

MODULE -1 EXAMPLES

Q. Find the integrating factor of

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

$$2) [3x^2y^4 + 2xy]dx + [2x^3y^3 - x^2]dy = 0$$

$$3) \{y - xy^2\}dx - \{x + x^2y\}dy = 0$$

$$4) y[x + y]dx - x[y - x]dy = 0$$

$$5) \frac{dy}{dx} = \frac{x^2y^3 + 2y}{2x - 2x^3y^2}$$