Xavier Institute of Engineering
Mahim, Mumbai 400016
Department of Information Technology
(Affiliated to University of Mumbai)

Subject Code:	Subject Name:	Semester:	Faculty In-charge:
FEC205	C Programming	02	Prof. Omprakash Yadav

Question Bank: Internal Assessment Test - 1 **Date:** 15/05/2021.

Q No.	CO/LO	BL	PI	Module	Question	Marks
Following questions are 1M each						
Q1. A	FEC205.1	BL1		01	Arrange the following operators in terms of their precedence (high to low) Comma,logical,unary,bitwise,relational,arithmetic	01
Q1.B	FEC205.1	BL1		01	Size of float data type is _____ remember	01
Q1.C	FEC205.1	BL4, BL5		01	char a='A'' printf("%c %d",a,a); Find the Output of this statement	01

Q1.D	FEC205.1	BL4, BL5		01	b=1;
					b=++b+b++;
					printf("%d",b);
					Find the Output of this statement
						01

Q1.E	FEC205.1	BL4, BL5		01	5+8%3*4 = = 2/1*3+2 Find the output of the above expression.	01
Q1.F	FEC205.1	BL1		01	Give the range of unsigned character	01
Q1.G	FEC205.1	BL4		01	x=28; y=25; Find x & y	01
Q1.H	FEC205.1	BL1		01	If two or more operators of same precedence are present in any expression then the execution of operators depends on _____	01
Q1.I	FEC205.1	BL1		01	Tell the associativity of Assignment and Relational operators.	01
Q1.J	FEC205.1	BL1		01	Find valid identifiers from below list: jay#, FLOAT,422,FE-XIE, 2015spandan	01
Q1.K	FEC205.1	BL2		01	Identify the following decimal integer constant are valid or invalid 2.5, 3#5, 98 5, 0925, 8, 354, 3705, 23759, 33679	01
Q1.L	FEC205.1	BL2		01	Identify the valid octal integer constant 0, 01777, 345, 03458	01
Q1.M	FEC205.1	BL2		01	Identify the valid hexadecimal integer constant 0x, 0x723, 0x7AB, 345, A3FE	01
Find the output of the following code snippet.						

Q2.A	FEC205.1	BL4,
		BL5
				01	void main( )
					{
					int a=10,b=3,max;
					a>b?max=a:max=b;
					printf(“%d”,max);
					}
						01

Q2.B	FEC205.1	BL4,
		BL5
				01	void main( )
					{
					int a,b,c,sum;
					sum=(a= 8,b= 6,c= 4,sum = a+ b+ c);
					printf(“%d”,sum);
					}
						01

Q2.C	FEC205.1	BL4,
		BL5
				01	void main()
					{
					int i=0,j=1;
					printf(“%d\n”, i && j++);
					printf(“%d %d\n”, i , j);
					printf(“%d\n”, ++ i || j++);
					printf(“%d %d\n”, i, j);
					}
						01

Q2.D	FEC205.1	BL4,
		BL5
				01	void main()
					{
					printf(“%6s\n”, ”Saturday”);
					printf(“%15s\n”, ”Saturday”);
					printf(“% .5s\n”, ”Saturday”);
					printf(“%10.5s\n”, ”Saturday”);
					printf(“% 2.5s\n”, ”Saturday”);
					}
						01

Q2.E	FEC205.1	BL4, BL5		01	void main() { int a=5,b=5; printf(“%d,%d\t”, ++a, b--); printf(“%d,%d\t”, a, b); printf(“%d,%d\t”, ++a, b++); printf(“%d,%d\t”, a, b); }	01
Q2.F	FEC205.1	BL4, BL5		01	void main() { float var; printf(“size of int=%d\n”, sizeof(int)); printf(“size of float=%d\n”, sizeof(float)); printf(“size of var=%d\n”, sizeof(var)); printf(“size of integer constant=%d\n”, sizeof(100)); }	01

Q2.G	FEC205.1	BL4,
		BL5
				01	void main()
					{
					int a=-3;
					a=-a-a+!a;
					printf(“%d\n”,a);
					}
						01

Q2.H	FEC205.1	BL4,
		BL5
				01	void main()
					{
					int x,y,z,k=10;
					k+=(x=5,y=x+2,z=x+y);
					printf(“x=%d,y=%d,z=%d,k=%d”,x,y,z,k);
					}
						01

Q2.I	FEC205.1	BL4, BL5		01	void main() {	01

					printf(“Indian\b is great”); printf(“\nNew\rDelhi\n ”);}	

Q2.J	FEC205.1	BL4, BL5		01	void main()
					{
					int a=15;
					printf(“a=%d\t a=%o\t a=%x\n”,a,a,a);
					}
						01

