

**S.D.E.**

**B.B.A. (2006 Course) Sem- II : WINTER - 2018**  
**SUBJECT : COMPUTER ALGORITHM & PROBLEM SOLVING**

Day : Tuesday  
Date : 04/12/2018

**W-2018-4451**

Time : 10.00 AM TO 1.00 PM  
Max. Marks : 80

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**N.B.**

- 1) Solve any **FIVE** from **SECTION-I**
  - 2) Solve any **TWO** from **SECTION-II**
  - 3) Answers to **BOTH** the sections should be written in **SEPARATE** Answer Book.
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**SECTION – I**

- Q. 1** Define Algorithm. Discuss characteristics of Algorithm. (10)
- Q. 2** Explain various steps in top-down approach of problem solving. (10)
- Q. 3** Define operator. Explain various types of operators. Give proper examples. (10)
- Q. 4** Write an Algorithm and draw Flow Chart to add contents of two arrays and store in third array. (10)
- Q. 5)** Write an Algorithm to check whether given number is prime. Explain developed algorithm. (10)
- Q. 6** What is Decision Table? Explain components of Decision Table. (10)
- Q. 7** Write short note on (ANY TWO) (10)
- a) Subroutines
  - b) Types of arrays
  - c) Symbols used in Flow Chart

**SECTION – II**

- Q. 8** Write an Algorithm and draw Flow Chart to merge contents of two sorted arrays in third array so that the third array is also in sorted order. (15)
- Q. 9** Write an Algorithm to compute all the prime factors of an integer n. Also explain developed Algorithm. (15)
- Q. 10** Draw a decision table for following conditions for salesman. (15)
- a) If the item is of type A, and sale amount is more than 10000, the bonus is 5%.
  - b) If the item is of type A, and sale amount is between 5000 and 10000, the bonus is 4%.
  - c) If the item is of type B, and sale amount is more than 15000, the bonus is 4%.
  - d) If the item is of type B, and sale amount is less than 15000, the bonus is 3%.
  - e) If festival period, then extra bonus is 1%.
  - f) If overall sale amount is more than 300000/-, extra bonus is 0.5%.

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