

# **Multiple-Choice Test Solution Links**

## **Chapter 01.01**

### **Introduction to Numerical Methods**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz\\_01aae\\_introduction\\_answers.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz_01aae_introduction_answers.pdf)

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Introduction
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 01.02**

### **Measuring Errors**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz\\_01aae\\_measuringerror\\_answers.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz_01aae_measuringerror_answers.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Measuring Errors
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 01.03**

### **Sources of Error**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz\\_01aae\\_sourceserror\\_answers.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz_01aae_sourceserror_answers.pdf)

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Sources of Error
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 01.04**

### **Binary Representation**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz\\_01aae\\_binaryrepresentation\\_answers.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz_01aae_binaryrepresentation_answers.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Binary Representation
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 01.05**

### **Floating Point Representation**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz\\_01aae\\_floatingpoint\\_answers.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz_01aae_floatingpoint_answers.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Floating Pt Representation
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 01.06**

### **Propagation of Errors**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz\\_01aae\\_propagationerrors\\_answers.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz_01aae_propagationerrors_answers.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Propagation of Errors
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 01.07**

### **Taylor Series Revisited**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz\\_01aae\\_taylorseries\\_answers.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/01aae/quiz_01aae_taylorseries_answers.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Taylor Theorem Revisit
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 02.01**

### **A Primer on Differentiation**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/02dif/quiz\\_02dif\\_background\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/02dif/quiz_02dif_background_solution.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Primer on Differentiation
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 02.02**

### **Differentiation of Continuous Functions**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/02dif/quiz\\_02dif\\_continuous\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/02dif/quiz_02dif_continuous_solution.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Continuous Function
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 02.03**

### **Differentiation of Discrete Functions**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/02dif/quiz\\_02dif\\_discrete\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/02dif/quiz_02dif_discrete_solution.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Discrete Function
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 03.01**

### **Background Nonlinear Equations**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/03nle/quiz\\_03nle\\_background\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/03nle/quiz_03nle_background_solution.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Quadratic Equations
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 03.03**

### **Bisection Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/03nle/quiz\\_03nle\\_bisection\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/03nle/quiz_03nle_bisection_solution.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Bisection Method
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 03.04**

### **Newton-Raphson Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/03nle/quiz\\_03nle\\_newton\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/03nle/quiz_03nle_newton_solution.pdf),

or

> Go to <http://numericalmethods.eng.usf.edu>

> Click on Newton-Raphson Meth

> Choose HTML option of the Multiple Choice Test

> Go to the bottom of the page and click on the Complete Solution link.

## **Secant Method**

### **Chapter 03.05**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/03nle/quiz\\_03nle\\_secant\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/03nle/quiz_03nle_secant_solution.pdf),

or

> Go to <http://numericalmethods.eng.usf.edu>

> Click on Secant Method

> Choose HTML option of the Multiple Choice Test

> Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 04.01**

### **Background Simultaneous Linear Equations**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/04sle/quiz\\_04sle\\_background\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/04sle/quiz_04sle_background_solution.pdf),

or

> Go to <http://numericalmethods.eng.usf.edu>

> Click on Intro to Matrix Algebra

> Choose HTML option of the Multiple Choice Test

> Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 04.06**

### **Gaussian Elimination**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/04sle/quiz\\_04sle\\_gaussianelimination\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/04sle/quiz_04sle_gaussianelimination_solution.pdf),

or

> Go to <http://numericalmethods.eng.usf.edu>

> Click on Gaussian Elimination

> Choose HTML option of the Multiple Choice Test

> Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 04.07**

### **LU Decomposition Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/04sle/quiz\\_04sle\\_ludecomposition\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/04sle/quiz_04sle_ludecomposition_solution.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on LU Decomposition
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 04.08**

### **Gauss-Seidel Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/04sle/quiz\\_04sle\\_gaussseidal\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/04sle/quiz_04sle_gaussseidal_solution.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Gauss-Seidel Met
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 05.01**

### **Background on Interpolation**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz\\_05inp\\_background\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz_05inp_background_solution.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Primer on Interpolation
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 05.02**

### **Direct Method of Interpolation**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz\\_05inp\\_direct\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz_05inp_direct_solution.pdf),

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Direct Method
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 05.03**

