

**T.Y. B. SC. (Computer Science) SEM –V (CBCS - 2016 COURSE) :**  
**SUMMER - 2019**  
**SUBJECT : OPERATING SYSTEM**

**Day** : Wednesday  
**Date** : 10/04/2019

**Time** 11.00 AM TO 02.00 PM  
**Max. Marks** : 60

**S-2019-1105**

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**N.B.**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the **RIGHT** indicate **FULL** marks.
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**Q.1** Answer **ANY TWO** of the following. **(12)**

- a) Define file. Explain different operations on file.
- b) Describe Demand paging concept in detail.
- c) What is system call? Illustrate implementation of system call.

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

- a) Describe directory structure with various types of directory.
- b) Illustrate the contiguous memory allocation method using MVT scheduling.
- c) Explain FCFS CPU scheduling algorithm with suitable example.

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

- a) Define operating system. Explain various services of operating system.
- b) Describe the necessary conditions for deadlocks to occur.
- c) Explain indexed and linked file allocation methods.

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

- a) Describe SJF CPU scheduling with proper example.
- b) Write a note on deadlock recovery.
- c) Write a note on CPU protection.
- d) What are the different file access methods?

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

- a) Write note on paging.
- b) Explain swapping and overlap swapping.
- c) What are the different categories of system call?
- d) Explain various operations on directory.
- e) What do you mean by Buffering and Spooling?
- f) Write a note on simple monitor.

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