King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-102 Semester-153 QUIZ I

NAME: S.No. ID:
Maximum Marks: 10 Section: 02 Time Allowed: 30 minutes

(1) Estimate the area under the graph of $y = x^2$ from 1 to 9 by using the four rectangles and midpoints.
(2) Use the form of the definition of the integral to evaluate the integral

$$\int_0^3 (x^3 - 6x)dx.$$

(3) Use the Fundamental Theorem to find $\frac{dy}{dx}$ if $y = \int_{1+3x^2}^{4} \frac{1}{2 + e^t}\, dt.$