

(6 pages)

Reg. No. :

Code No. : 7440

Sub. Code : HCSE 11

M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2015.

First Semester

Computer Science

Elective I — DISTRIBUTED OPERATING SYSTEM

(For those who joined in July 2012 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. In distributed system each processor has its own _____.
(a) Local memory (b) Clock
(c) Both (a) and (b) (d) None of the above
2. MAN stands for _____.
(a) Main Area Network
(b) Massive Area Network
(c) Methods And Networks
(d) Metropolitan Area Network

3. Message passing sends a message to _____.
(a) Process (b) Server
(c) Main Memory (d) Virtual Memory

4. Encoding is the process of putting a sequence of _____.
(a) Analog signals (b) Characters
(c) Digital signals (d) None of above

5. Banker's algorithm is used for _____.
(a) Deadlock detection
(b) Deadlock prevention
(c) Deadlock avoidance
(d) Deadlock recovery

6. The shared memory model provides a _____.
(a) Physical address space
(b) Logical address space
(c) Both (a) and (b)
(d) Virtual address space

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7. A locality of reference is associated with _____.

- (a) Cache memory
- (b) Main memory
- (c) Secondary memory
- (d) Virtual memory

8. NFS stands for _____.

- (a) New File System
- (b) Network File System
- (c) New Future System
- (d) Network Future System

9. Trojan horse attack is generally a _____.

- (a) Active attack (b) Thread attack
- (c) Passive attack (d) None of the above

10. Key elements of security _____.

- (a) Confidentiality (b) Integrity
- (c) Availability (d) All of the above

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PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the details about remote access service.

Or

- (b) Define ATM and explain its technology.

12. (a) Explain about the failure handling.

Or

- (b) What is message passing and explain its advantages.

13. (a) Explain Architecture of DSM.

Or

- (b) Explain Granularity.

14. (a) Difference between stateful service and stateless service.

Or

- (b) Explain Fault tolerance principle.

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[P.T.O.]



15. (a) What are the various advantages of cryptography?

Or

- (b) Explain the types of Access Control.

PART C — ($5 \times 8 = 40$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) What is distributed operating system and its advantages?

Or

- (b) What is meant by ATM and explain its architecture?

17. (a) Difference between synchronization and asynchronization.

Or

- (b) Explain encoding and decoding techniques.

18. (a) Explain the concept of Replacement Strategy.

Or

- (b) What are the various design and implementation issues of DSM?

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19. (a) What is Distributed File System (DFS) and its features?

Or

- (b) Explain various File Caching Schemes.

20. (a) Explain in detail about cryptography technique.

Or

- (b) What the advantages and disadvantages of encryption and decryption?
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