## Quiz 12

| Name: |  |      |  |
|-------|--|------|--|
| SID : |  | <br> |  |

Caution.  $Minor\ mistakes\ can\ cause\ much\ deduction\ of\ points.$  So, please read each questions carefully and figure out what they want.

1. Solve the initial value problem

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$$y'' - 5y' + 6y = -e^{2t}, \quad y(0) = 2, \quad y'(0) = 5.$$

2. Find a general solution to the following differential equation.

$$y'' + 4y = 8e^{2t} + 4\cos 2t$$