

**U-54-A**

**SUMMATIVE ASSESSMENT - I - 2018-2019**

**GENERAL SCIENCE - Paper - I**

**(Physical Science)**

**(English Medium)**

**PART - A & B**

**Class : IX**

**(Max. Marks : 40)**

**Time : 2.45 Mts.**

**Instructions :**

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

**Marks : 30**

**PART - A**

**Time : 2 Hrs.**

**Section - I**

**Note :** 1. Answer all the Questions.

2. Each Question carries 1 Mark

3. Answer each question in 1 or 2 sentences

**4 × 1 = 4**

1. What is the difference between  $2N$  and  $N_2$ ?
2. Why does a cricketer move his hands backwards while catching a fast moving cricket ball?
3. There is a mixture with sand and iron fillings. Write an activity for the separation of iron fillings from sand.
4. Calculate the momentum of a fast moving ball with a velocity  $2.2 \text{ m/s}$  of mass  $6 \text{ kg}$ .

**[ Turn Over**

## Section - II

Note : 1. Answer all the Questions.

2. Each Question carries 2 Marks

5 × 2 = 10

5. Fill the following table.

S. No	Name	Molecular Mass	No. of Particles present in molar mass
1	Atomic Oxygen	16 gr	
2	Sodium	23 gr	
3	Sodium chloride		$6.02 \times 10^{23}$ of Sodium chloride
4	Water	18 gr	

6. Why do some of the animals like pigs toil in the mud during hot summer?

7. A motor cyclist drives from A to B with uniform speed of 30km/hour and returns back with a speed of 20km/hour. Find the average speed.

8. What is valency? Write valency of hydrogen

9. Give reasons of the following

(i) Napthalene balls disappear in air completely with respect to time

(ii) We can get the smell of perfume even it is in several meters away.

## Section - III

Note : 1. Answer all the Questions.

2. Each Question has internal choice

3. Each Question carries 4 Marks

4 × 4 = 16

10. a) What is Tyndal effect? Write any two applications of Tyndal effect.

(OR)

b) Write the postulates of Dalton's Atomic theory.

11. a) Classify the following substances & fill the following table according to heading.

Ink, Soda water, brass, fog, blood, aerosol sprays fruit salad, black coffee, oil, water, boot polish, nail polish, starch solution, milk.

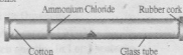
S.No	Solution	Suspension	Colloidal Solution
1			
2			
3			
4			

(OR)

- b) Fill the following table

S. No	Physical Quality	Formula	Units
1	Force		Newton
2	Momentum	$P = mv$	
3	Impulse		Newton.sec
4	Acceleration	$\frac{v - u}{t}$	

12. a) Observe the following figure. Write the answers for the following questions.



- Write the chemicals to perform this activity
- What is the reason performing  $\text{NH}_4\text{Cl}$  ring near  $\text{HCl}$ ?
- Write the precautions to be taken while performing this activity
- What do you observe by this activity?

(OR)

- b) Explain the activity to observe action and reaction acting on two different objects.

[ Turn Over

13. a) Using the following data. Draw displacement time graph

Time (Sec)	0	2	4	6	8	10	12	14	16
Displacement (m)	0	2	4	4	4	6	4	2	0

Using above graph, what is the average velocity in First "4" Seconds

(OR)

- b) Draw the arrangement of apparatus of fractional distillation experiment.  
What is the advantage of using the fractionating column?

Regd.No. **U-54-B**Marks: 

**SUMMATIVE ASSESSMENT - I - 2018-2019**  
**GENERAL SCIENCE - Paper - I**  
**(Physical Science)**

(English Medium)

**PART - B**

Class : IX

(Marks : 10)

Time : 30 Minutes

Academic standard	AS <sub>1</sub>					AS <sub>2</sub>			AS <sub>3</sub>		AS <sub>4</sub>		AS <sub>5</sub>			Total	Grade		
	Q.No.	S	1	5	6	10	14-27	2	7	28-29	3	11	30-31	8	12			13	4
Allotted Marks	16					4			6		6		4			40			
Total																			

Name of the Student : ..... Roll No. : .....

