Kingdom Saudi Arabia
Imam Mohammed bin Saud University
College of science
103 phys (General Physics)
Mdterm1

المملكة العربية السعودية
جامعة الامام محمد بن سعود الاسلامية
كلية العلوم الطبيعية
103 فيز (فيزياء عامة)
الاختبار الأول

	الاسم
	الرقم الجامعي
	الشعبة

1	2	3	4	5	6

Q1: Choose the correct answer: 6points

1. A vector has direction of ($180° > \theta > 90°$), the components of this vector will be:

  a) $A_x (-) and A_y (-)$
  b) $A_x (+) and A_y (+)$
  c) $A_x (-) and A_y (+)$
  d) $A_x (+) and A_y (-)$

2. Two vectors are given as follows: $\vec{A} = 3\hat{\imath} - 6\hat{\jmath}$ and $\vec{B} = 2\hat{\imath} - 3\hat{\jmath}$
  Find the vector: $\vec{A} \times \vec{B}$.
  a) -3 k
  b) -21 k
  c) 21 k
  d) 3 k

3. The diagram shows the electric field lines in a region of space containing two small charged spheres (Y and Z). Then:
  a) Y is positive and Z is negative
  b) Y is negative and Z is positive
  c) Y and Z both are negative
  d) Y and Z both are positive
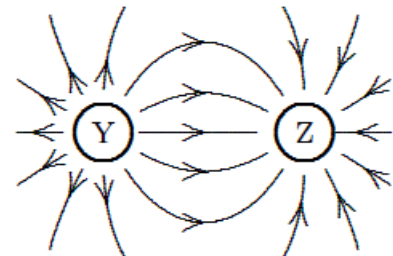
4. Electric charges is always conserved in an is an isolated system.
   a) True
   b) False
   c) none of these

5. Assume the magnitude of the electric force between two point charges is F.
If the distance between them is increased by factor 3, the magnitude of the
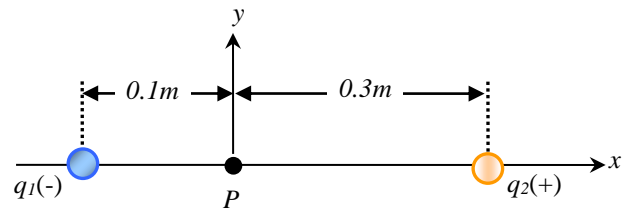electric force then becomes:
a) F/3.
b) 3F.
c) F/9.
d) 9F.

6. The electric force is attractive if the charges are of same sign
   a) True
   b) False
   c) none of these

Q2: Answer the following equation: 4 points
Two point charges, q_1= -3µC and q_2= 5µC are arranged as shown in figure.
Find the total electric field that the charges q_1 and q_2, at point P.

Good Luck
T.Saja Algessair