

Mathematic Second year (education)

Faculty of Science

differential equations

Department of Mathematic.

Second term exam

تناول بالبحث احد الموضوعات الاتية:

- (1) Solution of differential equation from first order and its applications.**
- (2) Homogeneous and exact differential equation.**
- (3) First order linear differential equation and Bernoulli differential equation**
- (4) Solution of the homogeneous differential equation with constant coefficients from second order.**

- (5) Solution of the high order homogeneous differential equation with constant coefficients.**
- (6) Solution of Cauchy – Euler differential equation.**

- (7) Integrating Factor to change non-exact differential equation to be exact.**
- (8) Variation of parameter method to get special solution of a nonhomogeneous differential equation of the second order.**

- (9) the relation between Wronskien and linearity of the solutions of differential equation and the solution set of it.**
- (10) comparison between Variation of parameter method and Solution of Cauchy – Euler method.**