

# GOVT ADARSH VIDYALAYA HUNASHYAL(PB) B. BAGEWADI

## SUMMATIVE ASSESSMENT- 2

Class :-9<sup>th</sup> Sub : -Science Model Paper:- 2 Marks:-80 Time:-3:15 hr

### PART-A (Physics)

**I. Chose the correct answer** **1x3=3**

- SI unit of power is  
a) Watt                      b) Joule                      c) Meter                      d) Newton
- Which property of sound is helpful for working of stethoscope  
a) Echo                      b) Wave                      c) Frequency                      d) Reverberation
- The formula of universal gravitational is  
a)  $F=GMm/d^2$                       b)  $W=mg/d^2$                       c)  $W=mg$                       d)  $g=GM/d^2$

**II. Answer the following questions in one or 2 sentences** **1x4=4**

- Who is called as father of nuclear physics?
- What is the SI unit of acceleration.?
- Which equipment is used to measure the distance covered in any vehicle.?
- What is the SI unit of mass?

**III. Answer the following questions** **2x3=6**

- Right three equations of motion. And explain each term.
- Rahul is started from rest and covers 6 m in 30 seconds and applies a break & reduce speed 24m/s in 5 seconds find the acceleration in both cases.
- Below information gives the detail about distance covered by Suresh and Ramesh in same interval decide who is in uniform motion and non uniform motion.

Time	Distance Travelled by Suresh	Distance Travelled by Ramesh
9:30	10	12
9.45	20	19
10.00	30	23
10.15	40	35

**IV. Answer the following questions briefly** **3x2=6**

- The Ravi and Raju both has 400 N weight, climbs 8 m with the help of rope. if Ravi takes 20 seconds and Raju takes 50 seconds. find who has more power and how much.
- Write applications of ultrasonic sound. **OR**  
Write three laws of Newton with the help of examples

**V. Answer the following questions briefly** **4 x 1 = 4**

- What is Density & Relative density & Name 2 devices which work on Archimedes principle

**VI. Answer the following questions briefly** **5 x 1 = 5**

- a) What do you mean by universal law of gravitation? Write importance of it.  
b) Write difference between gravitational acceleration and gravitational force.

### PART-B (Chemistry)

**VII. Four alternative answers are given to the following questions or incomplete statements. Choose the correct answer among them and write the full answer with an acronym.** **3 x 1 = 3**

- The state of matter where the attraction force between the particles is very low.  
a) solid                      b) liquid                      c) gas                      d) a and b
- Which of the following is an example of Chemical change?  
A) Solidification of water                      b) iron corrosion                      c) Dissolution of salt in water                      d) wax combustion
- A solution that exhibits the Tyndall effect  
a) salt solution                      b) milk                      c) copper sulphate solution                      d) starch solution

**VIII. Answer the following questions.** **2 x 1 = 2**

- What is an atomic number?
- If an atom contains one electron and one proton, then what will be the charge of the atom?

**IX. Answer the following questions.****2 x 2 = 4**

20. Draw a picture showing the inter-transitions of the three states of matter.

21. What are the two main laws of chemical composition?

**X. Answer the following questions.****4 x 3 = 12**

22. List the differences between the solid, liquid, and gas states physical properties.

23. Write a picture of partial distillation and identify the parts.

24. Sangeeta discuss with Sujatha & describes Water as a compound but salt & copper sulphate solution as a mixers . Write your own justifications for this. **OR**

Write which method will you apply to separate the following.

A) Extraction of sodium chloride from an aqueous solution of sodium chloride

B) Ammonium chloride from a mixture containing sodium chloride and ammonium chloride

C) Small pieces of metal in the engine oil of the car

D) Pigments in the extract from the bunches. E) butter from curd f) crocodile oil from water

25. Complete the following table.

Atomic Number	Atomic Mass	No. of Neutron	No. of proton	No. of Electron	Name of atomic type
9	?	10	?	?	?
16	32	?	?	?	Sulphur
?	24	?	12	?	?
?	2	?	1	?	?
?	1	0	1	0	?

**Or**

Make a list of three main elements of Rutherford's atomic nucleus model.

**XI Answer the following questions.****1 x 4 = 4**

26. Calculate the Atomic Mass of the following.

A) 0.5 moles of N<sub>2</sub> gas {mass of molecules} B) 0.5 mol of N atoms {mass of atomic moles}C) 3.011 X 10<sup>23</sup> numbers of N atoms {mass by number} D) 6.022 X 10<sup>23</sup> number N<sub>2</sub> molecules**PART-C (BIOLOGY)****XII. Four alternative answers are given to the following questions or incomplete statements.****Choose the correct answer among them and write the full answer with an acronym. 2x1 = 2**

27. Robert Whitaker's Five Living Kingdoms is sorted based on which of the following characteristics?

a) cell structure b) Nutrition method c) body structure design d) all of the above

28. Which of the following does not belong to a cryptogamy group?

a) Thalophyta b) Snail Plant c) Cucurbita d) Lagoon Plant

**XIII. Answer the following questions.****2 x 1 = 2**

29. What part of the body does the virus that causes jondis reside?

30. What is the virus that causes brain fever?

**XIV. Answer the following questions.****3 x 2 = 6**31. List the factors that influence evaporation. **Or**

We should wear cotton clothes in the summer time. Write down the scientific reasons for this.

32. Write an example of what are acute and chronic diseases.

33. Write a picture of the Neuron and identify the following parts. A) Axon b) Dendride

**XV. Answer the following questions.****3 x 3 = 9**

34. Draw a picture of a fish and identify two parts.

35. Write a picture of the plant cell &amp; identify the following. a) Nucleolus b) chloroplast c) cell wall

36. Explain classification of five animal kingdoms with examples.

**Or**

Compare plant cell and animal cells and in what ways Are they different from each other? Explain.

**XVI Answer the following questions.****2 x 4 = 8**

37. Draw a picture showing Nitrogen cycle in nature.

38. Write differences Between striped muscles, unstripe muscles and cardiac muscles based on their structure and their position in our body. **Or** Briefly describe plant tissue types.