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| QUIZ 3 | Duration: 25 minutes | Marks: 15 | Marks Obtain:  |
| Semester: Summer 2023 | | Section: 09 | |
| Course ID: MAT120 | Course Title: Integral Calculus & Differential Equation | | |
| Student ID: 22101698 | Name: Jannatul Somiya Mahmud | | |

Answer all the questions below:

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| 1. | Solve the linear ODE $x \frac{dy}{dx} - y = x^2 \sin x$. | [7] |
| 2. | Solve the I.V.P $(4y + 2t - 5)dt + (6y + 4t - 1)dy = 0, \quad y(-1) = 0$ | [8] |