

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2023 ONLY)

SUB CODE

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : NOVEMBER 2023

B.Sc. INFORMATION TECHNOLOGY

MAXIMUM MARKS: 50

SEMESTER III

TIME : 3 HOURS

PART - III

22UIT307 - OPERATING SYSTEMS

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.(K1)

1. The term _____ indicates a machine (i.e. a computer), which does not physically exist, and yet, makes the user believe that there is a machine.
a) virtual machine b) Machine c) File Structure d) Booting
2. A process which is not waiting for any external event such as an I/O operation is said to be in _____ ready state.
a) Running b) Ready c) Blocked d) Finished
3. _____ allows the program to be divided into different chunks and loaded at different portions of the memory.
a) Contiguous b) Continuous c) Non-Contiguous d) Paging
4. In _____ all the processors are tightly coupled, communicate using shared memory and are packaged in one housing.
a) Remote Procedure Call b) Distributed Processing
c) Parallel Processing d) Paging Mechanism
5. Windows 2000 was to be initially named as _____.
a) Windows NT 5.0 b) Windows NT 4.0 c) Windows ME d) Windows XP

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. Write a note on Operating System.
7. What is a Process?
8. Define Paging in Memory Management.
9. What is meant by Remote Procedure Call?
10. What is the use of NTFS ?

(COND..2)

SECTION – B

(5 X 3 = 15MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K3)

11. a) Narrate in detail about Booting in OS
(OR)
b) Describe in detail about File Directory Entry.
12. a) Narrate in detail about Multithreading.
(OR)
b) Explain in detail about Semaphores
13. a) Outline in detail about Graphical Representation of Deadlock
(OR)
b) Describe in detail about Single Contiguous Memory Management
14. a) Outline in detail about Differences between Distributed and Parallel Processing
(OR)
b) Explain in detail about Process migration
15. a) Explain in detail about Windows Registry
(OR)
b) Describe in detail about important features of NTFS

SECTION – C

(5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K4 (Or) K5)

16. a) Outline in detail about the different services provided by Operating systems.
(OR)
b) Discuss in detail about Device Driver Basics and I/O Procedure.
17. a) Discuss in detail about Process State Transitions with a neat diagram.
(OR)
b) Summarize in detail about The Producer Consumer Problem .
18. a) Elucidate in detail about Strategies to avoid Deadlock by OS.
(OR)
b) Discuss in detail about Fixed partition Memory Management
19. a) Discuss in detail about Machine architecture supporting Parallel Processing.
(OR)
b) Summarize in detail about Distributed Processing.
20. a) Explain in detail about Windows 2000 Process and Threads.
(OR)
b) Discuss in detail about Windows 7 Design Principles and Architecture.