St.Joseph'S College of arts & science (autonomous)
Cuddalore.1

UNIT-I

5 MARKS:

1. Explain operating system functions with examples. (Nov 2015, Apr2016)

2. Write short notes on Kernel.

3. Give a note on history of operating system.

4. Write a short note on booting and kernel.

5. What is kernel? Explain with neat diagram.

10 MARKS:

1. What is meant by operating system? Explain the history of operating system. (Nov2014, Apr2015)

2. Summarize the different services of the operating system.

3. Discuss the Generations of operating system with neat structure.

4. Explain about disk space allocation methods in detail.

UNIT II

5MARKS:

1. Explain process state transition with neat diagram?

2. What are the steps followed to create a process? Explain.

3. What is a process? Discuss the types of process state?

4. What is the necessary conditions for deadlock situation? Discuss.

5. Explain the process state with neat diagram.

6. Explain Deadlock characterization.

7. Describe the fields of PCB.

8. What is deadlock? What are Coffman's prerequisites for deadlock?

9. What are the different process scheduling levels? How do they interact
    with each other?

10. Describe about various methods for deadlock prevention.

10 Marks:

1. Explain deadlock avoidance algorithm with example? (Nov-14, April16)

2. Discuss Inter-Process Communication with suitable example.

3. Discuss about process concept.

4. Give an Example of producer-consumer problem indicating the reasons
    for inconsistency that can arise due to race condition.

5. Discuss various process states and their transitions.

6. Point out the various deadlock strategies.

7. Elucidate the operations in process.

8. Explain deadlock and deadlock detection.

UNIT-III

5 MARKS:

1. Difference between contiguous and non-contiguous.

2. Illustrate paging.

3. Explain the address translation mechanism in paging? Why page size is a power of two?

4. What are requirements to be satisfied by the memory management?

5. List the issues to be addressed by memory management schemes.

6. Explain the working function of single contiguous memory management.

7. Explain about non-contiguous Allocation.

10 MARKS:

1. Describe irrutal memory management. Concept with example?

2. Discuss fixed memory schemes in detail?

3. Detail the process of paging.

4. Explain operating system software in virtual memory management.

5. Explain the concept of variable partition.

6. Describe the commonly used jargon in virtual system.

7. What is fixed partitioned memory management? Explain.

8. Describe the partitioned memory management in detail?

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UNIT-IV

5 MARKS:

1. Write short note on computer worms.
2. List the components of GUI.
3. What are the Design principles insecurity? Explain.
4. Write Short note on virus. List Some of its types.
5. Write Short notes on Encryption.
6. Explain the basic concepts of encryption.
7. List the design principles for security mechanism? Explain.
8. List the requirements for a window-based GUI?
9. Describe the commonly used jargon in virtual system.
10. Discuss the security problem with example.

10 MARKS:

1. Explain the requirements of a window-based GUI with reference to MS-Word.
2. Discuss on the security protection mechanism.
3. What are the various components of GUI? Explain in Detail.
4. Explain the different ways in which security system can be attacked.
5. Explain attacks a security.
6. Define Authentication. Explain how authentication in centralized environment can be achieved.
7. Discuss various mechanisms of data encryption.
8. Given account on protection strategies provided by OS.
9. Explain encryption.

UNIT-V

5 MARKS:

1. Give any five Unix commands and Explain their purpose of usage.
2. How the file system of Unix is managed.
3. Explain Unix environment with neat diagram.
4. Discuss the common facilities of the modern Unix systems.
5. What are the different types of file in Unix? Explain any two types.
6. Explain Unix operating system and its features.

10 MARKS:

1. Explain the architecture of Unix file system.
2. Explain the architecture of Unix and discuss the basic commands in it.
3. Explain the different types of files in Unix.
4. Explain about the Unix file system in detail.
5. Discuss the process of executing and terminating a program in Unix.
6. Explain the basic commands in Unix with an example.
7. Explain the over view of Unix with a neat diagram.
8. Describe the salient features of the Unix file system.