E 6900 (Pages : 2) Reg. No.....

Name.....

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

First Semester

Vocational Course—COMPUTER FUNDAMENTALS

(For Model II B.Sc. Mathematics)

[2013 Admissions]

Time : Three Hours Maximum : 80 Marks

Part A

Answer **all** *questions.*
1 *mark each.*

1. What is data processing ?
2. Define system.
3. What is meant by non-positional number system ?
4. What is auxiliary memory ?
5. What is microcode ?
6. What is meant by community-supported software ?
7. What is the use of repeaters ?
8. What is multiplexing ?
9. What is bandwidth ?
10. What is word processing ?

(10 × 1 = 10)

Part B

Answer any **eight** *questions.*
2 *marks each.*

11. What are the encoding forms used in unicode ?
12. What is collating sequence ?
13. Write a note on BCD code.
14. What are the characteristics of data scanning devices ?
15. Distinguish between IRG and IBG.
16. What are the applications of speech recognition systems ?
17. Describe the different steps in the development of a software package.

18. What is the relationship between hardware and software ?
19. What are the uses of a spreadsheet package ?
20. What are the different modes of data transmission ?
21. What is VAN ?
22. What are the different forms of modulation ?

(8 × 2 = 16)

Part C

Answer any **six** *questions.*
4 marks each.

23. What are the features of Unicode ?
24. Perform the following conversions :
    (a) 11010.11_2 to decimal.
    (b) $8A6_{16}$ to binary.
    (c) 731_8 to hexadecimal.
    (d) 7102_{10} to hexadecimal.
25. What are the basic operations performed by a computer ?
26. What are the different types of primary memories ?
27. Draw a flowchart to display the average mark of a student in different subjects.
28. What are the different types of softwares ?
29. Discuss the different network topologies.
30. What are the commonly used utility programs ?
31. Describe the functions of a communication protocol.

(6 × 4 = 24)

Part D

Answer any **two** *questions.*
15 marks each.

32. What are the direct access devices used in a Computer ?
33. Describe the evolution of computers.
34. Discuss the different services provided by the Internet.
35. (a) Distinguish between compiler and interpreter.
    (b) What are the advantages and limitations of high level languages ?

(2 × 15 = 30)