ME-P-1010　　　Seat No. _____

M. C. A. (Sem. I) Examination

January - 2018

P-1010 : Introduction to Programming using C

Time : $2\frac{1}{2}$ Hours]　　　　　　　　　[Total Marks : **70**

1　The following questions from unit-1

  (a)　Attempt the following objective questions :　　　**4**

    (1)　How many keywords in C language?

    (2)　Is Main a key word in C?

    (3)　The format identifier '%d' is also used for _____ data type.

    (4)　Is a default case necessary in a switch statement?

  (b)　Attempt any **one** out of two from the following :　　**2**

    (1)　What is the difference between declaration and definition of a variable?

    (2)　What is the use of printf( ) and scanf( ) functions?

  (c)　Attempt any **one** out of two from the following :　　**3**

    (1)　What is for loop? Explain with nested for loop.

    (2)　Explain The? : Operator with example.

  (d)　Attempt any **one** out of two from the following :　　**5**

    (1)　Explain flow chart with suitable example.

    (2)　What is infinite loop? Explain with example.

2　The following questions from unit-2 :

  (a)　Attempt the following objective questions :　　　**4**

    (1)　Define an array.

    (2)　Define getchar( )

    (3)　Differentiate putc( ) getchar( )

    (4)　Explain strcpy( )

  (b)　Attempt any **one** out of two from the following :　　**2**

    (1)　Explain sting in C.

    (2)　Differentiate 1D and 2D array.

(c) Attempt any **one** out of two from the following :   **3**

     (1) Initialization of a two dimensional arrays in C and print it.

     (2) What is the difference between single quoted and double quoted declaration of char array?

(d) Attempt any **one** out of two from the following :   **5**

     (1) Write a program to print reverse data from integer array.

     (2) Write a program to compare two strings.

3 The following questions from unit-3 :

(a) Attempt the following objective questions.   **4**

     (1) How can we access structure members?

     (2) What is the key word to declare union for C program ?

     (3) What is the output of this C code?

```
#include <stdio.h>
void main ()
{
    struct student
    {
        int no;
        char name[20];
    };
    struct student s;
      no = 8;
      printf("%d", no);
}
```

     (4) Number of bytes in memory taken by the below structure is

```
#include <stdio.h>
struct test
{
        int k;
        char c;
};
```

(b) Attempt any **one** out of two from the following :   **2**
    (1) What is difference between structure and union.
    (2) What is a nested structure?

(c) Attempt any **one** out of two from the following :   **3**
    (1) Write a C program to find size of structure.
    (2) What are the differences between structures and arrays?

(d) Attempt any **one** out of two from the following :   **5**
    (1) Write a program to pass entire structure to function named display and print content.
    (2) Write a program to receive student name and five subjects marks in a structure for five students.

4 The following questions from unit-4

(a) Attempt the following objective questions :   **4**
    (1) What is an array of pointers?
    (2) Nesting of structure is not allowed in c true or false.
    (3) What is size of pointer?
    (4) What will be output if you will compile and execute the following c code?

```
void main (){
  int i;
  double a=5.2;
  char *ptr;
  ptr=(char *)&a;
  for(i=0;i<=7;i++)
    printf("%d ",*ptr++);
}
```

(b) Attempt any **one** out of two from the following :   **2**
    (1) What is pointer arithmetic?
    (2) Explain nested function.

(c) Attempt any **one** out of two from the following :   **3**
    (1) What is the difference between user defined function and library function?
    (2) What are the rules for passing an array to a function? Explain with example.

(d) Attempt any **one** out of two from the following :　　**5**
  (1) Write a C program to find the length of a string using pointer.
  (2) Write program in C to use pointer to pointer.

5　The following questions from unit-5
  (a) Attempt the following objective questions　　**4**
    (1) What are the types of files in C file handling.
    (2) What is the meaning of "rb" in the following
       fopen ("E:\\cprogram\\old program.bin"," rb");
    (3) Explain following
       FILE *fptr;
    (4) What is the meaning of "wb+" in file opening ?
  (b) Attempt any **one** out of two from the following :　　**2**
    (1) Explain fseek( ) with all parameters.
    (2) Explain getc( ) and putc( ).
  (c) Attempt any **one** out of two from the following :　　**3**
    (1) Explain Functions fread( ) and fwrite( )
    (2) List and explain various fine opening modes.
  (d) Attempt any **one** out of two from the following :　　**5**
    (1) C program to find number of lines in a file.
    (2) Write a C program to read name and three subject marks of n number of students from user and store them in a file.

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