Code : 303205

BCA 2nd Semester Exam., 2014

OPERATING SYSTEM AND UNIX

Time : 3 hours Full Marks : 60

Instructions : akubihar.com

(i) **All** questions carry equal marks.

(ii) There are **SEVEN** questions in this paper.

(iii) Attempt **FIVE** questions in all.

(iv) Question Nos. **1** and **2** are compulsory.

1. Choose the correct answer/Fill in the blank (any six) :

   (a) UNIX is a

      (i) single-user and CUI-based operating system

      (ii) multiuser and GUI-based operating system

      (iii) multiuser and single-tasking operating system

      (iv) ✓ multiuser and multitasking operating system

   (b) wc command

      (i) is used for counting the character of a word   akubihar.com

      (ii) counts the line of a file

      (iii) counts the files of a directory

      (iv) is a wrong command

   (c) To erase the entire word in vi editor, we use

      (i) Ctrl-w

      (ii) Ctrl-c

      (iii) Alt-w

      (iv) Ctrl-d

   (d) Which was the first UNIX shell?

      (i) Bash shell

      (ii) Korn shell

      (iii) ✓ Bourne shell

      (iv) X-shell

   (e) To remove a directory —— command is used in UNIX.

   (f) The octal number used with chmod command to make a file readable, writable and executable to the owner is

      (i) 000   (ii) 722

      (iii) 755   (iv) 777

(g) The process is

    (i) job in execution

    (ii) job in RAM

    (iii) job in waiting

    (iv) None of the above

(h) How many types of scheduler are there?

    (i) 2   (ii) 3

    (iii) 4   (iv) 5

(i) The SJF stands for

    (i) shortest job first

    (ii) simple job first

    (iii) system job first

    (iv) second job first

(j) To see the contents of a directory, we use the command

    (i) ls

    (ii) lp

    (iii) dir

    (iv) list

2. Answer any *three* short answer-type questions :

(a) What is the role of operating system?

(b) Differentiate between page and segment.

(c) Describe about process.

(d) Deals about the three modes of vi editor. How would you switch from one mode to another?

(e) Write the syntax of the following commands :

    (i) cmp

    (ii) cat

    (iii) rmdir

    (iv) comm

3. How many types of scheduling algorithm are there? Describe them in detail.

4. Describe the paging techniques. What is the need of page table?

5. Compare UNIX features with Windows. Give your views which is better.

6. How many types of shell are used in UNIX? Describe them.

7. Write short notes on any *three* of the following :

(a) Fragmentation

(b) GUI

(c) UNIX file system

(d) Shell

(e) Multithreading

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