

KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

THOOTHUKUDI – 628 003

(5 Pages)

Reg. No:

Question. Code No : 25E01407

Sub Code : 24PECA11

PG Degree - End Semester Examinations, April 2025

First Semester

M.C.A.

Elective - Advanced Operating Systems

(For those who joined in July 2024 onwards)

Time : 3 Hours

Maximum : 75 Marks

PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

1. _____ provides a file-system interface where clients can create, update, read and delete files.
(a) Compute-Server system (b) File-Server system
(c) Real time-Server system (d) None

2. The _____ indicates the address of next instruction to be executed.
- (a) CPU Register (b) Process State
(c) Program Counter (d) Process Control Block
3. A _____ state of a system is one which if entered when the system fails, no damage would result.
- (a) Safety-critical (b) Fail-safe
(c) Safe-fail (d) Critical-safety
4. In _____ Scheduling, at every scheduling point the task having the shortest deadline is taken up for scheduling.
- (a) EDF (b) MLF
(c) RMA (d) Hybrid
5. _____ operating system is an operating system for personal digital assistants, designed for touch screen.
- (a) Symbian (b) Windows
(c) Palm (d) Linux
6. _____ operating system can be used by any one because it is an open source operating system.
- (a) Linux (b) Symbian
(c) Palm (d) Android
7. _____ are show files that contain an arbitrary pathname of another file.

- (a) Hard Link (b) Soft Link
(c) Short Link (d) None
8. _____ allows for clones or multiple copies of the same file.
(a) HFST (b) APFS
(c) AFPS (d) HSFT
9. The _____ is a list at servers which hold a copy of the replicated volume.
(a) AVSG (b) VSG
(c) RVM (d) None
10. _____ is compatible with Unix and was designed by the open foundation software company.
(a) Micros (b) Solaris
(c) OSF/I (d) Locus

PART - B (5X5=25 Marks)

**Answer ALL Questions choosing either (a) or (b).
Answer should not exceed 250 words.**

11. (a) Write about Clustered systems.
(OR)
(b) Describe on Deadlock detection.
12. (a) Summarize the features of distributed operating system.

(OR)

(b) Elucidate on Coda system.

13. (a) Give a note on Event-driven scheduling.

(OR)

(b) Explain shortly about Table-driven scheduling.

14. (a) Describe the Technological overview of handheld system.

(OR)

(b) Illustrate on Palm OS.

15. (a) Explain about File system in iOS.

(OR)

(b) Differentiate between Linux versus Unix like kernels.

PART - C (5 X 8 = 40 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 600 words.

16. (a) Explain in detail about Deadlock characterization.

(OR)

(b) Elucidate on Inter process communication.

17. (a) Write about the design issues in distributed operating system.

(OR)

(b) What are the deadlock handling strategies in distributed systems? Explain.

18. (a) Write a note on EDF (Earliest Deadline First) scheduling.

(OR)

(b) What are the issues in RMA? Explain in detail.

19. (a) Explain: Android architecture.

(OR)

(b) Elucidate on Symbian OS.

20. (a) Explain about iOS Architecture.

(OR)

(b) Explain in detail about the overview of Unix file system.