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Total No. of Questions : 13]   [Total No. of Pages : 02

Paper ID [B0146]

(Please fill this Paper ID in OMR Sheet)

BBA (BB - 1003) (S05) (LE) (Sem. - 6th)
INTRODUCTION TO OPERATING SYSTEM

Time : 03 Hours   Maximum Marks : 75

Instruction to Candidates:

    1)   Section - A is **Compulsory**.

    2)   Attempt any **Nine** questions from Section - B.

Section - A

Q1)   *(15* x *2 = 30)*

    a)   Write short note on Batch Operating system.

    b)   Explain the performance measurement criteria for CPU.

    c)   What is real time operating system? Explain.

    d)   Explain functions performed by an OS.

    e)   What is a Process Control Block (PCB)? What information is stored in this?

    f)   Write short note on deadlock detection and recovery.

    g)   What do you mean by Priority based scheduling? Explain.

    h)   Explain deadlocks prevention.

    i)   What is the need for process synchronization? Explain.

    j)   Discuss the Round Robin scheduling algorithm.

    k)   What are interrupts? How an OS handles these?

    l)   What is swapping? Explain.

    m)   Explain various file Operations.

    n)   Write short note on I/O System.

    o)   What do you mean by Protection? Explain.

A-49   *P.T.O.*

Section - B

(9 x 5 = 45)

Q2) Differentiate between Multiprogramming and Time Sharing operating systems.

Q3) What do you understand by a process? Draw the state transition diagram and explain the purpose of each state.

Q4) What is a scheduler? Explain various types of schedulers.

Q5) Define Operating System. Explain the functions performed by an Operating System.

Q6) Describe methods for deadlock handling.

Q7) Explain the Readers and Writers Problem of synchronization.

Q8) What are deadlocks? Discuss the necessary conditions for deadlock occurrence.

Q9) Explain the FCFS and SJF scheduling algorithms.

Q10) What do you mean by virtual memory? How it is implemented? Explain.

Q11) Explain various file organization techniques in detail.

Q12) Compare static and dynamic contiguous partitioned memory management schemes.

Q13) What do you mean by Directory Structure? Discuss the data structures for maintaining directories.

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