**Department of Humanities and Applied Sciences**

**Problem set I (2023-2024)**

**Subject: Engineering Mathematics II**

**Modules:**

1. **Exact and Linear Differential Equations**
2. **Higher Order Linear Differential Equations with constant coefficients.**

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| **Course Outcome**  **FEC 201.1:**  **Learners will be able to solve various types of First Order differential equation.** | | | |
| Question No. | Module 1 | Bloom Taxonomy Level | Course outcome |
| Q.1. | Solve | Applying | FEC201.1 |
| Q.2 | Solve | Applying | FEC201.1 |
| Q.3 | Solve | Applying | FEC201.1 |
| Q.4 | Solve | Applying | FEC201.1 |
| Q.5 | Solve | Applying | FEC201.1 |
| Q.6 | Solve | Applying | FEC201.1 |
| Q.7 | Solve | Applying | FEC201.1 |
| Q.8 | Solve | Applying | FEC201.1 |
| Q.9 | Solve the following | Applying | FEC201.1 |
| Q.10 | 1. Solve . | Applying | FEC201.1 |

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| **Course Outcome**  **FEC 201.2:**  **Learners will be able to solve various types of Higher Order Differential equation.** | | | |
| Question No. | Module 2  Higher Order Linear Differential equations | Bloom Taxonomy Level | Course outcome |
| Q.1. | Solve | Applying | FEC201.2 |
| Q.2 | Solve | Applying | FEC201.2 |
| Q.3 | Solve | Applying | FEC201.2 |
| Q.4 | Solve | Applying | FEC201.2 |
| Q.5 | Solve | Applying | FEC201.2 |
| Q.6 | Solve | Applying | FEC201.2 |
| Q.7 | Solve | Applying | FEC201.2 |
| Q.8 | Solve | Applying | FEC201.2 |
| Q.9 | Solve | Applying | FEC201.2 |
| Q.10 | Solve | Applying | FEC201.2 |
| Q.11 | Solve the following differential equations using Method of variations of parameters. | Applying | FEC201.2 |