SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF MATHEMATICS
TUTORIAL SHEET
18MAB101T- CALCULUS AND LINEAR ALGEBRA
TUTORIAL-7 (C1 SLOT)

Part-B

1. Solve $(D^2 - 4D + 13)y = 0$.
2. Find the particular integral of$(D^2 + 2D + 1)y = 15$.
3. Find the complementary function of $(D^5 - D)y = 0$.
4. Solve $(D^2 + 4D + 4)y = e^{-2x}$.
5. Solve$(D^3 - 3D^2 + 4D - 2)y = 0$.

Part-C

6. Solve $(D^2 + 2D + 1)y = cosh2x$
7. Solve$(D^3 - 3D^2 + 3D - 1)y = \mathrm{x}^2\mathrm{e}^{\mathrm{x}}$
8. Solve $\frac{d^2y}{dx^2} + \frac{dy}{dx} = x^2 + 2x + 4$
9. Solve$[D^2 - 4D + 3]y = 3e^x cos2x$
10. Solve$(D^2 - 3D + 2)y = e^{-x}\, sin2x\, cos2x$