

**Prabhat Kumar College, Contai**

**Department of Mathematics**

**2<sup>nd</sup> Semester Mathematics (General) CBCS Pattern**

**Paper: DSC-1B**

**Time: 1 hours**

Answer any one :-

1. Solve  $\left( xy^2 - e^{\frac{1}{x^3}} \right) dx - x^2 y dy = 0$

2. Solve  $x \frac{dy}{dx} - y = x \sqrt{x^2 + y^2}$

3. Solve  $p^3 - 4xyp + 8y^2 = 0$

4. Solve  $3p^2y^2 - 2xyp + 4y^2 - x^2 = 0$