

Roll No.

23543

**M. Tech. 1st Sem. (Cyber
Forensics and Information
Security) Examination-
December, 2016**

OPERATING SYSTEMS AND SECURITY

Paper : MTCF-103

Time : 3 hours

Max. 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 the 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 :

(a) System calls (5)

(b) Virtual Memory (5)

(c) Threads (5)

(d) SMB (5)

Section-A

2. (a) Define operating system. Explain in detail about OS organisation. (10)

(b) Define Process. Explain in detail about Process Management. (10)

3. Define deadlock. Explain in detail about deadlock detection and recovery. (20)

Section-B

4. Give a complete description about memory management. (20)

5. Explain the following :

(a) Memory Mapped Files (10)

(b) Device Drivers (10)

Section-C

6. Describe the following : (20)

(i) Flow of Create Process

(ii) Process Internals

(iii) Job Objects

7. What do you understand by Windows management mechanisms ? Explain. (20)

Section-D

8. Explain the following :

(i) Remote file system security (10)

(ii) Smart Cards (10)

9. Describe the following :

(a) Digital Rights Management (10)

(b) TCPA and NGSCB (10)