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

Seat No.	

[5252]-164

SE (Computer Engineering) (First Semester)

EXAMINATION, 2017

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 use of operating system ? Explain the operating system services. [6]

(*b*) Explain the three levels of unix architecture. [6]

Or

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

(*b*) Write short notes on : [6]

(*i*) V-node and I-node tables

(*ii*) Sleep and Wake up

(*iii*) Block IO devices and Raw IO devices.

3. (*a*) Explain mounting and unmounting. How new file system is mounted and unmounted in UNIX ? [6]

(*b*) What is bootstrapping ? Explain the different phases of the bootstrapping. [6]

P.T.O.

Or

4. (*a*) Explain the different types of files in Unix. Describe pathname in unix operating system. [6]

(*b*) What is the Perl programming ? How to create and access the array elements in the Perl programming with an example. [6]

5. (*a*) What is process ? Explain the life cycle of process in detail. [7]

(*b*) Explain different signals in Unix. [6]

Or

6. (*a*) Explain the following commands in detail : [6]

(*i*) strace

(*ii*) truss

(*iii*) tusc.

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

7. (*a*) Explain the different levels of the RAID model with a neat diagram. [7]

(*b*) Explain the advantages and disadvantages of multiple partitions. [6]

Or

8. (*a*) Explain the relationship between various elements of the LVM with the help of neat diagram. [6]

(*b*) What is the extended file system ? Explain the different extended file system in detail. [7]