

Paper I — FUNDAMENTALS OF COMPUTERS

(For those who joined in July 1999 and after)

Time : Three hours

Maximum : 100 marks

PART A — (20 × 2 = 40 marks)

Answer ALL questions.

1. Define micro computer.
2. List down the characteristics of computers.
3. Define : Flow chart.
4. What is an analog computer?
5. Write the binary equivalent of $(125)_{10}$.
6. Write a note on : Octal number system.
7. What is RAM?
8. Write a note on : Address bus.
9. Define assembler.
10. What are the disadvantages of machine level languages?

Pg 10/11

4

11. What is plotter?
12. Write a note on : Floppy disk.
13. List down any four functions of an operating system.
14. Define : Multiprogramming.
15. List the names of any two operating systems.
16. Define : Computer Network.
17. What is WAN?
18. Define : Star Topology.
19. What is an Internet?
20. What is TCP/IP?

PART B — (5 × 12 = 60 marks)

Answer ALL questions.

21. (a) Describe the structure of a digital computer with a neat block diagram.

Or

(b) Explain the classification of computers based on size.

22. (a) (i) Determine the binary equivalent of $(671)_{10}$.
- (ii) Determine the octal equivalent of $(432267)_{10}$.

Or

(b) What are the advantages and disadvantages of High-level languages? Discuss briefly.

23. (a) Write short notes on : Output units of a computer.

Or

(b) Explain about magnetic disk.

24. (a) Explain about batch processing and time-sharing operating systems.

Or

(b) Discuss briefly about process scheduling in operating systems.

25. (a) Explain about various components in data communication system.

Or

(b) Describe in detail, different network topologies.

(b) A manufacturing organisation has employed permanent persons on a fixed scale and temporary workers are paid on an hourly basis. Write a program to calculate monthly payments for both temporary and permanent employees.

24. (a) How is the selection structure implemented in COBOL and explain the syntaxes and uses of class condition, relation condition and sign condition.

Or

(b) Explain the various types of PERFORM verb in detail.

25. (a) Write a COBOL program to sort a file in the ascending order of DNO, the input file format is DNO, Name, Class, Address.

Or

(b) An Input file consists of Names of Students, Register numbers and their Total Marks. Another file also consists similar data for another section. Write a COBOL program to merge these two files on the ascending order of register number.

2926/DC2

MAY 2008

Paper II — COBOL AND DATA PROCESSING

(For those who joined in July 1999 and after)

Time : Three hours

Maximum : 100 marks

PART A — (20 × 2 = 40 marks)

Answer ALL questions.

1. What is meant by saying that COBOL is self documenting?
2. What is meant by figurative constants?
3. What are the special uses of column 7 in COBOL?
4. What is the purpose of ENVIRONMENT DIVISION?
5. Define :
 - (a) Group item
 - (b) Elementary item.
6. What are the level numbers?
7. What is the purpose of PICTURE clause?

