

SUB: MAE 3360

INSTRUCTOR: ALBERT Y. TONG

ASSIGNMENT # 05

DUE ON 03/12/08

QUESTIONS

Solve the given d.e by variation of parameter.

$$(1) \quad x^2 y'' + 4xy' + 2y = 4 \ln x$$

$$(2) \quad x^2 y'' + 6xy' + 6y = 4e^{2x}$$

$$(3) \quad x^2 y'' + 4xy' + 2y = \cos x$$

$$(4) \quad y'' - 2y' + y = \frac{e^x}{x} \quad ; \quad y(1) = 0 \quad ; \quad y'(1) = 1$$

$$(5) \quad y'' + 4y = \sin^2 2x \quad ; \quad y(\pi) = 0 \quad ; \quad y'(\pi) = 0$$