M. SC. (Computer Science) SEM – III (Choice Based Credit & Grade System) : SUMMER - 2019

SUBJECT: ELECTIVE: c) ADVANCED OPERATING SYSTEM

Day: Thursday
Date: 02/05/2019

S-2019-1259

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 diag.ram **WHEREVER** necessary.

Q.1 Explain Priority scheduling algorithm with suitable example. Explain advantages and disadvantages of Priority scheduling algorithm. **(15)**

OR

Describe file organization in UNIX and Windows operating system.

Q.2 A) Answer **ANY ONE** of the following: **(08)**

i) Illustrate TCP/IP architecture in detail.

ii) Explain demand paging with suitable example.

B) Answer **ANY ONE** of the following: **(07)**

i) Describe directory structure in Windows operating system.

ii) Explain page replacement algorithm with proper example.

Q.3 Answer **ANY THREE** of the following: **(15)**

a) Describe various states of process.

b) Explain I/O devices and I/O functions.

c) Illustrate different types of operating system.

d) Explain threading and list its advantages.

e) Illustrate concept of mutual exclusion in detail.

Q.4 Write short notes on **ANY THREE** of the following: **(15)**

a) Monitors

b) RPC clusters

c) Segmentation

d) Security threats

e) Virtual Memory

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