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**SUBJECT CODE NO: - Y-2103**  
**FACULTY OF SCIENCE AND TECHNOLOGY**  
**B.Sc. F.Y (Sem-II)**  
**Examination March / April - 2023**  
**Computer Science Paper-IV CS04 Operating System-I**

[Time: 1:30 Hours]

[Max. Marks:50]

Please check whether you have got the right question paper.

N. B

- 1) Attempt all questions.
- 2) Illustrate you answer with suitable example

- Q.1 a) Define CPU scheduling. Write briefly about the various CPU scheduling algorithm 10  
 b) Explain in detail any two types of operating system. 10

**OR**

- c) What is synchronization? Explain the various problems of synchronization. 10
- d) What is Address binding? Explain logical versus physical address space. 10

- Q.2 a) What is demand paging? explain virtual memory in windows XP. 10  
 b) Explain disk management in detail 10

**OR**

Write short note on ( any four ) 20

- 1) I/O Devices
- 2) Disk scheduling
- 3) Evolution of operating system
- 4) Time sharing system
- 5) Directory structure
- 6) Deadlock modelling

- Q.3 Multiple choice questions. 10

- 1) \_\_\_\_\_ Operating system does not implement multitasking.
 

a) Windows XP	b) Windows NT
c) Windows 98	d) MS-DOS
- 2) Process synchronization of programs is done by \_\_\_\_\_
 

a) Input	b) Output	c) operating system	d) memory
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- 3) For execution a process needs \_\_\_\_\_
- a) Throughput      b) Timer      c) Resources      d) Accessories
- 4) Which one of the following is the address generated by CPU?
- a) Physical address      b) Absolute address  
c) Logical address      d) None of the mentioned
- 5) Which of these is / are the desirable features of an operating system?
- a) Extensible      b) Portable      c) Reliable      d) All of these
- 6) Program priorities, pre-emption are the key concept of \_\_\_\_\_
- a) Batch processing      b) Real time  
c) Multiprogramming      d) Time sharing
- 7) The interface between users and computer called \_\_\_\_\_
- a) Operating system      b) Operator      c) Operation      d) None of these
- 8) Memory management technique in which system stores and retrieves data from secondary storage for use in main memory is called?
- a) Fragmentation      b) Paging      c) mapping      d) None of these
- 9) LRU stands for \_\_\_\_\_
- a) Line Replaceable unit      b) Linear Repair unit  
c) Line Repair unit      d) Linear Replacement unit
- 10) Which of the following are loaded into main memory when the computer is booted?
- a) Internal command instructions      b) External command instructions  
c) Utility programs.      d) Word processing instructions