 MARKS)****ANSWER ANY FOUR OUT OF SIX QUESTIONS.****(16<sup>th</sup> QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS .**

16. Describe the characterization of deadlock.  
17. Explain the Components of operating system.  
18. Describe the Scheduling Algorithms.  
19. Explain about Storage Management.  
20. Explain Optimal Page Replacement.  
21. Give overview of File System Structure in detail.

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