Day : Monday   Time : 02:00 PM-05:00 PM

Date : 5/12/2022   **W-20114-2022**   Max. Marks : 60

N.B.
1)   All questions are **COMPULSORY.**
2)   Figures to the **RIGHT** indicates **FULL** marks

Q.1   Answer **ANY TWO** of the following: **(12)**
a)   Define Operating system. Explain functions of operating system.
b)   Illustrate Shortest Job First scheduling with suitable example.
c)   What is Deadlock? Explain conditions for deadlocking and preventions of deadlock.

Q.2   Answer **ANY TWO** of the following: **(12)**
a)   Explain direct and sequential file access methods.
b)   What is system call? Illustrate implementation of system call.
c)   Explain page replacement algorithm with example.

Q.3   Answer **ANY TWO** of the following: **(12)**
a)   What is file? Explain attributes and types of file.
b)   What is partitioning? Explain various memory partitioning techniques with diagram.
c)   Elaborate structure and types of directory.

Q.4   Answer **ANY THREE** of the following: **(12)**
a)   State the various types of operating system.
b)   Explain Round Robin algorithm with example.
c)   What is FCFS? Explain FCFS algorithm with example.
d)   Explain demand paging in brief.

Q.5   Answer **ANY FOUR** of the following: **(12)**
a)   Write note on simple Monitor.
b)   State Deadlock recovery.
c)   Explain swapping.
d)   Explain Linked allocation method of file.
e)   Write buffering and spooling terms.
f)   State the segmentation.

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