

EE202 Numerical Methods for Engineers
Laboratory Assignment: 9

** Find solutions of the following questions in Matlab:

Question 1:

Consider a 1-D differential equation;

$$-\frac{d^2 f(x)}{dx^2} = 3 + x^2 \quad \text{with } f(0)=f(1)=0 .$$

Solve this equation using Galerkin's Method of Moments (MoM).

Question 2:

S Consider a 1-D differential equation;

$$-\frac{d^2 f(x)}{dx^2} = 1 + x^2 \quad \text{with } f(0)=f(1)=0 .$$

Solve this equation using Galerkin's Method of Moments (MoM).