E 6647 (Pages : 3) Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, NOVEMBER 2013

First Semester

Vocational Course—OPERATING SYSTEM AND COMPUTER NETWORKS

(For the Vocational Subject : Computer Applications of Model-II Physics)

[Prior to 2013 admissions]

Time : Three Hours Maximum Weight : 25

Part A (Objective Type)

Answer **all** *questions.*
Each bunch of four questions carries a weight of 1.

Bunch I

Fill in the blanks :

1. A ——— spans a large geographical area, often a country or continent.
2. PDA stands for ———.
3. A ——— is an agreement between the communicating parties on how communication is to proceed.
4. In ISO/OSI reference model, the main tasks of the ——— is to transform a raw transmission facility into a line that appears free of undetected transmission errors to the next layer.

Bunch II

Select the most appropriate alternate :

5. When a person at home accesses a page on the world wide web, the model is known as :
   (a) Peer-to-Peer Network. (b) Broadcast Network.
   (c) Mobile Network. (d) Client-Server Network.
6. A webpage is located using a :
   (a) Universal Record Linker. (b) Uniform Resource Locator.
   (c) Universal Record Locator. (d) Uniformly Reachable Links.
7. Which of the following is not a browser for internet ?
   (a) Internet Explorer. (b) Netscape Navigator.
   (c) Mozilla. (d) Alta Vista.
8. BIOS is stored in :
   (a) Hard disk. (b) Floppy disk.
   (c) ROM. (d) RAM.

Turn over

Bunch III

Fill in the blanks :

9. The number of processes completed per line time is known as ————.
10. ———— is a memory management scheme that permits the physical-address space of a process to be non-contiguous.
11. An address generated by the CPU is commonly referred to as ————.
12. ———— provides the device drivers and initial programs to load the MS-DOS into memory.

Bunch IV

State True *or* False :

13. The FCFS scheduling algorithm is pre-emptive.
14. If the process can be moved during its execution from one memory segment to another, then binding must be delayed until run time.
15. The Kernal in UNIX provides low level functions such as device drivers and memory management.
16. Virtual memory is a technique that allows the execution of processes that may not be completely in memory.

(4 × 1 = 4)

Part B

Answer any **five** *questions.*
Each question carries a weight of 1.

17. Give the purpose and syntax of any two external commands of MS-DOS.
18. Distinguish pre-emptive and non-pre-emptive scheduling.
19. What is Swapping ?
20. What are the functions of using microkernal based operating systems ?
21. What is meant by ISDN ?
22. Define multiplexer and concentrators.
23. Define Round-Robin scheduling.
24. Describe NIC.

(5 × 1 = 5)

Part C

Answer any **four** *questions.*
Each question carries a weight of 2.

25. List and explain internal commands of MS-DOS.
26. Describe address space abstraction and dynamic address space binding.
27. Explain TCP/IP reference model.

28. Explain the basic functions of Operating System.

29. Describe Outlook Express.

30. Write notes on shared memory multiprocessors.

(4 × 2 = 8)

Part D

Answer any **two** *questions.*
Each question carries a weight of 4.

31. Write notes on the following :—
    (a) Windows.
    (b) LINUX.

32. What is Virtual Memory ? How is it realized ? Discuss the advantages and disadvantages of it.

33. Explain the following :—
    (a) ISO/OSI reference model.
    (b) Communication equipments.

(2 × 4 = 8)