

Quiz No: 5

Name: \_\_\_\_\_

ID \_\_\_\_\_

Section \_\_\_\_\_

Marks: 8

1. Use variation of parameter method IVP  $y'' + 4y = 2x$

2. For  $y'' + 4y = \cos x$ , find  $y_p$

3. Given  $y'' + y = \sin x$ , guess the  $y_p$ . Do not find constants in  $y_p$ .

4. Let  $y = c_1 e^{-2x} + c_2 e^x$  be the general solution of some constant coefficient homogenous differential equation. Construct the differential equation.