



**ISRA UNIVERSITY**

Islamabad Campus

**Program: BSc  
Semester – Spring 2019**

**MTCA-183  
Calculus-II**

**Quiz – 3  
Marks: 20**

**Handout Date: 14/05/2019**

Question # 1:

Verify by substitution that  $y_1 = e^x$  and  $y_2 = e^{-x}$  are solution of the ODE  $y'' - y = 0$ , solve for the initial value problem  $y(0) = 6$  and  $y'(0) = -2$ .

Solution:

Question # 2:

Solve the IVP. Show the details of your work.

$$y'' + y' - 6y = 0, y(0) = 10, y'(0) = 0$$

Solution:

**Good Luck**