

FYBCA (Semester – I)
US01CBCA05 – Practical Based on US01CBCA01, US01CBCA03 and US01CBCA04
Journal Program List

Sr. No.	Definition	Seq. No.																				
1.	To find simple interest. Hint: $SI = (P * R * N)/100$	46																				
2.	Write C Program to find out solution of expression ax^2+bx+c . a, b, c and x should be entered by user.	35																				
3.	Write C Program that read a number and checks whether the given no. is divisible by X or not. (X is any no. entered from user)	71																				
4.	Write C Program that will accept any year and check whether it is leap year or not.	69																				
5.	Write a program to enter marks of 6 subjects. Print the result as first class if percentage is ≥ 60 . Print result as second class if percentage is ≥ 48 and < 60 . Pass class if percentage < 48 and ≥ 40 . Print result as fail if student fails in all subjects. Print ATKT if student fails in 1 or 2 subject. Passing criteria is 40 marks.	84																				
6.	<p>An electric power distribution company charges its domestic consumers as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Consumption Units</th> <th style="text-align: left;">Rate of Charge</th> </tr> </thead> <tbody> <tr> <td>1-100</td> <td>Rs. 0.75 per unit</td> </tr> <tr> <td>101-300</td> <td>Rs. 75 plus Rs. 1.00 per unit excess of 100</td> </tr> <tr> <td>301-500</td> <td>Rs. 275 plus Rs. 1.50 per unit excess of 300</td> </tr> <tr> <td>500 and above</td> <td>Rs. 575 plus Rs. 1.75 per unit excess of 500</td> </tr> </tbody> </table> <p>Write a program that read customer number & power consumed and print the amount to be paid by the customer.</p>	Consumption Units	Rate of Charge	1-100	Rs. 0.75 per unit	101-300	Rs. 75 plus Rs. 1.00 per unit excess of 100	301-500	Rs. 275 plus Rs. 1.50 per unit excess of 300	500 and above	Rs. 575 plus Rs. 1.75 per unit excess of 500	88										
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7.	<p>Write a program to find net salary of employee. Criteria to calculate net salary are as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Employee code</th> <th style="text-align: left;">DA</th> <th style="text-align: left;">MA</th> <th style="text-align: left;">PF</th> <th style="text-align: left;">IT</th> </tr> </thead> <tbody> <tr> <td>1 to 5</td> <td>67%</td> <td>12%</td> <td>10%</td> <td>15%</td> </tr> <tr> <td>6 to 12</td> <td>62%</td> <td>10%</td> <td>9%</td> <td>10%</td> </tr> <tr> <td>13 to 15</td> <td>55%</td> <td>8%</td> <td>8%</td> <td>8%</td> </tr> </tbody> </table> <p>DA, MA, PF and IT are given in percentage of basic salary. Net salary = Basic salary + DA + MA – PF – IT</p>	Employee code	DA	MA	PF	IT	1 to 5	67%	12%	10%	15%	6 to 12	62%	10%	9%	10%	13 to 15	55%	8%	8%	8%	99
Employee code	DA	MA	PF	IT																		
1 to 5	67%	12%	10%	15%																		
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8.	Write a C Program to find out the factorial of a given number.	175																				
9.	Write a program to input a number and check whether the number is Prime number or not.	178																				
10.	Write a C Program that check whether the given no. is Palindrome or not.	189																				
11.	Write C Program to find out whether entered no. is an Armstrong or not.	190																				
12.	Write C Program to print Fibonacci series : 0 1 1 2 3 5 8 13...N	154																				
13.	Write a program to find out the total number of an odd digits and even digits within the given number and also print the sum of all odd digits and sum of even digits.	185																				

