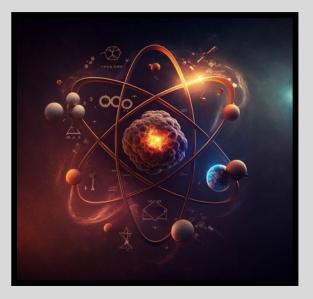


Shagaf

Physics Mid

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1-the distance of a particle is given by x = A(t)3 + B(t)4, where x in meter a second	and t in
unit for the constant B. is ?	
a.m/s	
b.m/ s3	
c. m/s2	
d.m/s4	
	answer:d
2-If the magnitude of vector A is 15 m and makes an angle of 60° with the and	x-axis
vector is B = 12 x+12 y, what is the direction of 2A - B?	
a.86	
b.80	
c.78	
d.63	
	answer:c
3-a particle moving along the x axis stars from the rest to a speed of 12m/s	s in 10s
find the acceleration?	
a. 0.8 m/s2	
b. 1.2 m/ s2	
c. 1.6 m/s2	
d. 2 m/ s2	
	answer:b
4-If the velocity of a particle is constant, then the acceleration is:	
a.zero	
b. not zero	
c. need more information	
d. not constant	answer:a
مستوى الأرض) from the ground leve(مستوى الأرض) velocity 80 m/s	
angle of 30° to the horizontal direction. When does it reach its maximum height?	
a.2s	
b.3s	
c.1.5s	
d.4s	
	answer:d

6-A ski jumper (متحدر) leaves a slope(منحدر) at <mark>an angle of 40° to the horizontal</mark> direction. She lands(نقطة الانطلاق) 3.5 s later at a point 20 m below her tak off point (مبطت)Her speed was (ابتدائية) speed was a. 18.3 m/s b. 34.4 m/s c.15.4m/s d. 23.6 m/s answer:a 7- A 6 kg block is at rest on an inclined plane (سطح مائل) of an an<mark>gle 30°. What is the</mark> force exerted by the inclined plan on the block? a. 17.3 N b. 51.9 N c.34.6 N d. 69.3 N answer:b 8- A particle starts from the origin at t=0 with a velocity of 8y m/s and moves in the xy plane with a constant acceleration of (4x + 2y) m/s2. At the instant the x coordinate of the particle is 29 m, what is the value of it y coordinate? a. 90 m b. 60 m c.45 m d. 75 m answer:c 9-A force of 10 N is applied to a block of mass 4 kg. find the acceleration of the block? a. 2 m/s? b.5 m/s2c.10 m/s2 d.2.5m/s2 answer:d 10 - A vector of magnitude 20, makes an angle 20 with the y-axis. Find its xcomponent? a. 1.7 b. 6.8 c. 3.4 d. 5 answer :b

11-A child pulls(يسحب) a toy (لعبة)car with a10N force at a 20 angle to the horizontal. If the car moves adistance of 10m.how much work does the child do? a. 75J b. 94J c.56J d. 113 J answer:b 12 - woman pushes (توثر) a toy car initially at rest by exerting (توثر) constant horizontal force of magnitude 5 N, the car moves 1 m. If the mass of the car is 0.4 kg. What is its final speed? a. 7.1 m/s b. 4.5 m/s c. 5.8 m/s d. 5.0 m/s answer:d 13-A boy on a sled (زلاجة) slides (ينزلق) from the rest down a hill (تلاجة) of height 30m, coming to a stop 10 m above his lowest point. If his mass is 70 kg, how much mechanical energy has beer lost ? a.1.4 x104 J b. 1.0 x104 J c. 1. 2 x104 J d. 1.6 ×104 J answer:a ارض) 14-A car must do a power of 10 kw to keep a constant speed of 100 m/s on flat مستوبة) ground. What is the friction force due to the ground? a. 200 N b. 50 N c.100 N d. 400 N answer:c دَبَبتَ للمَجدِ والسَّاعون قد بَلَغُوا جَهدَ النُّفوس وألقوا دونَه الأزُرَا وكابدوا المجدَ حتّى ملَّ أكثرُهُم وعانَقَ المجدَ مَن أوفي ومَن صَبَرًا