

B.Tech. 1st Semester Mid Term Examination- 2021
Name of Subject: Introduction to Programming
Paper Code: UCS12B01

Full Marks: 20

Time: 1 Hour

All questions are compulsory

PART-A (Total Marks:10)

(10*1 =10 marks)

1. What do we mean by a variable and a constant? What is a difference between a declaration and a definition of a variable?
2. Find $(5B2C.2AB)_{16} = (?)_{10} = (?)_2$ and $(32)_{10} - (42)_{10}$ using 2's complement.
3. What are the features of micro and mini computer?
4. What is the importance of flowchart in a C program? What do you mean by debugging?
5. Explain bit-wise operator in C programming. What are the advantages of 2's complement over sign-magnitude representation?
6. What is character constant? How does numeric constant differ from character constant?
7. What is the use of format specifier? What are the limitations of the switch case statement?
8. What is machine language? How does it differ from high-level language?
9. What are the general characteristics of C language? What is the library function to display a statement and that is under which header file?
10. What is an assignment statement? What is the relationship between assignment and expression statement?

Part B: (Total Marks:10)

(10*1=10)

1. What will be the output of the following program segments:

```
void main()
{
    int x = 0;
    if (x == 0)
        printf("hi");
    else
        printf("how are u");
    printf("hello");
}
```

a. hi b. how are you c. hello d. hihello
2. Before C source code is compiled it is passed through another program called-
a. Processor
b. Preprocessor
c. Interceptor
d. interpreter
3. In the given loop construct, which one is executed only once always? for(exp1; exp2; exp3)
a. exp1
b. exp3
c. exp1 and exp3
d. exp1, exp2 and exp3
4. The continue statement cannot be used with
a. For b. while c. do-while d. switch
5. Which loop is guaranteed to execute at least one time
a. For b. while c. do-while d. None

