KFUPM – Department of Mathematics and Statistics – Term 152 **MATH 202 QUIZ # 2 Code 1** (Duration = 20 minutes)

NAME:______ ID:_____ Section: _____

Exercise 1 (5 points)

Solve the differential equation $ydx = (ye^y - 2x)dy$ [Hint: $\int y^2 e^y dy = (y^2 - 2y + 2)e^y + c$]

Exercise 2 (5 points) Solve the differential equation $x^2 y' + 2xy = 5y^4$.

KFUPM – Department of Mathematics and Statistics – Term 152 **MATH 202 QUIZ # 2 Code 2** (Duration = 20 minutes)

NAME:______ID:_____Section: _____

Exercise 1 (5 points)

Solve the differential equation $xdy = (xe^x - 2y)dx$ [Hint: $\int x^2 e^x dx = (x^2 - 2x + 2)e^x + c$]

Exercise 2 (5 points) Solve the differential equation $x^2 y' + 3xy = 6y^4$.