

Code No. **41-NS**

Total No. of Questions : 37 ]

[ Total No. of Printed Pages : 4

**July, 2007**

**COMPUTER SCIENCE**

( New Syllabus)

Time : 3 Hours ]

[ Max. Marks : 90

**PART - A**

Note : i) Answer all the questions.

ii) Each question carries one mark.

10 × 1 = 10

1. What is the function of IR ?
2. What is a microprocessor ?
3. Define structured programming.
4. What is the length of the string 'PU College' ?
5. What is recursion ?
6. How is data different from information ?
7. What is transaction file ?
8. What is a primary key ?
9. Write any one feature of LAN.
10. Expand H.T.M.L.

[ Turn over

**PART - B**

**Note :** i) Answer any ten questions.

ii) Each question carries two marks.

10 × 2 = 20

11. Explain briefly computer maintenance.
12. What is sorting ? Mention any one method.
13. Construct a top-down design to find area of a circle.
14. Write any two advantages of arrays.
15. Explain any two character handling functions in string.
16. What are actual parameter and formal parameter ?
17. Define structure. Give an example.
18. Explain briefly any two functions associated with file.
19. Explain Select Operation in database.
20. Explain briefly any two built-in functions in spreadsheet.
21. Mention any two features of UNIX operating system.
22. What is E-Commerce ? Mention any one advantage.

**PART - C**

**Note :** i) Answer the following questions.

ii) Each question carries five marks.

8 × 5 = 40

**A. Answer any two questions :**

23. Explain different factors affecting the processing speed of a CPU.

24. Explain Cache memory.

25. Mention any one difference between impact and non-impact printers.

Write a brief note on

a) Dot Matrix Printer

b) Ink Jet Printer.

**B. Answer any one question :**

26. Write an algorithm to perform linear search.

27. Write the steps involved in performing Binary search operation for the following :

32, 48, 56, 67, 79, 82, 99

Search for 56.

**C. Answer any three questions :**

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

29. Explain the structure of a function with an example.

30. Explain the following with example :

a) Automatic storage class

b) Register variables.

31. What is pointer ? Explain call by value and call by reference.

[ Turn over

D. Answer any *two* questions :

32. Explain data processing cycle.

33. Discuss random file organisation.

34. Explain the following :

- a) Batch processing
- b) Distributed data processing.

#### **PART - D**

Note : i) Answer any *two* questions.

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

35. Write a flow-chart to identify the matrix as square matrix or rectangular matrix.

36. Write a 'C' program to find  $n^{\text{th}}$  Fibonacci number using recursion.

37. i) What is query language ? Give an example. 2

ii) Explain any two network topologies. 4

iii) Write a short note on EDI. 4

