GOA COLLEGE OF ENGINEERING
DEPARTMENT OF COMPUTER ENGINEERING

SUBJECT: - OOPS
FACULTY: - Prof. AMIT P. PATIL **CLASS: - SE Comp (III)**
PLATFORM: - Dev C++/VS 2010 **YEAR: - 1-7-24 to 12/11/24**

Date of Announcement: 25-7-24 **Date of Submission: 8-8-24**

Assignment No 2

1.

An election is contested by five candidates. The candidates are numbered 1 to 5 and the voting is done by marking the candidate number on the ballot paper. Write a program to read the ballots and ***count*** *the votes cast for each candidate using an array variable count. In case, a number read is outside the range 1 to 5, the ballot should be considered as a 'spoilt ballot', and the program should also count the number of spoilt ballots.*

2.

A cricket team has the following table of batting figures for a series of test matches:

Player's name	Runs	Innings	Times not out
Sachin	8430	230	18
Saurav	4200	130	9
Rahul	3350	105	11
.	.	.	.
.	.	.	.

Write a program to read the figures set out in the above form, to calculate the batting averages and to print out the complete table including the averages.

Note : use setw() manipulator to format the output.
Batting avg = runs/ times batsman is out

3.

Write programs to evaluate the following functions to 0.0001% accuracy.

(a) $\sin x = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \cdots\cdots$

(b) $SUM = 1 + (1/2)^2 + (1/3)^3 + (1/4)^4 + \cdots\cdots$

4. With diagram explain how the memory allocation is done for objects. Also state the mechanism to perform dynamic memory allocation to objects.

5. Write a program to demonstrate the dynamic memory allocation for a matrix. Read the matrix elements and display the same.