## King Fahd University of Petroleum and Minerals College of Computer Sciences and Engineering

## **CISE 301 – Numerical Methods (T112)**

## Homework # 04 (due date & time: Monday 16/04/2012 during class period)

\*\*\* Show all your work. No credit will be given if work is not shown! \*\*\*

**Problem 1 (15 points):** Problem 23.2 of the textbook.

**Problem 2 (15 points):** Problem 23.4 of the textbook.

**Problem 3 (20 points):** Parts (a) and (e) of problem 23.8 of the textbook.

**Problem 4 (30 points):** Parts (a), (b), and (c) of problem 21.1 of the textbook.

**Problem 5 (10 points):** Part (a) of problem 21.10 of the textbook.

**Problem 6 (5 points):** Problem 22.1 of the textbook.

**Problem 7 (45 points):** Problem 22.5 of the textbook.

**Problem 8 (10 points):** Part (a) of problem 22.9 of the textbook. Use a 5-point Gauss-Legendre formula in computing the integration.