

**Vidya Vikas Mandal's**  
**Shree Damodar College of Commerce and Economics Margao-Goa**  
**F.Y.BCA SEM I END SEMESTER EXAMINATION, OCTOBER 2016**  
**PROBLEM SOLVING AND PROGRAMMING CONCEPTS (BCA 101)**

**Duration: 2 hours**

**Max. Marks: 50**

---

**Instructions:**

Figures to the right indicate maximum marks.  
Start each question on a fresh page  
All questions are compulsory

**Q1 A) Name the following.**

(5)

- 1) Smallest memory Unit .
- 2) programming approach that divides problem into smaller modules to solve it.
- 3) Function that counts number of characters.
- 4) Software used to write programs.
- 5) code generated after successful compilation.

**Q1 B) State true/false and justify your answers.**

(5)

- 1) Array with size 5 has last index position as 5.
- 2) = and == operators perform same function in the C program.
- 3) Programs in LowLevelLanguage are faster .
- 4) 2D Array stores information of two different datatypes.
- 5) % c format specifier is used to represent float data in C language.

---

**Q2) Answer The Following**

- 1) Explain how Application software is different from System Software? (2)
- 2) Explain the steps involved in programming. (3)
- 3) Write note on Generations of Computers. (5)

**P.T.O**

**Q3) Answer The Following.**

- 1) Variable declaration is important in programs. Give reasons. (2)
- 2) Define following terms. i)Constant Variable ii) Keyword iii)Instruction. (3)
- 3) Give the characteristics of Algorithm. Write an Algorithm to find Factorial of number specified by the user . (5)

**Q4) Answer The Following.**

- 1) State the differences between while loop and Do-While loop with examples. (2)
- 2) Explain the working of if – else – if Decision making syntax used in programs. (3)
- 3) what is the use of Flowchart in program analysis. Draw flowchart to read number and display reversed number . (5)

**Q5) Answer The Following .**

- 1)Explain with examples use of & and && operators . (2)
- 2) Name the types of storage classes and explain the importance of storage class. (3)
- 3) Explain the following terms.  
a) Function   b) Pointer variable   c) structures   d)Debugging   e)break (5)

\*\*\*\*\* Best of Luck \*\*\*\*\*