Reg No ……………….

Name:…………………

B.VOC DEGREE EXAMINATION,OCTOBER 2016

FIRST SEMESTER - CORECOURSE(SOFTWARE DEVELOPMENT)

VSD1S02TB-PROBLEM SOLVING TECHANIQUES

Time:Three Hours   **Maximum:80 Marks**

PART A(Short Answer Questions)

1.Answer all questions (Each question carries 1 mark)

1. Step by step instruction to solve a program is called--------------------------

2.A source program can be converted into object program is done by-----------------

3.What is meant by space complexity?

4.What is meant by factoring?

5.Define Array.

6.What is merging?

7.What is meant by time complexity?

8.What is a program

9. What is an algorithm?

10. Explain problem definition phase.

(10*1=10)

PART B (Brief Answer question)

 Answer any eight questions in one or two sentence (Each question carries 2 marks)

11.Define flowchart.

12.What is meant by translators? With example.

13.Define efficiency of an algorithm.

14.Draw the different flow charting symbols and name function of each symbol.

15.What do you meant by redundant computations?

16.Write an algorithm to find the fibonacii series for a given limit.

17.What is mean by referencing array elements

18.What is meant by two dimensional array?

19.What is meant by hashing?

20.What is meant by linear search?

21.Write an algorithm for finding GCD of two numbers

22.Write algorithm for finding maximum number in an array.

(8*2=16)

PARTC (Descriptive/Short Answer Questions)

111 Answer any Five   questions in 50 words (Each question carries 6 marks)

23.Explain the different functional units of a computer with a neat diagram.

24. Briefly explain the analysis of an algorithm.

25.Write an algorithm to find the sum and average of n numbers.

26. Write an algorithm to print the reverse of a given number.

27.Draw a flow chart for find the greatest element in an array.

28.Draw a flow chart of a given no is prime or not.

29.Discuss the fundamental technique to find the factorial of a given number.

30.Explain bubble sort with example.

31.Explain binary search in detail with an example.

(6*4=24)

PART-D (long Essay)

1V Answer any 2 questions in 100 words (Each question carries 15 marks)

32. a) Discuss the advantages and disadvantages of an algorithm .

 b) Write an algorithm to check the whether the given string is palindrome or not .

33. Explain different factoring methods

34. a).Explain different types of arrays .

b) Discuss basic operations on one dimensional array with example.

35. Define sorting . Explain any one sorting technique in detail with example.

(2*15=30)