

Roll No.

23543

**M. Tech. 1st Semester (Cyber Forensics
and Information Security)
Examination – January, 2016**

OPERATING SYSTEMS AND SECURITY

Paper : MTCF-103

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

*Note : Students have to attempt **five** questions in all, selecting **one** question from each Section and Question No. 1 is **compulsory**.*

1. Explain the following : 20
- (i) OS Organization
 - (ii) Swapping
 - (iii) Processes
 - (iv) SMB

SECTION - I

2. (i) Define Operating System. Explain its functions. 10
(ii) Explain the following : 10
(a) Time Sharing and Multiprogramming
(b) Real Time Systems
3. Explain the following : 20
(i) Deadlock Avoidance
(ii) Threads
(iii) Two phase locking

SECTION - II

4. (i) What do you understand by segmentation ?
Explain. 10
(ii) Give a brief description about low level file
implementations. 10
5. Give a complete description about file system and I/O
management. 20

SECTION - III

6. (i) Define Registry. Explain in detail about Registry
usage and Registry data types. 10
(ii) Give a complete description about service control
manager. 10
7. Explain the following : 20
(i) Thread Internals
(ii) Job Objects
(iii) Thread Scheduling

SECTION - IV

8. What do you understand by Secure Operating
Systems ? Explain in detail. 20
9. Explain the following : 20
(i) Trusted Computing
(ii) Digital Rights Management