Total No. of Questions—8]　　　　[Total No. of Printed Pages—3

Seat
No.

[5057]-254

S.E. (Computer Engg.) (I Sem.) EXAMINATION, 2016

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**, 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*)　How to change file permissions in unix ? Explain with suitable

example.　　　　　　　　　　　　　　　　　　　　　[6]

(*b*)　Explain the functionalities of kernel of the operating system.　[6]

P.T.O.

3. (*a*) How new file system is mounted and unmounted in unix ? Explain with example. [6]

(*b*) Explain the difference between Perl and Python. [6]

Or

4. (*a*) Explain block devices and character devices in detail. [6]

(*b*) Explain pipes and redirection in shell. [6]

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

(*b*) Explain the different levels of RAID model with a neat diagram. [6]

Or

6. (*a*) What is the use of signal for processes ? Explain different signals in unix. [6]

(*b*) Explain different storage hardware interfaces in detail. [7]

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

(*i*) strace

(*ii*) truss

(*iii*) tusc.

(*b*)   Explain the structure of /etc/passwd file. Write different fields

included in /etc/passwd.   [7]

Or

8.   (*a*)   Explain role based access control system in detail.   [7]

(*b*)   With the help of neat diagram, explain the relationship

between various elements.   [6]