

Reg No

Name:.....

B.VOC DEGREE EXAMINATION,OCTOBER 2016
FIRST SEMESTER - CORECOURSE(SOFTWARE DEVELOPMENT)
VSD1S02TB-PROBLEM SOLVING TECHNIQUES

Time:Three Hours

Maximum:80 Marks

PART A

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

- 1.Set of instructions in a sequence to solve a particular problem is called a ----- .
- 2.An Assembly program can be converted into its equivalent machine program is done by an ----- .
- 3.What are the two types of complexities in algorithmic logic ?
- 4.What is meant by factoring?
- 5.Define Array.
- 6.What is merging?
- 7.Give two problem solving strategies
- 8.What is an algorithm?
- 9.What are the objectives of program testing?
10. What is a program?

(10*1=10)

PART B

11 .Answer any Eight questions in one or two sentence (Each question carries 2 marks)

11. Define efficiency of an algorithm.
- 12.What is meant by translators? With example.
- 13.Define Flowchart.
- 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 fibonacci series for a given limit.

17. What is meant 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?

(8*2=16)

PART C (Descriptive/Short Answer Questions)

11 Answer any Six questions in 50 words (Each question carries 6 marks)

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

22. Briefly explain the analysis of an algorithm.

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

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

25. Draw a flow chart to find the greatest element in an array.

26. Draw a flow chart for the summation of a set of numbers

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

28. Explain insertion sort with example.

29. 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)

30. Write an algorithm for reversing the digits of an integer.

31. Explain algorithm for finding a prime number..

32. Explain sorting by selection method with examples and give algorithm

33. Explain the algorithm for partitioning an array.

(2*15=30)