Total No. of Questions—8]　　　　　[Total No. of Printed Pages—2

Seat
No.

[5668]-186

S.E. (Computer Engineering) (Sem. I) EXAMINATION, 2019

OPERATING SYSTEM AND ADMINISTRATION

(2012 PATTERN)

Time : Two Hours　　　　　　　　　　**Maximum Marks : 50**

N.B. :— (*i*) Attempt Q. No. **1** *or* Q. No. **2**, Q. No. **3** *or* Q. No. **4**, Q. No. **5** *or* Q. No. **6** and Q. No. **7** *or* Q. No. **8**.

(*ii*) Neat diagrams must be drawn wherever necessary.

(*iii*) Figures to the right indicate full marks.

(*iv*) Assume suitable data, if necessary.

1. (*a*) What is the Operating System ? Explain the operating system services. [6]

(*b*) What is the use of kernel ? Draw and explain the block diagram of system kernel. [6]

Or

2. (*a*) What do you mean by user perspective ? Explain the file system structure with the help of diagram. [6]

(*b*) Explain the architecture of the UNIX operating system. [6]

3. (*a*) How to mount file system ? Explain unmount command with options. [6]

(*b*) What is bootstrapping ? Explain steps in boot process. [6]

P.T.O.

4. (*a*) What is GRUB ? Explain GRUB boot process in detail. [6]

(*b*) Define File. Explain the organization of the file trees. [6]

5. (*a*) What is Shell ? Explain different types of shell. [6]

(*b*) Differentiate between program and process. Explain with neat diagram contents of a UNIX process image. [7]

Or

6. (*a*) What do you mean by nice and renice value ? What is dynamic monitoring with top ? [6]

(*b*) How to deal with runaway processes ? How kill and signal can be used to deal with runaway processes ? [7]

7. (*a*) What is the Storage Hardware ? Explain the Hierarchy of storage with diagram. [6]

(*b*) What is the LVM ? Explain the implementation of the LVM. [7]

Or

8. (*a*) Explain with the help of diagram the different levers of the RAID model. [6]

(*b*) What are the different steps of the disk partitioning ? What are the advantages and disadvantages of the multiple partitions ?