KFUPM – Department of Mathematics and Statistics – Term 161 MATH 102 QUIZ # 1 Code 1 (Duration = 20 minutes)

NAME:______ ID:_____ Section: _____

Exercise 1 (5 points) Express the limit $Lim \sum_{i=1}^{n} \frac{i}{n^2} \cos(\frac{i\pi}{n})$ as a definite integral.

Exercise 2 (5 points) Evaluate the definite integral $\int_0^4 (x + \sqrt{16 - x^2}) dx$ [Hint: interpreted as area]

KFUPM - Department of Mathematics and Statistics - Term 161 **MATH 102** QUIZ # 1 Code 2 (Duration = 20 minutes)

NAME:______ ID:_____ Section: _____

Exercise 1 (6 points) Express the limit $Lim \sum_{i=1}^{n} \frac{i}{n^2} \sin(\frac{i\pi}{n})$ as a definite integral

Exercise 2 (5 points) Evaluate the definite integral $\int_{-5}^{0} (-x + \sqrt{25 - x^2}) dx$ [Hint: interpreted as area]