

Lecture-9

Conversion of initial value problem into integral equations(A QUIZ)

A. An equation in which an unknown function appears under one or more integral signs is said to be as

1. Kernel
2. Integral Eq.
3. PDE
4. ODE

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Course Code : MSCM303

Course Name: Integral equations and calculus of variation

The integral eq. $f(s) + \lambda \int_a^b K(s,t)g(t)dt = 0$ is called

1. Fredholm integral eq. of first kind
2. Fredholm integral eq. of second kind
3. Volterra integral eq. of first kind
4. Homogeneous Fredholm integral equation of the second kind

The integraleq. $g(s) = f(s) + \lambda \int_a^b K(s,t)g(t)dt$ is called|

1. Fredholm integral eq. of first kind
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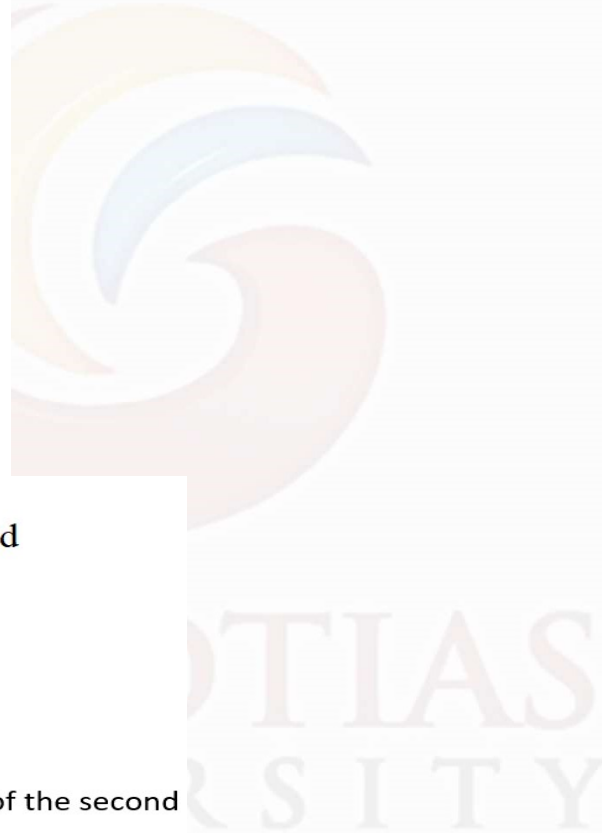
Course Name: Integral equations and calculus of variation

The integraleq. $f(s) + \lambda \int_a^x K(s, t)g(t)dt = 0$ is called

- 1 Volterra integral eq. of first kind
- 2 Volterra integral eq. of second kind
- 3 Volterra integral eq. of first kind
- 4 Homogeneous Fredholm integral equation of the second kind

The integraleq. $g(s) = f(s) + \lambda \int_a^x K(s, t)g(t)dt$ is called

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Name of the Faculty: Dr. Leena Rani

Program Name: M.Sc(Mathematics)

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The integraleq. $g(s) = \lambda \int_a^x K(s,t)g(t)dt$ is called

5. Volterra integral eq. of first kind
6. Volterra integral eq. of second kind
7. Volterra integral eq. of first kind
8. Homogeneous Volterra integral equation of the second kind

13. If $K(x, t) = i(x - t)$, which type of kernel is it

1. Symmetric kernel
2. Separable or degenerate kernel
3. Not a symmetric kernel
4. None of these

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14. If $K(x, t) = \sin(2x + 3t)$, which type of kernel is it

1. Symmetric kernel
2. Separable or degenerate kernel
3. Not a symmetric kernel
4. None of these

If $K(x, t) = \sum_{i=1}^n g_i(x)h_i(t)$ which type of kernel is it

1. Symmetric kernel
2. Separable or degenerate kernel
3. Not a symmetric kernel
4. None of these