

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks

[Download PDF version of :](#)
Engineering Mathematics Quiz Questions With Answers

EE203 Mock Final Examination

1(a) Show that the following ordinary differential equation is an exact differential equation. Then find its general solution. (10 marks)

$$x \frac{dy}{dx} + 3y = \frac{e^x}{x^2}$$

(b) Show that $y_1(x) = e^{-2x}$ is one solution of the following homogeneous differential equation: (8 marks)

$$y'' + 4y' + 4y = 0.$$

Determine the second solution by using **Reduction of Order method** or otherwise. Find the general solution of the above differential equation.

2(a) Find the **general solution** for the following non-homogeneous differential equation: (14 marks)

$$y'' + 2y' + 5y = 3 \sin 2x$$

(b) Solve the following **separable variables** differential equation: (6 marks)

$$\frac{dy}{dx} = \frac{y(x+1)}{x}$$

3(a) Consider the following **IVP** consisting of the differential equations with initial conditions: (12 marks)

$$y'' + 16y = 0, \quad y(0) = -10 \text{ and } y'(0) = 3$$

Find the solution $y(x)$ by using **Laplace and Inverse Laplace method**.

(b) Determine $F(x)$, which is the **Laplace transform** of $f(t)$ defined by: (8 marks)

$$f(t) = \begin{cases} \sin t, & 0 \leq t < \pi \\ 0, & t \geq \pi \end{cases}$$