

Semester: July 2025 – Nov 2025		
Maximum Marks: 10	Debug Test	Duration : 15 min
Programme: B.Tech	Class: FY	Semester: I (SVU 2025)
Name of the Constituent College:	K. J. Somaiya School of Engineering	
Course Code: 316U06L101	Name of the Course: Structure Programming methodology	
Roll No:	Name:	
Division and Batch:	Sign:	

Instruction:-
There will be logical, syntax error, or missing statements (more than one line) in the given program.
A student needs to identify and correct it. If needed type the corrected code accordingly in given format.

Line no	Error	Explanation	corrected code

Question	C++ program to print the diagonal elements of a square matrix		
<pre> 1. #include <iostream> 2. using namespace std; 3. void printDiagonal(int matrix[10][10], int n) { 4. cout << "Diagonal elements of the matrix are: "; 5. for (int i = 0; i < n; ++i) { 6. cout << matrix[i][i] << " "; 7. } 8. cout << endl; 9. } 10. int main() { 11. int matrix[10][10], n; 12. cout << "Enter the order of the square matrix: "; 13. cin >> n; 14. cout << "\nEnter elements of the matrix:\n"; 15. for (int i = 0; i < n; ++i) { 16. for (int j = 0; j < n; ++j) { 17. cin >> matrix[i][j]; 18. } 19. } 20. cout << "\nMatrix entered:\n"; 21. for (int i = 0; i < n; ++i) { 22. for (int j = 0; j < n; ++j) { 23. cout << matrix[i][j] << " "; 24. } 25. cout << endl; 26. } 27. // Function call to print diagonal elements 28. printDiagonal(matrix); 29. return 0; 30. }</pre>			

Line no	Error	Explanation	corrected code	marks
5	Syntax error	For is blank	for (int i = 0; i < n; ++i)	2

6	Syntax error		cout << matrix[i][i] << " ";	2
17	Logical error	cin >> matrix[j][i];	cin >> matrix[i][j];	2
21	Syntax error	for (int i == 0; i < n; ++i)	for (int i = 0; i < n; ++i)	1
22	Syntax error	for (int j = 0; j < n; ++j)	for (int j = 0; j < n; ++j)	1
22	Syntax error	for (int j = 0; j < >n; ++j)	for (int j = 0; j < n; ++j)	1
28	Logical error	printDiagonal(matrix);	printDiagonal(matrix,n);	1