M3-R4: JANUARY, 2013, DOEACC O LEVEL, C LANGUAGE PROGRAMMING ANSWER

1. Each question below gives a multiple choice of answers. (1x10)

1.1 If a=8, b=3 and c=-5 are integers, then value of a*b/c is
A) -4
B) -2.8
C) +2.8
D) +3

1.2 Which of the following is a valid identifier?
A) 1return
B) return1
C) return
D) $return_1

1.3 Which of the following is a valid string constant?
A) "programming"
B) "programming
C) 'programming
D) $ programming $

1.4 How will you free the allocated memory?
A) remove(var-name);
B) free(var-name);
C) delete(var-name);
D) dalloc(var-name);

1.5 If i = 8 and j = 5 are two integers, then the value of (i>0) || (j < 5) is
A) -5
B) 1
C) 0
D) +5

1.6 How many times "INDIA" will get printed?
```
#include<stdio.h>
int main()
{
int x;
for(x=-1; x<=10; x++)
{
```

```
if(x < 5)
continue;
else
break;
printf("INDIA");
}
return 0;
}
```
A) Infinite times
B) 11 times
C) 0 times
D) 10 times

1.7 A group of related data that share a common name is
A) Pointer
B) Array
C) Function
D) None of the above

1.8 In 'C', if you pass an array as an argument to a function, what actually gets passed?
A) Value of elements in array
B) First element of the array
C) Base address of the array
D) Address of the last element of array

1.9 What does *fp* point to in the program?
```
#include<stdio.h>
int main()
{
FILE *fp;
fp=fopen("trial", "r");
return 0;
}
```
A) The first character in the file
B) A structure which contains a *char* pointer which points to the first character of a file
C) The name of the file
D) The last character in the file

1.10 Which of the following language is predecessor to 'C' Programming Language?
A) A
B) B
C) ADA
D) C++

2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and ENTER in the "tear-off" sheet attached to the question paper, following instructions

therein. (1x10)

2.1 Sizes of short integer and long integer would vary from one platform to another.
FALSE
2.2 A structure can contain similar or dissimilar elements. **TRUE**
2.3 Names of functions in two different files linked together must be unique. **TRUE**
2.4 Functions that do not contain return statement do not return any value. **TRUE**
2.5 malloc() allocates memory from the heap and not from the stack. **TRUE**
2.6 Every 'if' statement must also include 'else'. **FALSE**
2.7 The three declarations *char* **apple, char *apple[], and char apple[][] are same.
FALSE
2.8 malloc() returns a float pointer if memory is allocated for storing float's and a double
pointer if memory is allocated for storing double's. **TRUE**
2.9 If we have to execute the program with different set of inputs, we need to recompile
the program each time. **TRUE**
2.10 Compiler translates the of source code into object code before the program can be
executed. **TRUE**

3. Match words and phrases in column X with the closest related meaning/
word(s)/phrase(s) in column Y. Enter your selection in the "tear-off" answer sheet
attached to the question paper, following instructions therein. (1x10)

> A. menu selection
> B. logical operators
> C. stdio.h
> D. stdlib.h
> E. 4,8
> F. integer value
> G. strcat()
> H. dynamic data
> structure
> I. strcmp()
> J. argument
> K. ftell()
> L. pointer
> M. linked list

3.1 Used when we want to test more than one condition and make decision **B**
3.2 Size of float and double in bytes **E**
3.3 A linked list is a **H**
3.4 The switch statement is often used for **A**
3.5 Input/output function prototypes and macros are defined in **C**
3.6 Gives the current position in the file **K**
3.7 Header file should be included to use *malloc()* function **D**
3.8 A piece of information passed to a method **J**
3.9 By default functions return **F**
3.10 To concatenate two strings we use **G**

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list

below. Enter your choice in the "tear-off" answer sheet attached to the question paper, following instructions therein. (1x10)

A. header **B**. garbage **C**. alloc
D. goto **E.** void **F.** double quotes
G. Flowchart **H**. deallocate **I**. return
J. logical **K.** 1972 **L**. ->
M. conditional

4.1 _____**D**_____ breaks the normal sequential execution of the program.
4.2 Character constants should be enclosed between _____**F**_____.
4.3 The operator && is an example for _____**J**_____ operator.
4.4 Pictorial representation of an algorithm is _____**G**_____.
4.5 A pointer contains _____**B**_____ until it is initialized.
4.6 If a function return type is declared as _____**E**_____ it cannot return any value.
4.7 The _____**L**_____ operator can be used to access structures elements using a pointer to structure variable only.
4.8 The keyword used to transfer control from a function back to the calling function is _____**I**_____.
4.9 NULL macro is defined in _____**A**_____ file.
4.10 _____**C**_____ function is used to request memory space.