

Roll No. ....

24252

B. Tech 5th Semester (CSE)

Examination – December, 2016

PRINCIPLES OF OPERATING SYSTEM

Paper : CSE-301-F

Time : Three Hours ]

[ Maximum Marks : 100

*Before answering the question, 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 :** Attempt five questions. Question No. 1 is compulsory. Attempt one question each from each Section.

1. Write a short note on the following : 4 × 5 = 20

- (a) System programs and system calls.
- (b) Logical and Physical address.
- (c) Critical Section.
- (d) Shell interpreter.

**SECTION – A**

2. (a) What is Operating System. Explain its types in detail. 10
- (b) Explain First come First serve and shortest job first in detail with suitable example. 10
3. (a) Differentiate between Distributed Operating System and Network Operating System. 10
- (b) Explain the concept of process in detail. 10

**SECTION – B**

4. Explain virtual Memory Management. 20
5. Explain swapping in detail. 20

**SECTION – C**

6. (a) Explain directory structures in detail. 10
- (b) What are the advantages of a Distributed file system over a file system in a centralized system. 10
7. (a) Explain distributed file system. 10

24252-5250-(P-3)(Q-9)(16) ( 2 )

- (b) What is semaphore ? Which operation done on semaphore. Explain in detail. 10

**SECTION – D**

8. Explain Window NT file system. 10
9. Explain architecture of UNIX operating system. 10

24252-5250-(P-3)(Q-9)(16) ( 3 )