

**Class Test****Student ID:****Program:****Semester: Fall 2024****Course Code: MAT211****Course Title: Engineering Mathematics****Section: 65\_I****Date: 11/09/24****Signature of the Course Teacher:****Class Test No.: 1**

Marks: 15

Time: 35 Minutes

Q-1	i.	Write down the definition of particular solution.	1
	ii.	Distinguished between linear and non-linear ODE.	3
	iii.	Solve the ODE $\frac{dy}{dx} = e^{x+y} + x^2 e^{x^3+y}$ .	5
	iv.	Find the differential equation of a family of circles touches both axes.	6

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**WRITING START HERE**

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