KING FAHD UNIVERSITY OF PETROLUEM AND MINERALS
College of Science, Prep- Year Math Program
Math 001 - Term 062
Quiz 4

Name : **ID#:** **Section:**

Q1) The graph of $p(x) = x^2(x+2)^2 - (x+2)^2$ is below the $x-axis$ on the interval:

$a)(-2,1)$ $b)(-1,1)$ $c)(-2,-1)$ $d)(0,1)$ $e)(-2,0)$

Q2) The Polynomial $p(x) = x^3 - 4x - 4$ has a zero between:

$a) -1 and\ 0$ $b) 0 and\ 1$ $c) 3 and\ 4$ $d) -3 and -2$ $e) 2 and\ 3$

Q3) The sum of all **non-integer rational** zeros of the polynomial $p(x) = 4x^4 + 4x^3 + 23x^2 - x - 6$

$a) 0$ $b) 1$ $c) -1$ $d) 5/2$ $e) -3/2$

Q5) If -1 is a zero of multiplicity 2 of $p(x) = x^3 + Ax + B$ then $A + B =$

$a) 0$ $b) 2$ $c) 4$ $d) -5$ $e) -2$

Q6) If $(x-i)$ is a factor of $P(x) = x^4 - 2x^3 + 2x^2 - 2x + 1$, then the NUMBER of $x-$intercepts of $p(x)$ is

$a)$ 0 $b)$ 2 $c)$ 3 $d)$ 1 $e)$ 4

Q7) The largest negative integer that is a **lower bound** for the real zeros of $f(x) = x^5 + 7x^2 - x + 3$ is:

$a)$ − 1 $b)$ − 5 $c)$ − 4 $d)$ − 2 $e)$ − 3