

TOPIC

Mathematics – Section I – Question 22

QUESTIONGiven D is the differential operator, the general solution to

$$(D + 2)(D - 3)y = 0$$

is

(A) $y = K_1e^{-2x} + K_2e^{-3x}$

(B) $y = K_1e^{-2x} + K_2e^{3x}$

(C) $y = K_1e^{2x} + K_2e^{3x}$

(D) $y = K_1e^{2x} + K_2e^{-3x}$

HINT

The characteristic equation of the ordinary differential equation is

$$(m + 2)(m - 3) = 0$$

CONTRIBUTOR

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