

Name:	 <b>UPES</b> <small>UNIVERSITY WITH A PURPOSE</small>
Enrolment No:	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination, December 2021**

**Course: Programming for Analytics**  
**Program: BBA (Analytics and Big Data)**  
**Course code: DSBA 3002**

**Semester: V**  
**Time: 03 hrs.**  
**Max. Marks: 100**

**SECTION A**

**1. Each Question will carry 2 Marks**

**2. Instruction: Select/Write the correct answer(s) /**

S. No.	Question	CO
Q1	<p><b>1. How many times "IndiaBIX" is get printed?</b></p> <pre>#include&lt;stdio.h&gt; int main() {     int x;     for(x=-1; x&lt;=10; x++)     {         if(x &lt; 5)             continue;         else             break;         printf("IndiaBIX");     }     return 0; }</pre> <p>A. Infinite times          B. 11 times          C. 0 times          D. 10 times</p> <p><b>2. Which of the following is not logical operator?</b></p> <p>A. &amp;          B. &amp;&amp;          C.             D. !</p>	CO1

**3. Which of the following statements should be used to obtain a remainder after dividing 3.14 by 2.1 ?**

- A. `rem = 3.14 % 2.1;`
- B. `rem = modf(3.14, 2.1);`
- C. `rem = fmod(3.14, 2.1);`
- D. Remainder cannot be obtain in floating point division.

**4. Which of the following special symbol allowed in a variable name?**

- A. \* (asterisk)
- B. | (pipeline)
- C. - (hyphen)
- D. \_ (underscore)

**5. By default a real number is treated as a**

- A. float
- B. double
- C. long double
- D. far double

**6. The keyword used to transfer control from a function back to the calling function is**

- A. switch
- B. goto
- C. go back
- D. return

**7. How many times the program will print "IndiaBIX" ?**

```
#include<stdio.h>
int main()
{
    printf("IndiaBIX");
    main();
    return 0;
}
```

- A. Infinite times
- B. 32767 times
- C. 65535 times

D. Till stack overflows

8. To print out a and b given below, which of the following printf() statement will you use?

**#include<stdio.h>**

float a=3.14;  
double b=3.14;

- A. printf("%f %lf", a, b);
- B. printf("%Lf %f", a, b);
- C. printf("%Lf %Lf", a, b);
- D. printf("%f %Lf", a, b);

9. To scan a and b given below, which of the following scanf() statement will you use?

**#include<stdio.h>**  
float a;  
double b;

- A. scanf("%f %f", &a, &b);
- B. scanf("%Lf %Lf", &a, &b);
- C. scanf("%f %Lf", &a, &b);
- D. scanf("%f %lf", &a, &b);

10. Input/output function prototypes and macros are defined in which header file?

- A. conio.h
- B. stdlib.h
- C. stdio.h
- D. dos.h

## SECTION B

1. Each question will carry 5 marks

2. Instruction: (Scan and upload)

Q1.	What are different types of arithmetic operators?	CO2
Q2.	Write a C program to check whether a number is positive or negative.	CO2
Q3.	Differentiate between break and continue statement with example	CO2

Q4.	Write a C Program to calculate the average of three numbers.	<b>CO2</b>
<b>Section C</b>		
<b>1. Each Question carries 10 Marks.</b> <b>2. Instruction: (Scan and upload)</b>		
Q1	Describe different types of decision-making statements with examples.	<b>CO2</b>
Q2	Differentiate between logical and relational operators with the help of examples.	<b>CO2</b>
Q3	Describe different types of loops with examples.	<b>CO2</b>
<b>Section D</b>		
<b>1. Each Question carries 15 Marks.</b> <b>2. Instruction: (Scan and upload)</b>		
Q1.	Write three programs to print the table of 8 using the three different types of loops.	<b>CO3</b>
Q2.	A) Write a program to convert any digit from 1 to ten into a word using the switch statement. B) Considering a real-life example, describe the process of the nested If- else statement. Finally, convert the process into a C program.	<b>CO3</b>