GANPAT UNIVERSITY
B. TECH. SEMESTER - I
Regular (CBCS) Examination Dec-2014
2CE101: COMPUTER PROGRAMMING

Time: 3 Hours]   [Total Marks: 60

Instructions:

1. Figures to the right indicate full marks.
2. Each section should be written in a separate answer book.
3. Be precise and to the point in your answer.

Section I

Q-1 Answer the following:

(a) Explain Basic Structure of C program. [4]

(b) Explain goto statement with the help of program. [4]

(c) Explain the difference between Global variables & Local variables with example. [2]

OR

Q-1 Answer the following:

(a) Explain prefix & postfix with proper example. [4]

(b) Discuss Precedence & associativity with proper example. [4]

(c) List out the format specifiers (Control Strings) for primary data types. [2]

Q-2 Answer the following:

(a) Explain #define Statement with help of program. [4]

(b) Explain Ladder if-else with example. [4]

(c) Write a program to calculate simple interest. [2]

OR

Q-2 Answer the following:

(a) Write a program to generate following series. $1^2+2^2+3^2+4^2.....+ n^2$ [4]

(b) Write a program to find whether the entered number is Armstrong or not. [4]
(e.g. $1^3 +5^3+3^3 = 153$)

(c) Write a program to print using [2]
(a) "15/8/1947"   (b) '15/8/1947/'   (c) 15\8\1947   (d) 15\\8\\1947

Q-3 Answer the following:

(a) Demonstrate the use of break & continue in loop using program. [6]

(b) What will be the output of the following program? [4]

```
void main()                          void main()
{       int x=3;                     {       int i=-4,j,num=10;
        x*=x+4;                              j=i%-3;
        printf("x=%d",x); }                  j=(j?0:num*num);}
void main()                          void main()
{       float a,b;                   {       int x=10,y=5,p,q;
        int i,j;                             p=x>9;
        a=(i=sizeof(i),j=sizeof(b),i+j);     q=x>3 && y!=3;
        printf("%f",a);}                     printf("p=%d  q=%d",p,q);}
```

[P.T.O]

Section II

Q-4 Answer the following:

(a) Write a program to display following pattern using nested for loop : [5]

```
A
A A
A A A
A A A A
A A A A A
```

(b) List various character test functions and explain any four with the help of programs. [5]

OR

Q-4 Answer the following:

(a) List out the category of the function. Explain any two categories with example. [5]

(b) Describe features of C Language. [5]

Q-5 Answer the following:

(a) Write a program which adds all the scanned elements and displays the result using array. [5]

(b) Write a C program to find out the addition of two 2*2 Matrix (2D Array). [5]

OR

Q-5 Answer the following:

(a) Define Function & Explain Recursion using function. [5]

(b) What is an Array? Explain 2-Dimentional Array with suitable program. [5]

Q-6 Answer the following:

(a) Write a function oddeven() to check that the number passed as a parameter is odd or even. [5]

(b) Write a program to find whether entered string is palindrome or not using string Functions. [5]

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