BRAINWARE UNIVERSITY

Term End Examination 2022
Programme – Dip.CSE-2022/Dip.ME-2022/Diploma in Robotics & Automation-2022/Dip.EE-2022/Dip.CE-2022
Course Name – Introduction to IT Systems
Course Code - ES101
(Semester I)

Full Marks : 60   **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)   1 x 15=15

1. *Choose the correct alternative from the following :*

(i)   Define operating system?

   a) Collection of programs that manages hardware resources(

   b) System service provider to the application programs

   c) All of the mentioned

   d) Link to interface the hardware and application programs

(ii)   Tell what is the main function of the command interpreter?

   a) To get and execute the next user- specified command

   b) To provide the interface between the API and application program

   c) To handle the files in operating system

   d) NoneÂ

(iii) Recall which of the following is not a unary operator in C?

   a) !

   b) sizeof

   c) ~

   d) &&

(iv)   Infer which operators are known as Ternary Operator

   a) ::, ?

   b) ?, :

   c) ?, ;;

   d) None of these

(v)   Select what is the function of the break keyword?

   a) Halt execution of program

   b) Restart execution of program

   c) Exit from loop or switch statement

   d) None of these

(vi)   Select the statement printf("%c", 100); will print?

   a) prints 100

   b) print garbage

   c) prints ASCII equivalent of 100

   d) None of these

(vii) Interpret the size of a character variable in C in Bytes is

   a) 8

   b) 4

   c) 2

   d) 1

(viii) Interpret which of the following is not a valid relational operator?

   a) *

   b) ==

   c) >=

   d) <=

(ix) Interpret if a=8, b=3 and c=-5 are integers, then value of a*b/c is

    a) -4   b) -2.8

    c) 2.8   d) 3

(x) Speculate what is smallest unit of the information?

    a) A bit   b) A byte

    c) A block   d) A nibble

(xi) Write which keyword is used to prevent any changes in the variable within a C program

    a) immutable   b) mutable

    c) const   d) volatile

(xii) Select ,what is the output of following code? #include<stdio.h> int main(){ int sum=2+4/2+6*2 printf("%d,sum),return 0,

    a) 12   b) 16

    c) 15   d) 18

(xiii) Write which of following are "C" Pre-processor

    a) #ifdef   b) #defir

    c) #endif   d) all of those

(xiv) Write The C Processrs are specified with

    a) #   b) %

    c) @   d) &

(xv) write what is #include <stdio.h>

    a) function   b) preprocessor directive

    c) stack   d) memory

Group-B
(Short Answer Type Questions)   3 x 5=15

2. Choose the larger number: 11101101111101(binary), 1EH9FFE(Hexadecimal)   (3)
3. Write the various types of OS.   (3)
4. Illustrate the conditional statement in C.   (3)
5. Calculate the following Binary number to Octal: 010111100   (3)
6. Deduce the memory requirement to store int a[10] array.   (3)

OR

    Deduce the program to find sum of the digits of an integer.   (3)

Group-C
(Long Answer Type Questions)   5 x 6=30

7. State the functions of the operating system.   (5)
8. List the uses of Internet.   (5)
9. Determine the differences between LAN and WAN   (5)
10. Describe different types of looping statements in C programming language   (5)
11. Write a program in C to print all possible combinations of 1,2,3 without any repetition of digits.   (5)
12. Write a program in C to find out whether a number is Armstrong number or not.   (5)

OR

    Write a program to find the smallest of three numbers using nested-if statements.   (5)

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