

# COMPUTER SCIENCE 2013

Time: 20 Minutes

Max. Marks: 15

## OPTION - I (PROGRAMMING USING 'C')

### SECTION "A" (MULTIPLE CHOICE QUESTIONS)

1. Choose the correct answer for each from the given options:

- The full form of IDE is:  
(a) integrated Design Environment  
(b) integrated development environment  
(c) Internal Design Environment  
(d) Interconnected Development Environment
- The step by step solution of any program is called:  
(a) a flow chart (b) a pseudo code  
(c) an algorithm (d) none of these
- Which format specifier is used for double data type?  
(a) %d (b) %f (c) %c (d) %lf
- Each escape sequence must start with:  
(a) & (and sign) (b) /(forward slash)  
(c) \ (back slash) (d) % (percentage sign)
- All C-Language program must have a function called:  
(a) printf () (b) getche () (c) main () (d) scanf ()
- A program that is written in high level language and is converted to low level language is known as:  
(a) op-code (b) source code  
(c) object code (d) none of these
- All three expression of for loop must be separated by:  
(a) , (comma) (b) ; (semi colon) (c) & (and) (d) none of these
- Key field must contain:  
(a) Filtered values (b) Default values  
(c) Unique values (d) Duplicate values
- User defined function must have:  
(a) address (b) prototype  
(c) arguments (d) none of these
- Which of the following control structures uses DO-WHILE? (a) Sequence logic (b) Selection logic  
(c) Iteration logic (d) none of these
- Collection of related files is called:  
(a) files (b) database (c) record (d) none of these
- Which of the following is a primary object in Ms-Access? (a) Table (b) Form (c) Query (d) Report
- A function that calls itself is called:  
(a) Repeating function (b) Recursive function  
(c) Iterative function (d) none of these
- Which statement is used to exit the switch statement?  
(a) Break (b) If (c) Continue (d) none of these
- Which of the following is an arithmetic operator?  
(a) % (b) & (c) && (d) <

# COMPUTER SCIENCE 2013

Time: 2 Hours 40 Minutes

Marks: 60

## OPTION - I (PROGRAMMING USING 'C')

### SECTION B (SHORT-ANSWER QUESTIONS)(36)

NOTE: Answer 6 questions from this section.

- Define Source code and Object code.
- Define Switch case statement with an example.
- What are Escape sequences? Mention all Escape sequences.
- What will be the output of the following C-language program:  

```
for(i=5 ; i>0 ; i-)  
    for(j=1 ;j>=1 ;j++)  
        printf("%d" ,i);  
    printf("n");
```
- Write a C = language program of character I/O which reads a character from a text file name ABC.TXT.
- What is an Algorithm? Write different Algorithm standard notations.
- Convert the following mathematical expressions into equivalent 'C' expressions:  
(i)  $x = \frac{(2ab)^2}{3c}$  (ii)  $\frac{-b - \sqrt{b^2 - 4ac}}{2a}$  (iii)  $(x+y)^n$
- Define various data types supported by Ms - Access.
- Write a program to generate prime number upto 11 (like 2 3 5 7 11)

### SECTION 'C' (DETAILED- ANSWER QUESTIONS)

NOTE: Answer 2 question from this section.(24

- Explain different data types used in C - language with examples of each.  
(b) What is a loop? Define diff. loops used in C language.
- What is a Function? What are the major characteristics of any function?  
(b) Define database Model with diagram.
- Name the control structure used in C-language & discuss iterative control structure with syntax & example.  
(b) What are format specifiers and how do we use them in C - language program?

# COMPUTER SCIENCE 2013

Time: 20 Minutes

OPTION - II

Max. Marks: 15

## (PROGRAMMING USING VISUAL BASIC)

### SECTION "A" MULTIPLE CHOICE QUESTIONS

1. Choose the correct answer for each from the given options:

- The collection of related fields is called:  
(a) Record (b) Entity (c) File (d) Database
- ADO stands for:  
(a) Access Data Object (b) Active-X Data Object  
(c) Access Display Object (d) Actual Data Organization
- The collection of homogeneous data item is called:  
(a) Procedure (b) Function (c) Structure (d) Array
- The abs () function returns as:  
(a) Positive value (b) + & - both  
(c) Negative value (d) none of these
- In Ms- Access, which objects is used to represent data in a printed format?  
(a) Query (b) Form (c) Report (d) Macro
- When the variable scope is limited to a procedure, it is called: (a) Global variable (b) Local variable  
(c) Host variable (d) all of these
- RDBMS stands for: (a) Relational Data Managing System  
(b) Relational Data Managing Structure  
(c) Relational Data Management Structure  
(d) Relational Database Management System
- Option Buttons are also called:  
(a) Radio Buttons (b) Labels  
(c) Selected Buttons (d) None of these
- Which control accepts textual information from the user? (a) Label (b) Textbook (c) Caption (d) none of this
- The default name property of first Form is:  
(a) Form (b) Form 1 (c) Form0 (d) none of these
- A statement, which executes one block of statement if the condition is True and another block of statement if the condition is False, is:  
(a) if (b) if...then (c) if...then...else (d) none of these
- This is similar to subroutine but always returns a single value:  
(a) Subroutine (b) Procedure (c) Function (d) none of these
- One-to-many relation in RDBMS is:  
(a) Parent table has many records and child table also has many records.

(b) Parent table has one record & child table has many records

(c) Parent has many records and child table has one record

(d) all of these

(xiv) Key field must contain: (a) Filtered values

(b) Default values (c) Unique values (d) Duplicate values

(xv) To locate a record in a database table quickly, use the:

(a) Database (b) Replace feature

(c) Find feature (d) Print preview feature.

# COMPUTER SCIENCE 2013

Time: 2 Hours 40 Minutes

OPTION - II

Marks: 60

## (PROGRAMMING USING VISUAL BASIC)

### SECTION B (SHORT-ANSWER QUESTIONS)(36)

NOTE: Answer 6 question from this section.

- What is event driven programming?
- Differentiate between input box and message box.
- Define common methods of Form.
- Define the terms (a) Primary key (b) Secondary key.
- What is an object in MS - Access? Enlist various objects of MS - Access.
- Write a program in Visual Basic to generate the following output:  
12345  
1234  
123  
12  
1
- Differentiate between DBMS and RDBMS
- Define the term Function. Explain how it is different from Subroutine. (ix) Explain Active - X control in VB.

### SECTION C (DETAILED- ANSWER QUESTIONS)(24)

NOTE: Answer 2 questions from this section.

- What is MDI? What are its advantages in  
(b) Define the term database Model. Explain relational and hierarchical models.
- Define and discuss the loops used in visual Basic.  
(b) What is data type? Define visual basic data types.
- Write a program which accepts three values and check which one is greater.  
(b) What is a Control Structure? What statement is used for Selection Control?