King Fahd Univ. of Petroleum and Minerals  
Faculty of Sciences  
Department of Mathematics and Statistics  

QUIZ No. 1  
(MATH. 102-111 Section 2)  

Name: 
ID:  

Prob. 1  
Compute \( \int_1^2 t^2 e^{t^3} dt \)  

Prob. 2  
Find  
\[
\lim_{x \to 0} \frac{\int_0^{3x} \sin^3 t \, dt}{\sin^4 x}
\]