

M. SC. (Computer Science) SEM – III (Choice Based Credit & Grade System) : WINTER - 2018

SUBJECT: ELECTIVE: c) ADVANCED OPERATING SYSTEM

Day: Friday
Date: 26/10/2018

W-2018-1057

Time: 03.00 PM TO 06.00 PM
Max. Marks: 60

N.B:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labeled diagram **WHEREVER** necessary.
-

- Q.1** Explain following memory allocation methods: **(15)**
- a) Contiguous
 - b) Linked
 - c) Indexed

OR

Describe Shortest Job first and First Come First Served process algorithm in detail with the help of example.

- Q.2 A)** Answer **ANY ONE** of the following: **(08)**
- i) Illustrate different types and operations of file in windows operating system.
 - ii) Explain different objectives and functions of operating system.
- B)** Answer **ANY ONE** of the following: **(07)**
- i) Explain architecture of TCP/IP protocol.
 - ii) Describe virtual memory with proper example.

- Q.3** Answer **ANY THREE** of the following: **(15)**
- a) Draw and explain process state diagram.
 - b) Illustrate different types of security threats.
 - c) Describe deadlock prevention methods in detail.
 - d) Explain I/O system management of operating system.
 - e) Describe architecture of Linux operating system.

- Q.4** Write short notes on **ANY THREE** of the following: **(15)**
- a) Sockets
 - b) Message passing
 - c) Network File System
 - d) Client/Server computing
 - e) Paging