King Fahd University of Petroleum and Minerals Department of Mathematics and Statistics Math-201 Semester-101 QUIZ III

NAME:

S.No. ID:

Maximum Marks: 10 Section:10 Time Allowed: 20 minutes (a) Let $\bar{\mathbf{A}} = < 2, 1, 1 > \text{ and } \bar{\mathbf{B}} = < 2, 4, -1 > \text{ be two vectors.}$ Find the vector projection of $\bar{\mathbf{B}}$ onto $\bar{\mathbf{A}}$.

(b) Find the area of a triangle with vertices P(2, 1, 5), Q(-1, 3, 4) and R(3, 0, 6).

(c) Find the unit vector that are parallel to the tangent line to the parabola $y = x^2$ at the point (2, 4).