

BACHELOR OF SCIENCE (COMPUTER SCIENCE) (CBCS - 2016 COURSE)
T.Y.B.Sc.(Computer Science) Sem-V :SUMMER- 2022
SUBJECT : OPERATING SYSTEM

Day : Friday
Date : 1/7/2022

S-14903-2022

Time : 11:00 AM-02:00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**
- 2) Figures to **RIGHT** indicate **FULL** marks.

Q.1 Answer **ANY TWO** of the following: **(12)**

- a) What is an operating system? Discuss various types of operating system.
- b) Explain different strategies to deal with deadlocks.
- c) Illustrate various scheduling criteria for CPU scheduling.

Q.2 Answer **ANY TWO** of the following: **(12)**

- a) Explain First-Come-First-Served (FCFS) algorithm with suitable example.
- b) What is paging? Explain page table implementation in brief.
- c) Describe the conditions when a deadlock situation occurs.

Q.3 Answer **ANY TWO** of the following: **(12)**

- a) What is file? Explain various file operations.
- b) Write note on Segmentation.
- c) Explain types of directory.

Q.4 Answer **ANY THREE** of the following: **(12)**

- a) Describe access methods of file.
- b) Write note on simple monitor.
- c) Explain different types of system call.
- d) Write various functions of operating system.

Q.5 Answer **ANY FOUR** of the following: **(12)**

- a) Write Shortest-Job-First scheduling algorithm.
- b) Write various types of file.
- c) Explain swapping and overlap swapping.
- d) Write note on I/O memory.
- e) Compare between preemptive and non-preemptive algorithm.
- f) Write note on interrupts.

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