

Semester – Spring 2019

Calculus-II

Assignment – 7 Marks: 30 **Due Date: 11/06/2019** Handout Date: 24/05/2019

<u>Question # 1:</u> Find the general solution to the following differential equation using separation of variables:

$$y' = xe^{2y}$$

<u>Question # 2:</u> Find the general solution of the following equation using method of exact differential equations:

$$2xy\frac{dy}{dx} + y^2 - 2x = 0$$

<u>Question # 3:</u> Solve the given Bernoulli's equation:

$$\frac{dy}{dx} + \frac{y}{x} = y^2$$

Good Luck