

<b>Semester: July 2025 – Nov 2025</b>										
<b>Maximum Marks: 10</b>	<b>Debug Test</b>	<b>Duration : 15 min</b>								
<b>Programme: B.Tech</b>	<b>Class: FY</b>	<b>Semester: I (SVU 2025)</b>								
<b>Name of the Constituent College: K. J. Somaiya School of Engineering</b>										
<b>Course Code: 316U06L101</b>	<b>Name of the Course: Structure Programming methodology</b>									
<b>Roll No:</b>	<b>Name:</b>									
<b>Division and Batch:</b>	<b>Sign:</b>									
<p>Instruction:-</p> <p>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.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Line no</th> <th style="width: 35%;">Error</th> <th style="width: 30%;">Explanation</th> <th style="width: 20%;">corrected code</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			Line no	Error	Explanation	corrected code				
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Question	C++ program to print the diagonal elements of a square matrix
	<pre> 1. #include &lt;iostream&gt; 2. using namespace std; 3. void printDiagonal(int matrix[10][10], int n) { 4.     cout &lt;&lt; "Diagonal elements of the matrix are: "; 5.     for (int i = 0; i &lt; n; ++i) { 6.         cout &lt;&lt; matrix[i][i] &lt;&lt; " "; 7.     } 8.     cout &lt;&lt; endl; 9. } 10. int main() { 11.     int matrix[10][10], n; 12.     cout &lt;&lt; "Enter the order of the square matrix: "; 13.     cin &gt;&gt; n; 14.     cout &lt;&lt; "\nEnter elements of the matrix:\n"; 15.     for (int i = 0; i &lt; n; ++i) { 16.         for (int j = 0; j &lt; n; ++j) { 17.             cin &gt;&gt; matrix[i][j]; 18.         } 19.     } 20.     cout &lt;&lt; "\nMatrix entered:\n"; 21.     for (int i = 0; i &lt; n; ++i) { 22.         for (int j = 0; j &lt; n; ++j) { 23.             cout &lt;&lt; matrix[i][j] &lt;&lt; " "; 24.         } 25.         cout &lt;&lt; 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