Benha University Faculty of Engineering- Shoubra (Electrical) Engineering Department



Mid term exam Mathematics (3-B)

Date: March 2013 Code: EMP 272

Duration: 1 hours Total Mark: 20

Answer all the following questions

No. of questions: 2

I) Solve the system of equations -2y + 10z = 47 - 3x, 5x + 2z = 15, x - 2z = 5y - 24 using

a) Crout's method

b) Gauss seidel method [take $(y, z)^{(0)} = (2.853, 5.221)$]

II) Solve the following D.E. using Picard method and find y(0.2) using Euler { take h = 0.05}

$$x' = (y - 3t^2)(x - t^2) + 2$$
, $y' = 3(x - t^2)$, $x(0) = 0$, $y(0) = 1$

Dr. eng Khaled El Naggar

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