

*Kafr El-Sheikh*

*Mathematic Third year*

*Faculty of Science*

*second term Exam*

*Department of Mathematic*

**Integral Equations 329**

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تناول بالبحث احد الموضوعات الاتية:

- (1) on Laplace transformation.**
- (2) Piecewise continuous, Periodic functions and Laplace transformation for it.**
- (3) Inverse of Laplace transformation.**
- (4) Convolution product of two continuous function on the interval  $[0,b]$  and Laplace transformation for it.**
- (5) Solution of second order differential equation with initial conditions using Laplace transformation.**
- (6) Successive approximation for solving the Volterra integral equation from second kind (Resolvent kernel)**
- (7) Decomposition method. And series method for solving the Volterra integral equation from second kind.**
- (8) Reduce of second order differential equation with initial conditions to the Volterra integral equation from second kind and solve it.**
- (9) solution of Volterra integral equation of second kind from convolution type using Laplace transformation.**
- (10) on the set of functions which there is Laplace transformation for it**