

Kathmandu University

Second In-semester Examination-2025
Department of Artificial Intelligence

Level: B.Tech Artificial Intelligence

Course: AIMA 203

Year: II

Semester: II

Time: 15 minutes

F.M. : 10

Name:

Roll No:

Marks-Scored:

SECTION "A" [10 Q \times 1 = 10 marks] (*Do any ten*).

Fill in the blanks by writing the most appropriate word(s) or symbol(s).

1. Write the condition for the natural quadratic spline. _____.
2. Write the condition for the natural cubic spline. _____.
3. Write a major drawback of linear splines. _____.
4. Why is cubic spline the most popular one? _____
_____.
5. What are m_i 's and M_i 's in the quadratic and cubic splines? _____.
6. Write the formula for Romberg's Integration using Trapezoidal rule. _____.
7. From where the u_i 's are obtained in Gaussian quadrature. _____.
8. Write an second-degree IVP. _____.
9. Write an second-degree BVP. _____.
10. Difference between forward Euler method and backward Euler method: _____
_____.