

Course: B. Tech.

Branch : First Year(Group A)

Semester : II

Subject Code & Name: BTES204 & Computer Programing in C

Max Marks: 60

Date: 26-08-2022

Duration: 3.45 Hrs.

**Instructions to the Students:**

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Assume suitable data wherever necessary and mention it clearly.

(Level) Marks

**Q.1 Solve any two from the following**

- A) Define Error ? Enlist and Explain various types of error in C Programming ( Understand ) 6
- B) Define operator ? What is Criteria for operator classification ? Explain ternary operator with suitable example . ( Understand ) 6
- C) Define flowchart? draw a flowchart for following algorithm ( Synthesis ) 6
1. Start
  2. Read the values for B(base ) & H ( height )
  3. Calculate area =  $1/2 * B * H$
  4. Display area
  5. Stop

**Q.2 Solve any two from the following**

- A) What will be output of the following program segment in C and choose the correct option : (Application ) 6
- I) `int a = -1 , b=1 ,c,d=2;  
c = a++ + ++b - --d ;  
printf("a=%d b=%dc=%d d=%d", c,a,b,d);`
- a) a=0 b=1 c=1 d= 1    b) a=-1 b= 0 c=1 d=1  
c) a= 0 b= 0 c=2 d=1    d) a=0 b= 2 c= 0 d=1
- II) `int main()  
{  
    char x='X';  
    char a= ++x + 1;  
    printf("%c", a);  
    printf("%d",a);  
}`
- a) Z 90    b) 90 Z    c) error    d) none
- III) `#include <stdio.h>`

```

int main()
{
    int a=-2;
    ++a;
    if ( a)
    printf("Hi this is CPC ");
    else
    printf("C is Programming language ");
}

```

a) Hi this is CPC b) error c) C is Programming language d) None

- B) Define variable ? Define constant ? Give the difference between variable & constant with suitable example . (Understand) **6**
- C) Write a Program to a read a number & display its reverse using while loop. ( Synthesis ) **6**

### Q. 3 Solve any two from the following

- A) write a program to accept two numbers & compute quotient and remainder display the same. ( Synthesis ) **6**
- B) Define function ? explain function signature with suitable example. { Hint: function signature is also called as function prototype} ( Understand ) **6**
- C) Explain the following with proper example ( Understand ) **6**  
 i) extern variable ii) Static variable iii) size qualifier

### Q.4 Solve any two from the following

- A) Define string ? Write a program to copy first 16 characters from "Cpc is very easy programming language" into string abc. ( Synthesis) **6**  
 { Hint : consider "Cpc is very easy programming language" as a string with valid name }
- B) Define Array ? Define one subscripted variable ? explain Dynamic initialization of one subscripted variable with suitable program ( Analysis) **6**  
 { Hint : one subscripted variable is also known as 1dimensional array }
- C) why one should use goto statement in a c programming ? ( Synthesis) **6**  
 Explain with suitable program.

### Q. 5 Solve any two from the following

- A) Define Structure ? Explain how one should access structure fields explain with suitable program. ( Understand) **6**

B) write a program to display folllowing pattern

(Application )

6

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C) Define union ? How memory is allocated for union and structure in C Programming with suitable example .

( Analysis )

6

\*\*\* End \*\*\*