Q2.K	FEC205.1	BL4, BL5		01	void main( )
					{
					float a1,b1,a2,b2,a3,b3;
					a1=8;
					b1=6.8;
					a2=4.2;
					b2=3.57;
					a3=9.82;
					b3=85.673;
					printf(“%3.1f, %4.2f\n”,a1,b1);
					printf(“%5.1f, %6.2f\n”,a2,b2);
					printf(“%7.1f, %8.2f\n”,a3,b3);
					}
						01

Q2.L	FEC205.1	BL4, BL5		01	Find out various errors in following
					void main()
					{ int x,y,z;
					x=8++;
					y=++x++;
					z=(x+y)--;
					printf(“x=%d,y=%d,z=%d”,x,y,z);}
						01

Q2.M	FEC205.1	BL4, BL5		01	Point out errors, if any in following C-statements 1) int = 314.652*150; 2) name = ‘Ajay’; 3) varchar = ‘3’; 4) 3.14*r*r*h = vol_of_cyl; 5) k= (a*b) (c + (2.5a +b) (d + e); 6) m_inst = rate of interest * amount in rs;	01
Q3	FEC205.1	BL2		01	Explain different datatypes in C.	05
Q4	FEC205.1	BL2		01	Give the difference between identifier and keyword.	05
Q5	FEC205.2	BL6		01	Implement an algorithm and flowchart to swap values of two variables without using temporary variables.	05
Q6	FEC205.2	BL6		01	Implement an algorithm and flowchart to find the greatest of three integers given by the user.	05
Q7.	FEC205.2	BL6		01	Implement a C program to swap values of two variables without using temporary variables.	05
Q8	FEC205.2	BL6		02	Implement a C program to find the reverse of a two digit number.	05
Q9	FEC205.2	BL6		02	Draw flowchart and write an algorithm to determine whether the year entered by the user is leap or not.	05
Q10	FEC205.2	BL6		02	Draw flowchart and write an algorithm to find the greatest of four numbers.	05
Q11	FEC205.2	BL6		02	Implement a program that accepts two numbers, if the first number is greater than second, then print the sum of these numbers else print the difference.	05
Q10	FEC205.1	BL2		01	Rules for identifiers.	05
Q11	FEC205.1	BL2		01	Conversion from Decimal to Binary, Octal, Hexadecimal and vice versa	05

Q12	FEC205.2	BL6		02	Write a program that converts temperature from Celsius to Fahrenheit and vice versa.	05
Q13	FEC205.2	BL6		02	Write a program that computes and display simple interest and compound interest	05
Q14	FEC205.3	BL2		02	Differentiate between while and do…while with example.	05
Q15	FEC205.3	BL6		02	Write a program to print all the Armstrong numbers from 100 to 999.	05
Q16	FEC205.3	BL6		02	Write a program to print sin(x) series upto n.	05
Q17	FEC205.3	BL6		02	Write a program to print all the prime numbers between 1 to 100. (CO3, BL:CREATE)	05
Q18	FEC205.3	BL6		02	Write a program to convert decimal to binary number.	05
Q19	FEC205.3	BL6		02	Write a program to convert decimal to octal number.	05
Q20	FEC205.3	BL6		02	Write a program to convert binary to decimal number.	05
Q21	FEC205.3	BL6		02	Write a program to print all the factors of a number.	05
Q22	FEC205.3	BL6		02	Write a program to print the following patterns. A 1 232 34543 4567654 567898765 B. A B A C B A D C B A E D C B A C. 1 21A 321BA 4321CBA 54321DCBA D. A BAB CBABC DCBABCD EDCBABCDE	05
Q23	FEC205.3	BL6		02	Write a program in C to draw Pascal's triangle. 1 1 1 1 2 1 1 3 3 1 1 4 6 4 1	05
Q24	FEC205.3	BL6		02	Write a program to print all the combinations of 3 digit numbers.	05

Q25	FEC205.1	BL4, BL5		01	Find the output using associativity and precedence
					a=2, b=2
					x=4*(++a*2+3);
					y=4*(b++*2+3);
						01

					x=? y=?
					
					a=3, b=4, c=3, d=4
					x=(a=5)&&(b=7);
					y=(c=5)||(d=8);
					a=?, b=?, c=?, d=?, x=?, y=?
					
					x=(a==6) && (b==a);
					y=(c==6)||(d=10);
					a=?, b=?, c=?, d=?, x=?, y=?	

BL – Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating)

CO – Course Outcomes

PO – Program Outcomes; PI Code – Performance Indicator Code