Kingdom of Saudi Arabia

Ministry of higher Education

Al-Imam Mohammed Bin Saud Islamic University

College: Science

Department: Physics

بسم الله الرحمن الرحيم

المملكة العربية السعودية

وزارة التعليم العالي

جامعة الإمام محمد بن سعود الإسلامية

Course Name:	General Physics
Course Code:	101
Semester/Year:	quiz (1)
Duration:	30 second

الشعبة	الرقم الجامعي	اسم الطالبة

question	1	2	3	4	5	6	7	8	9	10	11	12	13	14
answer														

Choose the correct answer and write the litter on it in the table :

1- from a maximum height 10 m an object is thrown vertically <u>down</u>where , the object velocity before reach the ground is :

       a) 14 m /s
       b) 196 m /s
       c) − 14 m /s
       d) −196 m /s

2- If vector $\vec{A} = (2i − 3j)$ and $\vec{B} = (-3i + 5j)$, are two vectors , then find the vector $\vec{A} + 2\vec{B} - \vec{A}.\vec{B} =$

       a) $\vec{A} + 2\vec{B} - \vec{A}.\vec{B}= (− 8i + 7j − 21)$
       b) $\vec{A} + 2\vec{B} - \vec{A}.\vec{B}=(− 4i + 7j − 21)$
       c) $\vec{A} + 2\vec{B} - \vec{A}.\vec{B}= (− 4i + 13j − 21)$
       d) $\vec{A} + 2\vec{B} - \vec{A}.\vec{B}= (+ 4i −7j − 21)$

3- The value of $\hat{k} \cdot (\hat{j} \times \hat{j})$ is:
       a) 3
       b) +1
       c) −1
       d) zero

4- The direction of vector $\vec{A} = (25$ m$)\hat{i} - (45$ m$)\hat{j}$ with the positive x axis is:
       a) 299.1∘
       b) 60.9 ∘
       c) 151∘
       d) 119.1 º

5- The vector $\vec{A}$ are given as 4 m and the Y- components of vector $\vec{A}$ are given as $A_y= 2$ m ,   What is the magnitude of X- components ?
       a) 12 m
       b) 3.5 m
       c) 20 m
       d) 4.5 m

6- The coordinate of a particle in meters is given by $x(t) = -2t^2 + 4t^3$, where the time t is in seconds. The particle velocity in (t = 0 to t = 1) s is :

    a) + 4 m/s
    b) - 4 m/s
    c) - 2 m/s
    d) + 2 m/s

7- The coordinate of an object is given as a function of time by $v = 3t - 2t^2$, where x is in meters and t is in seconds. Its acceleration at t = 2 s is :

    a) $-1 m/s^2$
    b) $+1 m/s^2$
    c) $-5 m/s^2$
    d) $+5 m/s^2$

8- A stone is thrown vertically upward with an initial speed of 20 m/s. It will rise to a maximumheight of:

    a) 4.9 m
    b) 9.8 m
    c) 20 .4 m
    d) 1.02 m

9- Car has two displacement 10 m at west , then 5m at north east ,. So the magnitude of resultant distance is :

    a) 7.4 m
    b) 3.1 m
    c) 5.4 m
    d) 2.5 m

10- When an object is moving with uniform velocity, its acceleration is :

    a) Negative
    b) Zero
    c) Positive
    d) Constant $\neq 0$

11- For following condition, will the dot product of two vectors be zero:

   a) If the angle between them is 90°.

   b) If the angle between them is 0°.

c) If the angle between them is 180°

12- If vector A = (3i – 4 j) m , B = 5m and A.B = 15 m , then find the angle between two vectors A and B

   a) 90°

   b) 53°

   c) 0 ^{o}

   d) 180 ^{o}

13 - If object's <u>speed</u> is consonant , that mean:

   a) Object moves in straight line with a constant fast.

   b) Object moves in a constant velocity.

   c) Object moves in straight or curve line with a constant fast

14 - If an object take 3s to reach the maximum height, so it needs to return to the same point :

   a) + 3 s

   b) –3 s

   c) + 6s

   d) - 6 s

15 - A car is moving from rest with a constant acceleration 6m/s^2 in a straight line . determine the car's displacementafter 4s?