54-A

SUMMATIVE ASSESSMENT - I - 2017-2018 PHYSICAL SCIENCE - PAPER- I

(English Medium)

PART - A & B

Class : IX	(Max. Marks : 40)	Time : 2.45 Hrs.		
Instructions :		through the figure is a second		

- 15 Minutes are allotted for reading the question paper (Part A & B) in addition to 2.30 hours for writing the answers.
- 2. Part A answers should be written in a separate answer book.
- 3. There are three Sections in Part A.
- 4. Answer all the questions.
- 5. Every answer should be visible and legible.
- 6. There is internal choice in Section III.
- 7. Part-A & B should be given at the beginning of the exam only.

Marks : 30

PART-A

Section - I

Note 1. Answer all the Questions.

- 2. Each Question carries 1 Mark
- 3. Answer each question in 1 or 2 sentences
- $4 \times 1 = 4$
- Give two examples for substances that change directly from solid state to gaseous state on heating.
- 2. Name of the property on which LPG and CNG are filled in cyllinders.

3. Complete the table

Physical Quantity	Definition	Units	
Velocity	Rate of change in displacement	2. Fach C	
Acceleration		ms ⁻²	

4. Find the momentum of a 6kg ball, moving with 2.2ms-1 velocity.

Section - II

Note: 1. Answer all the Questions.

2. Each Question carries 2 Marks

- $5 \times 2 = 10$
- 5. Though the liquids have mass just as solids, they do not have fixed shape. Justify.
- The change of momentum due to impulse is 1.8 k.g ms⁻¹. If the time of impulse is 2sec, then calculate the force produced.
- Write an equation of motion which gives relation between s, u, a and t. Write the terms of that equation.
- How can you prove Newtoins third law of motion by using two spring balances given to you.
- A cyclist is moving on a straight road. The distance covered by him with respect to time is given in the table.

Time in seconds	0	1	2	3	4	5
Distance in meters	0	4	8	12	16	20

Answer the following questions based on the data.

(i) What type of motion that the cyclist have?

(ii) Calculate the instantaneous speed at 3rd second.

Section - III

Note: 1. Answer all the Questions.

- 2. Each Question has internal choice
- 3. Each Question carries 4 Marks

 $4 \times 4 = 16$

10. a) Desceribe the procedure to observe the speed of diffusion of gases.

(OR)

 b) What are the factors that influence the evaporation and explain how the surface area of a liquid effects the evaporation.

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 a) Suggest an activity to find the acceleraton of an object moving on an inclined track.

(OR)

b)Static inertia and dynamic inertia are the two types of inertia. Explain any one type of inertia with an activity

12. Matter can be existed in solid, liquid or gaseous state.

a) Prepare a comparative table of their properties of these three states.

(OR)

b) Study the temparature vs state change graph and answer the questions given below



i) Mention the stages between ice at -10% and water at 100% (2m)

ii) Which part of a graph indicates melting of ice. (1m)

iii) Express the boiling temparature of water in Kelvin scale. (1m)

 a) Draw the distance vs time graph when the speed of a body increases uniformly. Name the motion, when an object is moving with constant velocity.

(OR)

b) Draw a diagram for action and reaction forces acting on two different objects.

On which law the law of conservation of momentum depends?



54-B

SUMMATIVE ASSESSMENT - I - 2017-2018

PHYSICAL SCIENCE - PAPER- I

(English Medium) Class IX Part - B

Time : 30minutes

 Academic standard
 AS, (Novs)
 AS, (12)
 AS, (12)</

Name of the Student : -

- Roll No .: .

Marks:

Note:

 Choose the correct answers from the options given below and write them in CAPITAL letter.

2. Each Question carries - mark

14. Which of the following are least diffusable material (

A) Gases B) Liquids C) Solids D) Both gases and liquids

 Ramu : Change of liquid into vapour at any temparature below its boiling point is evaporation

Somu: Evaporation is a Surface phenomena.

A) Ramu correct, Somu incorrect C) Both Ramu & Somu incorrect B) Ramu incorrect, Somu correct D) Both Ramu & Somu correct

16. The substance which occurs in three states of matter

A) Naphthalene C) Alcohol B) water

D) Iodine

Marks: 10

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54-B

i) Mercury ii) Bernine iii) Spit ii) Camptor A) only (i) ii) iii iii (i) (iii iii) (i) (iii iii) 18 In an Uniform circular modes iii is constant (i) (iiii) 19 An object is alleling down on an inclined plane. The velocity changes at a constant factor low is 0.5 m s is 2 sconds, is a acceleration is (iiii) (i) Nikoticy 19. An object is alleling down on an inclined plane. The velocity changes at a constant factor low is 0.5 m s is 2 sconds, is a acceleration is (iiii) (iiii) 10. A) 5 m/sec (2) (2) fam/sec (2) (2) fam/sec (2) (iiii) (iiiii) 20. Pick out the odd physical component (iiiiiiii) (iiiiiiiii) 21. The wrong statement of the following is: (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	are not undergo	Which of the followng substan sublimation	th of the followng subst nation	
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54-R

- 23. Shock absorbers of vehicles obey ______()
 A) Newton's first law of motion
 C) Newton's third law of motion
 D) Law of conservation of momentum
- 24. Match the following

i) Mass	P) Newton
ii) Force	Q) Newton - sec
iii)Momentum	R) Kilogram
A) i - P, ii - R, iii - Q	B) i - R, ii - Q, iii - P
C) i - P, ii - Q, iii - R	D) i - R, ii - P, iii - Q

25. The correct order of the following sentences

- P. Hold one end of the thread and ask your friend to hold the other end .
- Q. Pass a thread through straw and tape a balloon on the straw
- R. Inflate a balloon and press its neck with fingers to prevent air escaping from it.
- Remove your fingers from the balloon neck and observe the movement of a balloon.

A) Q, R, P, S B) R, Q, P, S C) S, R, Q, P D) S, O, P, R

 A car and lorry are having same momentum, if same breaking force is applied then

A) Lorry comes to rest in shorter distance

B) Car comes to rest in shorter distance

C) Both travel same distance before coming to rest

D) Can not say.

A) Speed

B) Instantaneous speed

C) Uniform velocity

D) the direction of velocity

54-B

28.	The reason for causing severe	burns of steam than hot water	()
	A) The energy of particles of I	not water is less than the particles of va	pour	
	B) The energy of paricles of h	ot water is more than the Particles of v	apour	
	C) The energy of particles of	hot water is zero		
	D) None of the above			
29.	Pushing of cycle is easier than	pushing of a car. Because	()
	A) Inertia of cycle is more	B) Inertia of a car is more		
	C) Size of a bicycle is less	D) None of the above		
30.	570° K = ? °C		(0))
	A) 843°C B) 297°C	C) 273°C D) 300°C		
31.	Children while playing cricke Because	t often use tennis ball instead of cricket	ball.)
	A) Impulse caused by a crick	tet ball is more		•
	B) Imapulse caused by a cric	ket ball is less		
	C) Tennis ball its lighter than	cricket ball		
	D) It is easy to play with ten			
32.	You are riding a motor cycle indicates	Speedometer of your bike shows 50 k	:m/h. 1	'hat
	A) Instantaneons speed	B) speed		
	C) average speed	D) acceleration		
33.	Path of a stone projected wi		()
	A) straight line , B) Parabola	C) Circular D) Perpendicular		

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