Model paper-3
SUMMATIVE ASSESSMENT-I
PHYSICAL SCIENCE – PAPER–1
(English medium)

Class: X   (Max. Marks: 50)   Time: 2.45 Hrs.

Instructions:

1. **There are four sections and 33 questions in the paper.**
2. **Answers should be written in a given answer booklet.**
3. **There is internal choice in Section- IV**
4. **Write all the questions visible& legibly.**
5. **15 minutes are given for reading the question paper and 2.30 hours given for answering questions**

Section-I

Note:- 1. Answer all the questions

2. Each question carries 1/2 mark   12x1/2=6

1. Write S.I units of Refractive index?
2. Which is not lens' formula

   A)$2/R=1/v+1/u$ B)$1/f=1/v-1/u$ C)$2/R=1/v-1/u$ D)$f=uv/u-v$
3. In which situation, the value of focal length of a convex lens is equal to the value of image distance
4. Match the following

   i)Principal quantum number   (   ) p)Size and energy

   ii)Magnetic quantum number   (   ) q)Shape of orbitals

   iii)Angular momentum quantum number   (   ) r)Orientation of orbitals
5. Who developed "the quantum mechanical model of atom"?
6. The power of a lens is 1D,then its focal length is_____
7. Rajesh cannot see distant objects clearly. So Doctor suggests him to use the spectacles of convex lenses. Is it a correct suggestion?
8. Which electronic shell has least energy?
9. Colour of methyl orange in solution "A" is red and colour in solution "B" is yellow. Which solution is acidic in nature?
10. S: Ice floats on water

    R:Specific heat of ice is less than that of water. Choose the correct answer

    A)S and R are correct and R is correct explanation of S

    B)S and R are correct and R is not correct explanation of S

    C)S is correct, R is incorrect   D)S is incorrect, R is correct
11. In which medium, ray of incidence or ray of reflection is nearer to the normal?
12. Write any one chemical substance whose p^H is more than "7"which is used in your daily life.

Section-II

Note:- 1. Answer all the questions

2. Each question carries 1 mark   8X1=8

13. Frame any questions to understand the difference between Bi-convex and Bi-concave lens?
14. Write any one precautions do you take while doing the activity of verification of Snell's law.
15. What information do you give from the electronic configuration $1s^2 2s^2 2p^2$?
16. Convert 273^0C into Kelvin scale

17. Write any use of convex lens in your daily life.
18. What formula is used to find the refractive index of prism?
19. On what factors does the refractive index of medium depend?
20. Give examples for olfactory indicators.

Section-III

Note:- 1. Answer all the questions
        2. Each question carries 2 marks   8X2=16

21. Plaster of Paris should be stored in moisture proof container. Why?
22. Jagadeesh confused to understand the difference between scattering and dispersion. What questions do you ask him to clear his confusion?
23. What materials that you use to observe the characteristics of the images formed by a convex lens? What is the conclusion of this activity?
24. What are the applications of total internal reflection ?
25. Differentiate between evaporation and condensation?
26. How do you appreciate the coincidence of the experimental facts with the experimental results obtained by a ray diagram in terms of behavior of images formed by lenses.
27. Why is it difficult to shoot a fish swimming in water?
28. Write valence electronic configuration of i)Cu   ii)Ca

Section-IV

Note:- 1. Answer all the questions
        2. Each question carries 4 marks   5X4=20

29. Explain the procedure of finding specific heat of solid experimentally

(OR)

   The focal length of a converging lens is 20 cm. An object is 60 cm from the lens .Where will the image be formed? Write the characteristics of the image

30. Explain the formation of rainbow

(OR)

   Explain a test to know whether the acid or base is strong or weak.

31. How do you prove that water expands on freezing ?Explain with an activity.

(OR)

   How do you prove Snell's law experimentally? Explain

32. Observe the table and answer the following questions

Liquid/Solution	p^H
P	7
Q	6
R	11
S	2
T	8

   i) Which solution(s) turn into pink by adding phenolphthalein ?
   ii) Which solution(s) turn into red by adding methyl orange?
   iii) Which is strong acid?
   iv) Which one indicates pure water?

(OR)

Complete the following table

Orbital	Shape	'l' value	Maximum no.of electrons enter	No.of degenerated orbitals
p		1	6	
	Double dumbell			5
		0	2	

33.A last bench student Jayanth cannot see letter on black board clearly. Which defect Ravi has? Draw diagram showing this defect and its correction.

(OR)

Name that chart which shows the filling order of atomic orbitals? Draw that chart and write the filling of orbitals

M.SRINIVASA RAO
SA(PS)
A.F.C.SCHOOL,GUDIVADA
PH:9848143855