

COMPUTER SCIENCE 2012

Time: 2 Hours 40 Minutes

Marks: 60

OPTION - I (PROGRAMMING USING 'C')

SECTION 'B' (SHORT-ANSWER QUESTIONS)

NOTE: Answer any 6 questions from this section. No answer should exceed 6-7 lines. (36)

- 2.(i) What are the different types used in C language?
- (ii) What are the escape sequences? Define any five.
- (iii) What are the steps involved in creating a report in MS Access?
- (iv) What do DBMS and RDBMS stand for? State the advantages of DBMS.
- (v) Write a program to input three numbers and print the greatest one.
- (vi) What is an algorithm? What is its importance in computer programming?
- (vii) Write a program that prints the squares of all the numbers from 1 to 20.
- (viii) Convert the following mathematical expressions into equivalent 'C' expressions.

$$(a) \ x = \left(\sqrt{a^2} + \sqrt{b^2} \right)^2 \quad (b) \ y = \frac{2ab}{(a+b)(a-b)} \quad (c) \ Z = \frac{a^m + b^n}{(m+n)^a}$$

- (ix) Write the output of the following statements of C program.

```
for (int i= 2; i < 10 ; i++)
```

```
{
```

```
    printf ("%d",i);
```

```
    if(i%2==0)
```

```
        continues;
```

```
    printf("/n");
```

```
}
```

SECTION 'C' (DETAILED- ANSWER QUESTIONS)

NOTE: Answer 2 question from this section.(24)

- 3.(a) What is a flow chart? Describe different symbols used while drawing a flowchart.
- (b) How many relationships exist in MS Access? Explain in detail.
- 4.(a) What are the different operators used in C language? Write their precedence also.
- (b) what are the main objects in MS Access?
- 5.(a) What is a control structure? Discuss any two control structures with examples.
- (b) Define the term function. Discuss any five I/O functions used in C language.