

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Regular Semester Examination – Summer 2022

Course: B. Tech. Branch : First Year(Group A) Semester : II

Subject Code & Name: BTES204 & Computer Programming 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 = 2 , d = 2;
   c = a++ + ++b - --d ;
   printf("a=%d b=%d c=%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. (Understand) 6
{ Hint: function signature is also called as function prototype}
- 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 following pattern

(Application)

6

```
* * * * *  
  
* * * *  
  
* * *  
  
* *  
  
*
```

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

(Analysis)

6

*** End ***