### **Newton's Divided Difference Polynomial Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz\\_05inp\\_newton\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz_05inp_newton_solution.pdf) ,

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Newton's Dif Method
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 05.04**

### **Lagrange Method of Interpolation**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz\\_05inp\\_lagrange\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz_05inp_lagrange_solution.pdf) ,

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Lagrange Method
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 05.05**

### **Spline Method of Interpolation**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz\\_05inp\\_spline\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/05inp/quiz_05inp_spline_solution.pdf) ,

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Spline Method
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 06.01**

### **Background**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/06reg/quiz\\_06reg\\_background\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/06reg/quiz_06reg_background_solution.pdf) ,

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Primer on Regression
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 06.03**

### **Linear Regression**

Complete solution for this multiple choice test is available at  
[http://numericalmethods.eng.usf.edu/mcquizzes/06reg/quiz\\_06reg\\_linear\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/06reg/quiz_06reg_linear_solution.pdf),  
or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Linear Regression
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 06.04**

### **Non-Linear Regression**

Complete solution for this multiple choice test is available at  
[http://numericalmethods.eng.usf.edu/mcquizzes/06reg/quiz\\_06reg\\_nonlinear\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/06reg/quiz_06reg_nonlinear_solution.pdf),  
or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Nonlinear Regression
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 07.01**

### **Background**

Complete solution for this multiple choice test is available at  
[http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz\\_07int\\_background\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz_07int_background_solution.pdf),  
or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Integral Calc Primer
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 07.02**

### **Trapezoidal Rule**

Complete solution for this multiple choice test is available at  
[http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz\\_07int\\_trapcontinuous\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz_07int_trapcontinuous_solution.pdf)  
or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Trapezoidal Rule
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 07.03**

### **Simpson's 1/3 Rule**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz\\_07int\\_simpson\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz_07int_simpson_solution.pdf) ,

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Simpson's 1/3rd Rule
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 07.04**

### **Romberg Rule**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz\\_07int\\_romberg\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz_07int_romberg_solution.pdf) ,

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Romberg Integration
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 07.05**

### **Gauss Quadrature Rule**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz\\_07int\\_gaussquadrature\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/07int/quiz_07int_gaussquadrature_solution.pdf) ,

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Gauss-Quad Rule
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 08.01**

### **Background**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz\\_08ode\\_background\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz_08ode_background_solution.pdf) ,

or

- > Go to <http://numericalmethods.eng.usf.edu>
- > Click on Primer on ODE
- > Choose HTML option of the Multiple Choice Test
- > Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 08.02**

### **Euler's Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz\\_08ode\\_euler\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz_08ode_euler_solution.pdf),

or

> Go to <http://numericalmethods.eng.usf.edu>

> Click on Euler's Method

> Choose HTML option of the Multiple Choice Test

> Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 08.03**

### **Runge-Kutta 2nd Order Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz\\_08ode\\_runge2nd\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz_08ode_runge2nd_solution.pdf),

or

> Go to <http://numericalmethods.eng.usf.edu>

> Click on Runge-Kutta 2nd

> Choose HTML option of the Multiple Choice Test

> Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 08.04**

### **Runge-Kutta 4th Order Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz\\_08ode\\_runge4th\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz_08ode_runge4th_solution.pdf),

or

> Go to <http://numericalmethods.eng.usf.edu>

> Click on Runge-Kutta 4th

> Choose HTML option of the Multiple Choice Test

> Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 08.06**

### **Shooting Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz\\_08ode\\_shooting\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz_08ode_shooting_solution.pdf),

or

> Go to <http://numericalmethods.eng.usf.edu>

> Click on Shooting Method

> Choose HTML option of the Multiple Choice Test

> Go to the bottom of the page and click on the Complete Solution link.

## **Chapter 08.07**

### **Finite Difference Method**

Complete solution for this multiple choice test is available at

[http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz\\_08ode\\_fitediff\\_solution.pdf](http://numericalmethods.eng.usf.edu/mcquizzes/08ode/quiz_08ode_fitediff_solution.pdf) ,

or

> Go to <http://numericalmethods.eng.usf.edu>

> Click on Finite Diff Method

> Choose HTML option of the Multiple Choice Test

> Go to the bottom of the page and click on the Complete Solution link.