

**GOA VIDYAPRASARAK MANDAL'S
GOPAL GOVIND POY RAITURCAR COLLEGE OF COMMERCE & ECONOMICS
PONDA-GOA**

**B.C.A. (SEMESTER – I) EXAMINATION, OCTOBER 2012
PROBLEM SOLVING & PROGRAMMING CONCEPTS**

Duration: 2 Hours

Marks: 50

Q.1.A. State whether the following statements are true or false (5x1=5 mks)

- i. Logical errors are detected by the compiler.
- ii. The keyword void is a data type in C.
- iii. Symbolic constants are defined with #define directive.
- iv. An exit controlled loop is executed at least once.
- v. All arithmetic operators have same level of precedence.

Q.1.B.I. Find errors, if any, in the following C statements. (3x1=3 mks)

- i. int (fun) void;
- ii. int &nav;
- iii. printf("ok");

Q.1.B.II. Determine the output of the following code segment. (2x1=2 mks)

```
i. void main()
{
    char c= 'd';
    printf("%c",c);
    printf("%d",c);
}

ii. void main()
{
    int i=5,j=2;
    junk(&i, &j);
    printf("%d %d",i, j);
}
void junk(int *i, int *j)
{
    *i=*i * *j;
    *j=*j * *j;
}
```

Contd...2/-

- Q.2.A. Define slack byte. (2 mks)
Q.2.B. Explain the use of increment and decrement operators. (3 mks)
Q.2.C. Explain Goto statement with a program. (5 mks)
- Q.3.A. State the rules for naming a variable. (2 mks)
Q.3.B. Illustrate with an example, the use of break statement. (3 mks)
Q.3.C. Write a program to find largest element in a 3*3 matrix using functions. (5 mks)
- Q.4.A. State the fundamental data types in C. (2 mks)
Q.4.B. What is a C preprocessor? (3 mks)
Q.4.C. Write a program to reverse the case of the entered character. Draw a flowchart. (5 mks)
- Q.5.A. List and state the uses of any 4 library functions. (2 mks)
Q.5.B. What are symbolic constants? (3 mks)
Q.5.C. Write a program to read student roll no, name and marks scored in 5 subjects. Calculate percentage and print using structures. (5 mks)

-----Good Luck-----