GIET UNIVERSITY, GUNUPUR-765022

DEPARTMENT OF BASIC SCIENCE AND HUMANITIES

**ENGINEERING MATHEMATICS-I**

**Short Questions**

1. Write Bernoulli’s Equation.
2. Under what condition the equation (A+By)dx+(Cx+D)dy=0 is exact.
3. Define first order Linear Differential Equation
4. Find the complementary function of
5. Solve .
6. What is the integrating factor of .
7. Solve .

**Long Questions**

1. Solve the Differential Equation 4y״ + 4y׳ - 3y = e3x
2. Solve = (y – 4x)3
3. Solve by Non-Homogeneous method (2x + 2y + 1) d x + (x + y − 1) dy= 0
4. Solve the Differential Equation y״ - 9y = 18 cos
5. Solve by Exact Differential Equation [(x + 1) ex – ey] dx – xeydy = 0
6. Solve the Differential Equation y״ + 4y׳ + ( = 0
7. Solve the Differential Equation
8. Solve the Differential Equation

1. Solve the Differential Equation
2. Solve the Differential Equation

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