Note :

- Choose the correct answers from the options given below and write them in CAPITAL letter.
- Each Question carries  $\frac{1}{2}$  mark 20 x  $\frac{1}{2}$  = 10
- Rewrite and over writing questions are not valid.

14. CNG stands for ( )

- A) Cooled Natural Gas  
 B) Cooled Normal Gas  
 C) Compressed Natural Gas  
 D) Compressed Normal Gas

15. During phase change of a substance at a constant pressure ( )

- A) Temperature decreases  
 B) Temperature increases  
 C) No change in temperature during the change  
 D) Does not depend on temperature.

**[ Turn Over**

16. Choose correct response from the following ( )
- 1) Non - Compressible ( ) i) Gas  
 2) Maximum Expansion ( ) ii) Particle  
 3) Constituents of Matter ( ) iii) Solid  
 iv) Liquid
- A) 1 - ii, 2 - iv, 3 - iii      B) 1 - iv, 2 - iii, 3 - i  
 C) 1 - iii, 2 - i, 3 - ii      D) 1 - i, 2 - ii, 3 - iii
17. Latent heat depends on ( )
- A) Attractive force among molecules  
 B) Kinetic energy of molecules  
 C) Potential energy of molecules  
 D) All the above
18. Geetha told that her body temperature is  $37^{\circ}\text{C}$ . Value of this in Kelvin ( )
- A) 100 K      B) 200 K      C) 250 K      D) 310 K
19. Phase change from solid to gas directly and vice - versa is called ( )
- A) Evaporation      B) Boiling  
 C) Sublimation      D) Solidification
20. Solid carbon dioxide ( $\text{CO}_2$ ) is called ( )
- A) Dry ice      B) Camphor  
 C) Napthalene      D) Solid ice
21. Which of the following is not a vector ( )
- A) Speed      B) Acceleration  
 C) Velocity      D) Displacement
22. Milk is ( )
- A) Suspension      B) Emulsion      C) Colloid      D) Jel

23. When we go through deep forest, the following effect can be observed ( )
- A) Photo electric effect      B) Raman effect  
C) Tyndall effect              D) Compton effect
24. No. of molecules present in 18 grams of  $H_2O$  ( )
- A)  $6.02 \times 10^{22}$                   B)  $6.02 \times 10^{23}$   
C)  $6.02 \times 10^{32}$                   D)  $6.02 \times 10^{35}$
25. If valency of Mg is '+2' and valency of Sulphate ( $SO_4$ ) is '-2', then the formula of compound formed by these ( )
- A)  $Mg_2SO_4$                       B)  $Mg(SO_4)_2$   
C)  $MgSO_4$                         D)  $Mg_3(SO_4)_2$
26. Homogeneous molecule from the following ( )
- A)  $H_2O$       B)  $N_2$       C)  $N_2O_3$       D)  $FeSO_4$
27. The velocity of the car was measured by a traffic police through his radar gun at that instant. The gun measured ( )
- A) Instantaneous acceleration  
B) Instantaneous velocity  
C) Average acceleration  
D) Average velocity
28. Siva completed half revolution of circular path of radius 'a' units. Displacement of Siva is ( )
- A) 'a' units      B) '2a' units      C)  $\pi a$  units      D)  $2\pi a$  units
29. Acceleration of a person moving with constant velocity ( )
- A) Infinite                      B) Positive acceleration  
C) Negative acceleration      D) Zero

30. There must be following apparatus in chromatography laboratory activity ( )
- A) Thermometer                      B) Litmus paper  
C) Marker pen                         D) Kerosene
31. The main apparatus in at wood machine ( )
- A) Pulley  
B) Scale (graduated in centimeters)  
C) Barometer  
D) Spring balance
32. I appreciate the phenomena of diffusion because ( )
- A) It is very important process for living things  
B) It is not support to survival of a acquatic animals  
C) It prevents dissolving of Oxygen from lungs into blood  
D) It prevents spreading of bacteria
33. Thanish starts at 8 am to Ananthapuram from Amuravathi and reaches at 6pm. The distance between Amuravathi and Ananthapuram is 500 k.m. Average velocity of Thanish is ( )
- A) 0 km / hour                         B) 40 km / hour  
C) 50 km / hour                         D) 60 km / hour