March, 2013

COMPUTER SCIENCE

Time : 3 Hours 15 Minutes

PART - A

Note : i) Answer all the questions.

ii) Each question carries one mark.

1. What is cache memory?

2. Expand BIOS.

3. Define selection structure.

4. Write an array declaration to store the data of 100 integers.

5. Why is return type void used in functions?

6. What is the use of dot operator with reference to structures?

7. Name the type of information required for long term goals & planning.

8. What is meant by tertiary key?

9. Is Windows-NT a network operating system?

10. Expand the term 'ATM'.
Note:  
i) Answer any ten questions. 

ii) Each question carries two marks. 

10 × 2 = 20

11. What is a bus? Mention any two types.

12. What is the use of UPS? List the different types of UPS.

13. What is searching? Mention the different searching methods.


15. What is multidimensional array? Write the syntax of its declaration.

16. What is the difference between scanf() and fgets() functions with reference to strings?

17. If num is declared as a pointer variable, then what is stored in num & *num?

18. What are the uses of fread() & fgets() functions?

19. What is a file? Name any two types of files.

20. Mention different DDL commands.

21. Write any two types of network cables.

22. What is e-commerce? Mention any one advantage of it.
PART – C

Note:  
i) Answer the following questions.

ii) Each question carries five marks.  \[8 \times 5 = 40\]

A. Answer any two questions:

23. Explain any five components of the CPU.
24. How is instruction executed inside the CPU?
25. What is a computer virus? Write the different ways by which the computer gets a virus. How do you prevent it?

B. Answer any one question:

26. Explain the insertion sort method of sorting with a suitable example.
27. Write an algorithm to find the maximum elements in an array.

C. Answer any three questions:

28. Write a C program to find the sum of the series:
\[1 + \frac{1}{3!} + \frac{1}{5!} + \ldots + \frac{1}{n!}\]
29. Explain any five character manipulation functions with their syntax & examples.
30. What is recursive function? Write the syntax & example of recursive function.
31. What is call-by value? Explain with a suitable example.

D. Answer any two questions:

32. What is real time processing system? Explain in detail.
33. Mention different database operations. Explain any two with examples.
34. What is client-server network operating system? Write any two advantages & disadvantages.
PART - D

Note:  
i) Answer any two questions.  
ii) Each question carries ten marks.  

35. Draw a flowchart to find the maximum, minimum & average weights of all the weights of the babies.

36. Write a C program to count the number of vowels and consonants in a given string.

37. 
i) Write the general structure of an HTML program.

ii) Write the general features of Windows-98 operating system.

iii) Explain any two types of e-commerce.