## KFUPM - Department of Mathematics and Statistics - Term 131 **MATH 102 QUIZ # 2 Code 1** (Duration = 15 minutes)

NAME:\_\_\_\_\_\_ID:\_\_\_\_\_Section: \_\_\_\_\_

Exercise 1 (5 points) Evaluate the integral  $\int \frac{dx}{\sqrt{x-x^2}}$ 

Exercise 2 (5 points) Find the volume of the solid obtained by rotating the area enclosed by the curves  $y = x^2 + 1$ ,  $y = 9 - x^2$  in the first quadrant about the line x = -2

## KFUPM - Department of Mathematics and Statistics - Term 131 **MATH 102 QUIZ # 2 Code 2** (Duration = 15 minutes)

NAME:\_\_\_\_\_\_ID:\_\_\_\_\_Section: \_\_\_\_\_

Exercise 1 (5 points) Evaluate the integral  $\int \frac{dx}{x\sqrt{1-(\ln x)^2}}$ 

Exercise 2 (5 points) Find the volume of the solid obtained by rotating the area enclosed by the curves  $y = x^2 + 2$ ,  $y = 10 - x^2$  in the first quadrant about the line x = -2