



**PADRE CONCEIÇÃO COLLEGE OF ENGINEERING, VERNA-
GOA**

First Year Engineering

Internal Test-I

Semester & Course: I (RC 2019-'20)
Subject: Mathematics-I
Course Instructor: Ms. Komal Paroolkar

Date: 29/11/2021
Time: 09:30-10:30 am
Max Marks: 25

Instructions: Attempt all questions. Assume missing data, if any and justify.

| | <u>Marks</u> | <u>CO</u> | <u>CL</u> |
|---|--------------|-----------|-----------|
| Q1. Solve $\frac{dy}{dx} = \frac{2y-x+3}{4y-2x+2}$ | [6] | FE110.3 | CL3 |
| Q2. Solve $(e^y + 1) \cos x \, dx + e^y \sin x \, dy = 0$ | [5] | FE110.3 | CL3 |
| Q3. Solve $(x + 2y + 3)dx - (2x - y + 1)dy = 0$ | [7] | FE110.3 | CL3 |
| Q4. Solve $x \frac{dy}{dx} + y = y^2 \log x$ | [7] | FE110.3 | CL3 |

All the best!