June/July, 2011

COMPUTER SCIENCE

Time : 3 Hours 15 Minutes]

[Max. Marks : 90

PART - A

Note : i) Answer *all* the questions.

ii) Each question carries *one* mark.   10 × 1 = 10

1. Expand SMPs.

2. Define sorting.

3. Write any *one* disadvantage of structured programming.

4. What is the function of strcmpi ( ) in *C* ?

5. Why is return ( ) used in *C* ?

6. Define strategic information.

7. What is structured query language ?

8. Write any *one* disadvantage of client-server network.

9. Mention any *one* HTML tag.

10. Write any *one* advantage of E-mail.

[Turn over

PART - B

Note :　i)　Answer any *ten* questions.

　　　　ii)　Each question carries *two* marks.　　　　10 × 2 = 20

11. Give the specifications of dot-matrix printer.

12. Design the top-down structure for finding area of circle.

13. Explain selection construct with the help of a flowchart.

14. Write the purpose of static variable with declaration syntax.

15. Write a program segment to display the contents of two-dimensional array.

16. What is Call-by-reference ? Give an example.

17. Write the syntax and example for fscanf ( ) in C.

18. Mention any *two* examples for real time processing.

19. Differentiate between physical and logical file organisations.

20. Define candidate key and foreign key.

21. Write any *two* arithmetic built-in functions of MS-Excel.

22. Explain ring topology.

PART - C

Note :　i)　Answer the following questions.

　　　　ii)　Each question carries *five* marks.　　　　8 × 5 = 40

A.　Answer any *two* questions :

23. Briefly explain the general structure of CPU with a neat diagram.

24. What is secondary memory ? Explain any *one*.

25. Explain how instructions are executed in a CPU.

B.   Answer any *one* question :

26.   Write an algorithm for binary search technique.

27.   Apply selection sort method to arrange the following values in ascending order :

35   8   41   20   6.

C.   Answer any *three* questions :

28.   Write a *C* program to find the sum of the digits of a number until resulting value is a single digit.

29.   What is a pointer ? Give the syntax and an example. Mention any *two* pointer operations.

30.   Write the differences between struct and union in *C*.

31.   Explain function with arguments and no return value, with syntax and programming example.

D.   Answer any *two* questions :

32.   What is Indexed sequential file organisation ? Explain.

33.   List any *five* advantages of database management system.

34.   Explain E-payment.

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PART – D

35. Draw a flowchart to find product of two matrices.

36. Write a *C* program to find second largest of *N* numbers without sorting the array.

37. i) Mention and explain the different switching techniques.   4

    ii) What is a Macro in MS-Excel ? Explain with an example.   4

    iii) What is search engine ? Give an example.   2