14.	Write C Program that perform and print SUM=1 + 2 + 6 + 24 + 120 +up to N	151
15.	Write C Program that perform and print SUM=1 - 1/2 + 1/3 - 1/4 + 1/5.....1/n	144
16.	Write C Program that perform and print SUM= x + x/2! + x/3! + x/4!.....x/n!	207
17.	Write C Program to print following: ENTER N=4 O/P 1 1 2 1 2 3 1 2 3 4	372 (10)
18.	Write C program to print following: ENTER N= 4 O/P 1 2 3 4 1 2 3 1 2 1	372 (70)
19.	Write C Program to print following ENTER N= 4 O/P A A B A A B C B A A B C D C B A	372 (103)
20.	Write C program to print following ENTER N=5 O/P * * * * * * * * * * * * * * *	372 (121)
21.	Input two strings from user. Add second string at the end of first string without using strcat function.	310
22.	Input one string from user. Find number of words in a given string.	294
23.	Write a program to remove duplicate characters from given string. Eg. The C Programming Language ANS --> The CProgaminLu	301
24.	Write C Program to perform following: (a) ENTER FIRST CHARACTER: N ENTER SENCOND CHARACTER: Y O/P: N O P Q R S T U V W X Y (b) ENTER FIRST CHARACTER: Y ENTER SENCOND CHARACTER: M O/P: M N O P Q R S T U V W X Y	243

25.	Write C Program to find out no. of occurrence of given character from a string. Enter string: ASASDASDASESAADA Enter Character: A No. of Occurrences of A is: 7	291
26.	Write a program to input n values from the user. Store them in array and print the array in reverse order.	246
27.	Calculate the total number of zeros, positive and negative elements in an array.	257
28.	Write C program to find out maximum and minimum no. from given array.	265
29.	Write a program to accomplish the following: <ul style="list-style-type: none"> • Read the mark of 50 students obtained in university examination. Assume that each student can get mark between 1 to 50. • Count the number of students belonging to each of the following groups of marks:1-10, 11-20, 21-30, 31-40, 41-50 	261
30.	Write a program to find the sum of squares of elements on the diagonal of a square matrix.	339

Write algorithm and draw flowchart for following definitions:

1.	To find simple interest. Hint: $SI = (P * R * N)/100$	46
2.	To find maximum of given three numbers.	79
3.	To find out N! (Factorial of N).	175
4.	To find sum of odd value and even value digits of a given number.	184
5.	To find out minimum from N numbers.	167
6.	To check whether inputted number is prime number or not.	178
7.	To check whether inputted number is palindrome number or not.	189
8.	To check whether inputted number is armstrong number or not. Hint: The number whose sum of cube of individual digit is same as number itself. eg. $153 = 1^3 + 5^3 + 3^3$	190
9.	To print N terms of Fibonacci series. Input: N = 9 Output: Fibonacci series: 1 1 2 3 5 8 13 21	153
10.	sum= $1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + \dots$ and so on.	132

Note: Sequence number is serial number of definition in Assignment.

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Journal Index**

1.	Simple interest
2.	Evaluate $ax^2 + bx + c$
3.	Check given number divisible by X or not
4.	Check given year is leap year or not
5.	Calculate result
6.	Calculate electricity bil
7.	Calculate net salary
8.	Find factorial of given number
9.	Check given number prime or not
10.	Check given number palindrome or not
11.	Check given number Armstrong or not
12.	Print Fibonacci series
13.	Find odd & even digit of given number and sum of it
14.	SUM=1 + 2 + 6 + 24 + 120 +up to N
15.	SUM=1 – 1/2 + 1/3 - 1/4 + 1/5.....1/n
16.	SUM= x + x/2! + x/3! + x/4!.....x/n!
17.	Pattern 1 1 2 1 2 3 1 2 3 4
18.	Pattern 1 2 3 4 1 2 3 1 2 1
19.	Pattern A A B A A B C B A A B C D C B A
20.	Pattern * * * * * * * * * * * * * * *
21.	Append string without strcat function
22.	Find number of words in string
23.	Remove duplicate characters from string
24.	Display alphabets from given range
25.	Find number of occurrence of given character from a string
26.	Input array and print in reverse order
27.	Calculate total number of zeros, positive and negative elements in an array

28.	Find maximum and minimum number from array
29.	Count number of students in different group of marks
30.	Find sum of squares of elements on the diagonal of a square matrix

Algorithm and Flowchart

1.	Simple interest
2.	Find maximum of given three numbers
3.	Find N!
4.	Find sum of odd value and even value digits of given number
5.	Find minimum from N numbers
6.	Check given number is prime number or not
7.	Check given number is palindrome or not
8.	Check given number is armstrong number or not
9.	Print N terms of Fibonacci series
10.	$sum=1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + \dots$ and so on.