The City School

North Nazimabad Boys Campus PHYSICS Class 9 Revision Worksheet # 001



Name:

Sec.: _____

Date:

Q1: Label the given diagram



Q2. What is the reading on the Vernier calipers below?



.Q 3: What is the reading on the micrometer below?



Q4 List down Vector Quantities from the given physical quantities Speed –Velocity- acceleration- mass-weight-time-distance – displacement(4)

(2)

(2)

(2)

Q5 Identify the following			
Quantity Me	asuring Unit		
Distance			
Time			(2)
	m/s		
	gms/ cm ³		
Q6 Convert the following			
(i) 250km/hr =	m/sec		
(ii) 360sec =	day		
(iii) 200N =	kgs	(3)
Q7 (a)Choose the best instrum	ent for the each task	(5)
i)To measure the diamet	er of a solid cylinder		
ii)To find quantity of a s	ubstance		
iii)To find the pull of ea	rth on an object		
(b)What qualities of the ins	strument you consider	red before selecting it for the above tasks	
1)			
2)			
I			

Q8 A reel of copper wire is labelled 'length 30 m' and 'diameter 2 mm'. A student calculates the volume of the copper wire.

Which instruents does he use to measure accurately the length and the diameter of the wire?

	length	diameter
А	rule	calipers
В	rule	micrometer
С	tape	calipers
D	tape	micrometer

Q9 Which row correctly shows examples of a vector quantity and a scalar quantity?

	vector	scalar
А	area	force
В	mass	density
С	velocity	acceleration
D	weight	volume

Q10A cyclist travels along a hilly road without using the pedals or brakes. Air resistance and friction are negligible. The speed/time graph of the cyclist is shown.

At which point did he reach the bottom of the first hill?



Q11 A student drops a table-tennis ball in air.

What happens to the velocity and to the acceleration of the ball during the first few seconds after release?

	velocity	acceleration
А	decreases	decreases
В	decreases	increases
С	increases	decreases
D	increases	increases

Q12 The diagram shows a motorcyclist leaning over in order to move around a corner.

Which force causes him to move around the corner?

motorcyclist



Q13 The diagram shows a uniform balanced beam, pivoted about its centre.



Q14 The diagram shows four shapes, cut from the same piece of card.

Which shape has its centre of mass nearest to the base line?



Q15 A metal wire, of initial length 1000 mm, extends by 4 mm when a load of 2 N is added to it.

What is the length of the wire when a further 3 N is added, assuming that the wire does not extend beyond the limit of proportionality?

A 1006 mm B 1008 mm C 1010 mm D 1012

Q16 Two major components of a coal-fired power station are a turbine and a generator.

What are the output forms of energy from the turbine and from the generator?

	turbine	generator
А	electrical	electrical
В	electrical	kinetic
С	heat	kinetic
D	kinetic	electrical

- Q17 What is efficiency?
 - A <u>total energy input</u> useful energy output
 - B <u>total power input</u> useful energy output
 - C <u>useful energy output</u> total energy input
 - D <u>useful power output</u> total energy input
- Q18 A fixed mass of gas is enclosed in a cylinder by a movable piston.



The piston is moved so that the volume occupied by the gas increases. The temperature remains constant.

What happens to the pressure of the gas and why does this happen?

	pressure	reason
А	decreases	the molecules move more slowly
В	decreases	the molecules collide with the piston less frequently
С	increases	the molecules move more quickly
D	increases	the molecules collide with the piston more frequently

Q19 A student drops a table-tennis ball in air.

What happens to the velocity and to the acceleration of the ball during the first few seconds after release?

	velocity	acceleration
А	decreases	decreases
В	decreases	increases
С	increases	decreases
D	increases	increases

Q20



What are the angle of incidence and the angle of reflection?

	angle of incidence	angle of reflection
А	40°	40°
В	40°	50°
С	50°	40°
D	50°	50°

The City School

AM-TO LEARN

North Nazimabad Boys Campus Comprehensive Assessment for Class 9

Time 40minutes

Max.Marks 25

Name :-----

Section:-----

Date :-----

1 A reel of copper wire is labelled 'length 30 m' and 'diameter 2 mm'. A student calculates the volume of the copper wire.

Which instruments does he use to measure accurately the length and the diameter of the wire?

length	diameter
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А	rule	calipers
В	rule	micrometer
С	tape	calipers
D	tape	micrometer

2 Which row correctly shows examples of a vector quantity and a scalar quantity?

	vector	scalar
А	area	force
В	mass	density
С	velocity	acceleration
D	weight	volume

3 A cyclist travels along a hilly road without using the pedals or brakes. Air resistance and friction are negligible. The speed/time graph of the cyclist is shown.

At which point did he reach the bottom of the first hill?



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What happens to the velocity and to the acceleration of the ball during the first few seconds after release?

	velocity	acceleration
А	decreases	decreases
В	decreases	increases
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5 The diagram shows a motorcyclist leaning over in order to move around a corner.

Which force causes him to move around the corner?



6 The diagram shows a uniform balanced beam, pivoted about its centre.



What is the value of force P?

7 The diagram shows four shapes, cut from the same piece of card.

Which shape has its centre of mass nearest to the base line?



8 A metal wire, of initial length 1000 mm, extends by 4 mm when a load of 2 N is added to it.

What is the length of the wire when a further 3 N is added, assuming that the wire does not extend beyond the limit of proportionality?

A 1006 mm B 1008 mm C 1010 mm D 1012

9 Two major components of a coal-fired power station are a turbine and a generator.

What are the output forms of energy from the turbine and from the generator?

turbine generator

A	electrical	electrical
В	electrical	kinetic
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Which force causes him to move around the corner?

motorcyclist



6 The diagram shows a uniform balanced beam, pivoted about its centre.



What is the value of force P?

A 5N B 7N C 10N D 13N

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Which shape has its centre of mass nearest to the base line?



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12 Four wet towels are hung out to dry as shown.

Which towel dries most quickly?





В

sunny windy towel unfolded

cloudy no wind towel unfolded



cloudy windy towel folded



sunny no wind towel folded

13 The diagram shows a ray of light directed at a plane mirror.



What are the angle of incidence and the angle of reflection?

	angle of incidence	angle of reflection
А	40°	40°
В	40°	50°
С	50°	40°
D	50°	50°

14 Light travels through a glass block as shown.

Which angle is the critical angle for light in the glass?



15 A man is short-sighted.

Which ray diagram shows what happens in his eye when he looks at a distant object?

