

Solve

TEST - 3

Time: 2hr

① $x^2 y dx - (x^3 + xy^3) dy = 0$

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

③ $y e^x dx + (2y + e^x) dy = 0$

④ $(x - y^2) dx + (2xy) dy = 0$

⑤ $\frac{dy}{dx} + \frac{1}{3} y = e^x y^4$

⑥ $\frac{dy}{dx} + \frac{2}{x} y = -x^2 \cos x \cdot y^2$

⑦ $\frac{dy}{dx} + \frac{x}{1-x^2} y = x\sqrt{y}$

⑧ $z = \frac{1}{2} [\sqrt{x+a} + \sqrt{y-a}] + b$ (Eliminate constants)

⑨ $z = ax + by + \sqrt{a^2 - b^2}$

⑩ $\log(az-1) = x + ay + b$ "

⑪ $z = (x-a)^2 + (y-b)^2 + 1$ "