

**Numerical Method Lab Sheet Question**      **BCA 4<sup>th</sup> Sem**

1. WAP to implement Bisection method.
2. WAP to implement False Position Method.
3. WAP to implement Newton Raphson Method.
4. WAP to implement Secant Method.
5. WAP to implement Fixed Point Method.
6. WAP to implement linear interpolation.
7. WAP to implement lagrange's interpolation.
8. WAP to implement straight line curve fitting.
9. WAP to implement fitting a transcendental equation.
10. WAP to find the first and second derivative of a continuous function.
11. WAP to find integration using trapezoidal rule.
12. WAP to find integration using Simpson's 1/3 rule.
13. WAP to find integration using Simpson's 3/8 rule.
14. WAP to solve system of liner equation using gauss elimination method.
15. WAP to solve system of linear equation using gauss Jordan method.
16. WAP to solve system of liner equation using Jacobi iteration method.
17. WAP to solve system of linear equation using Gauss Seidel Method.
18. WAP to implement Taylor Series Method.
19. WAP to implement Euler's method.
20. WAP to implement Heun's Method.
21. WAP to implement RK 4<sup>th</sup> Order Method.

**Instruction for Submission**

- **The format for each lab question should contain the following section**

### **Theory**

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### **Algorithm:**

1.....

2.....

### **Source Code**

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### **Output**

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### **Conclusion**

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**Note: You must have to submit handwritten documents written in A4 Size paper with only one side (you must have to submit output in printed form)**