2021

FUNDAMENTALS OF COMPUTER— HONOURS

Paper : DSE-5.1eB

(Fundamentals of Computer)

Full Marks : 80

The questions are of equal value

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words
as far as practicable.

Answer *any eight* questions.

1. Discuss different types of Micro computer. 10

2. (a) Write a note on Super Computer.

   (b) Discuss the functions of SMPS. 5+5

3. (a) Write down the steps required for the execution of an instruction.

   (b) How are these steps performed by the CPU? 4+6

4. Write short notes on:

   (a) Synchronous and Asynchronous transmission

   (b) System Bus. 6+4

5. Describe diagrammatically two basic methods of accessing information from various memory devices. 5+5

6. (a) What is Cache memory? How does it work?

   (b) Discuss advantages of optical storage devices. (3+2)+5

7. Discuss the major output devices. 10

8. (a) Distinguish between LCD and LED monitor.

   (b) Explain the concept of MICR. 5+5

9. (a) What is operating system?

   (b) Explain the major functions of a operating system. 3+7

Please Turn Over

10. Write short notes on:

   (a) Automated Tape Library

   (b) Expansion cards   5+5

11. A wholeseller has three commodities to sell and has three types customers. The discount is given as per following rules: 10

   (i) For Govt. orders, 15% discount is given irrespective of the value of the order.

  (ii) For orders of more than Rs. 20,000, an agent gets a discount of 20% and the retailer 15% respectively.

 (iii) For orders of value between Rs. 10,000 and Rs. 20,000, agent gets discount of 15% and retailer gets 10%.

 (iv) For order of value less than Rs. 10,000, the agent and retailer get discount of 10% and 5% respectively.

    The above rules do not apply to furniture items. However, in case of furniture items, a flat rate of 10% discount is admissible to all type of customers.

    Prepare a mixed entry decision table.

12. A company gives discount to its customers on the following basis.

The adjoining discounts are allowed, if the customer's balance is below Rs. 50,000 otherwise the rate of discount is reduced by 2%

Quantity ordered (Units)	Normal Discount
1 - 399	6%
400 - 599	8%
600 – 799	10%
800 – 999	12%
1000 and above	15%

Draw a flowchart for computing appropriate discount.   10

13. (a) What is meant by the term 'Data Communication'?

   (b) Discuss the different components of data communication.   3+7

14. Explain the various applications of a computer network.   10

15. (a) Define multimedia.

   (b) Discuss the different categories of Internet audio/video services.   2+8

16. (a) What do you mean by Decision Table?

   (b) Discuss the advantages and disadvantages of decision tables.   2+(4+4)

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