

**King Fahd University of Petroleum and Minerals**  
**Department of Mathematical Science**  
**Math 102(01)      Term 052    Quiz#3**

Name: \_\_\_\_\_ ID#: \_\_\_\_\_

**Q1.** Use cylindrical shells to find the volume of the solid generated when the region R under the curve

$y = x^3$  over the intervals  $[0, 2]$  is revolved about the line  $y = -2$ .