

Daffodil International University

Department of CSE

Course Code: MAT211

set: B

Section: 65_B

Course Title: Engineering Mathematics

Quiz: 01

Time: 30 Mins

01. Give the answer (with explanation) to the following questions

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a) Mention the order and degree of $\left(\frac{dy}{dx}\right)^3 = \sqrt[5]{\left(\frac{d^3y}{dy^3}\right)^4} + y$

b) Write down the conditions of non-Linear equation with example

02. Find the differential equation of the solution $xy = Ae^{2x} + Be^{-2x} + x^2$

5

03. Solve the equation $\frac{dy}{dx} = \frac{xy+3x-y-3}{xy-2x+4y-8}$

6

14
2e^{2x} + 2

Order - 3
deg - 1

2. dy = $\frac{2-y}{x+y}$
x+3+3 2-3

$\frac{(y+3)(x-y)}{(y-2)(x+y)} = \frac{dy}{dx}$
x = dy