

Name. _____

Scores

_____ **Problem 1.** Variation of Parameters
_____ **Problem 2.** Undetermined Coefficients
_____ **Problem 3.** Practical Resonance
_____ **Problem 4.** RLC Circuit
_____ **Problem 5.** In-class, November 13.
_____ **Average.**

Applied Differential Equations 2250-1 Version A-M
Midterm Exam 3 In-Class
Wednesday, 13 November, 2002

Instructions: This in-class exam is 15 minutes. Hand-written or computer-generated notes are allowed, including xerox copies of tables or classroom xerox notes. Calculators are allowed. Books are not allowed. *An answer check* is expected.

5. (Particular Solution)

Solve for a particular solution $y_p(x)$. Cite the method(s) used and show all steps.

$$y'' - y' = \pi + e^x.$$

Name. _____

Scores

_____ **Problem 1.** Variation of Parameters
_____ **Problem 2.** Undetermined Coefficients
_____ **Problem 3.** Practical Resonance
_____ **Problem 4.** RLC Circuit
_____ **Problem 5.** In-class, November 13.
_____ **Average.**

Applied Differential Equations 2250-1 Version N-Z
Midterm Exam 3 In-Class
Wednesday, 13 November, 2002

Instructions: This in-class exam is 15 minutes. Hand-written or computer-generated notes are allowed, including xerox copies of tables or classroom xerox notes. Calculators are allowed. Books are not allowed.

5. (Particular Solution)

Solve for a particular solution $y_p(x)$. Cite the method(s) used and show all steps.

$$y'' + y' = \pi + e^{-x}.$$

Name. _____

Scores

_____ **Problem 1.** Variation of Parameters
_____ **Problem 2.** Undetermined Coefficients
_____ **Problem 3.** Practical Resonance
_____ **Problem 4.** RLC Circuit
_____ **Problem 5.** In-class, November 13.
_____ **Average.**

Applied Differential Equations 2250-3
Midterm Exam 3 In-Class
Wednesday, 13 November, 2002

Instructions: This in-class exam is 15 minutes. Hand-written or computer-generated notes are allowed, including xerox copies of tables or classroom xerox notes. Calculators are allowed. Books are not allowed.

5. (Particular Solution)

Solve for a particular solution $y_p(x)$. Cite the method(s) used and show all steps.

$$y'' - y = e^x + e^{-x}.$$