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# **3rd Sem / Eltx., Mechatronics, Med. Eltx. Subject:- Computer Programming using C / Comp. prg. & App.**

Time : 3Hrs. M.M. : 100

## **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 In which year was C invented

a) 1970                          b) 1971  
c) 1972                          d) 1973

Q.2 Bitwise NOT is represented by

a)  $\dot{\cup}$                           b) |  
c) ||                              d) ~

Q.3 Data type double has size of

a) 2 bytes                        b) 4 bytes  
c) 8 bytes                        d) 16 bytes

Q.4 Which bracket is used for declaration of array

a) ()                             b) {}  
c) []                             d) none of these

Q.5 The escape sequence \b stands for

a) beginning                     b) backspace  
c) both                            d) none of these

Q.6 `scanf()` and `printf()` are defined in which header file  
a) `conio.h`      b) `stdlib.h`  
c) `stdio.h`      d) none of these

Q.7 Line terminator in C is  
a) :      b) '  
c) ;      d) none of these

Q.8 How many reserved words are there in C?  
a) 8      b) 16  
c) 32      d) 64

Q.9 `1010>>2`  
a) 0001      b) 0101  
c) 0010      d) none of these

Q.10 Which of the following is a reserved word in C  
a) copy      b) paste  
c) register      d) none of these

## **SECTION-B**

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 The conversion character for integer is \_\_\_\_\_

Q.12  $1010 \gg 2 =$  \_\_\_\_\_

Q.13 Bitwise EX-OR is represented by \_\_\_\_\_ symbol.

Q.14 A loop that is executed at least once, even if the condition is false is \_\_\_\_\_

Q.15 What is the difference between getch and getche?

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O.16 What is the output of following C code

1 !=0?1:0;

**Q.17** What is subscript in C?

**Q.18** An array is a collection of elements.

Q.19 ~10101101=

**Q.20** The only function required in all C program is

## **SECTION-C**

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

### Q.21 Elaborate Escape Sequences in C.

**Q.22** Explain single line and multiple line comments in C.

**Q.23 Elaborate bitwise operators in C.**

**Q.24** Explain the difference between while and do while loops in C.

**Q.25** Clearly explain the difference between break statement and exit() function with examples.

O.26 Write a program in C to find the value of  $(x)^y$

O.27 Explain the data-types in C.

Q.28 Name all reserved words in C.

Q 29 Draw the truth-table of  $\bar{U}$  gate in C

**Q.30 Explain the difference between 1D & 2D arrays with example.**

O.31 Float a[3][2]={1,2,3,4,5,6};

value of a[1][1]=

Q.32 Explain the allocation of memory to the following array int a[4][3];

Q.33 int a[5]={1,2,3,4,5};

The base address = 1000

Find out the address and value of a [3]

**Q.34 Explain the syntax and semantics of multi-dimensional arrays.**

**Q.35** Write a program in C to print day of the week using switch-case statement.

## **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

**Q.36** Compare for, while & do-while loops with proper examples.

**Q.37 Explain Logical & Bitwise operators in C.**

**Q.38** Explain call by value & call by reference methods of parameters passing in C.