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BCS 3305

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Following Paper ID and Roll No. to be filled in your Answer Book.

Paper ID [redacted] Roll No. 1 2 [redacted]

B. Tech Examination 2021-22

(Odd Semester)

COMPUTER CONCEPTS AND PROGRAMMING IN 'C'

Time : Three Hours] *[Maximum Marks : 60*

Note :– Attempt all questions.

SECTION–A

1. Attempt all parts of the following : $8 \times 1 = 8$

(a) Write difference between algorithm and flowchart.

(b) Explain the importance of C language. – simple and efficient, fast, portability, Dynamic, Extensibility

(c) What is format specifier? – are used to take inputs and print the output of a type

(d) Define keyword, constant and variable.

(e) Write a short note on type casting. – values can't be changed eg %c, %d, %f

is basically a process in C in which we change a variable belonging to

P.T.O.

(f) Explain size of () with example. Why do we use header files?

(g) Define exit and return statement.

(h) What is the output of this program :

```
void main ()
    {
        int a =b= c=10;
        a=b=c=50;
    Printf("\n %d %d %d", a, b,c);
}
```

SECTION – B

2. Attempt any two parts of the following : $2 \times 6 = 12$

(a) Discuss about the following operators in C language with example :

(i) Bitwise operators

(ii) Increment and decrement operators

(iii) Logical operators

(b) Study the following C program :

```
Void main ( )
{
Int a =0;
For ( ; a ;);
a++;
}
```

(c) Difference between union and structure.

(d) Explain scanf(); and printf(); with example.

SECTION – C

Note:- Attempt all questions. Attempt any two parts from each questions. $8 \times 5 = 40$

3. Attempt any two parts of the following:

(a) Determine the value of each of following expression int i=8, j=5 c=3, d=5

(i) (3*i-2*j) % (2* d-c)

(ii) (i >0) && (j<5)

(b) Explain different data types used in C language.

(c) Explain the difference between '=' and '==' operator explain with example.

4. Attempt any two parts of the following:

(a) Write a program to find largest between two numbers.

(b) Write a short note precedence and order of evaluation.

(c) Explain the following function :

(i) getch() and (ii) clrscr().

Attempt any two parts of the following:

(a) What is the difference between call by reference and call by value? Explain with example.

(b) What is an array indexing explain with an example?

(c) Write a C program to calculate factorial of a given number using recursion

Attempt any two parts of the following:

a) Write a C language program to check whether the string is palindrome or not.

(b) Explain any three of the following with exampl

(i) fprintf()

(ii) fscanf()

(iii) getc()

(iv) feof()

(c) What is pointer? What is the use of pointer

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