KARIM NAGAR

RM-84

District Common Examinations Board

Summative Assessement-I, October-2015

Class : X (Paper-I) **Subject: PHYSICAL SCIENCE**

Time : 2.45 Hrs. KARIMNAGAR **Max Marks: 40**

General Instructions:

i) This question paper contain Three sections I, II, III

ii) Answer All the questions.

iii) Section-III having internal choice was provided choose anyone.

iv) Answer the Part-B question paper attach with answer sheet.

v) Time duration of 2 hrs 45 mns. 15 min of time is exclusively allotted to read and understand the question paper.

PART-A

SECTION - I

7 x 1=7

Instructions:

i) Answer the following questions.

ii) Each question carries 1 marks

iii) Answer each question in 1 or 2 sentences

1. What type of reaction takes place in stomach when an antacid tablet is consumed?
2. Why does the shift the p^H of the fresh milk 6 of slightly alkaline.
3. Balance the following chemical equation

   a) $Al + Fe_2O_3 \rightarrow Al_2O_3 + Fe$

   b) $Mg + O_2 \rightarrow Mgo$
4. Why does transfer of heat energy take place between objects.
5. Ravan wanted to see his complete image in the mirror. As such he made some hypothesis. Write what those could he ?
6. The radius of curvature of a spherical mirror is 20 cm. What is the focal length.
7. When do you get a virtual and magnified image with a convex lens.

SECTION - II

Instructions 6x2=12

i) Answer all the questions

ii) Each question carries 2 marks

iii) Answer each question in 4 to 5 sentences

8. Why the apple, Banana and Potatos change their colour when they cut and exposed to air ?

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BD Pally.

9. Write the uses of Baking soda

10. Write your prediction when electricity passed through distilled water.

11. What happens to the incident ray when the angle of incidence is more than the critical angle.

12. Which objects as yours home act as spherical mirrors ?

13. Explain why dogs pant during hot summer days using the concept of evoparation.

SECTION - III

Instructions **4x4=16**

i) Answer all the quesions

ii) Each question carries 4 marks

iii) There is internal choice for each question.

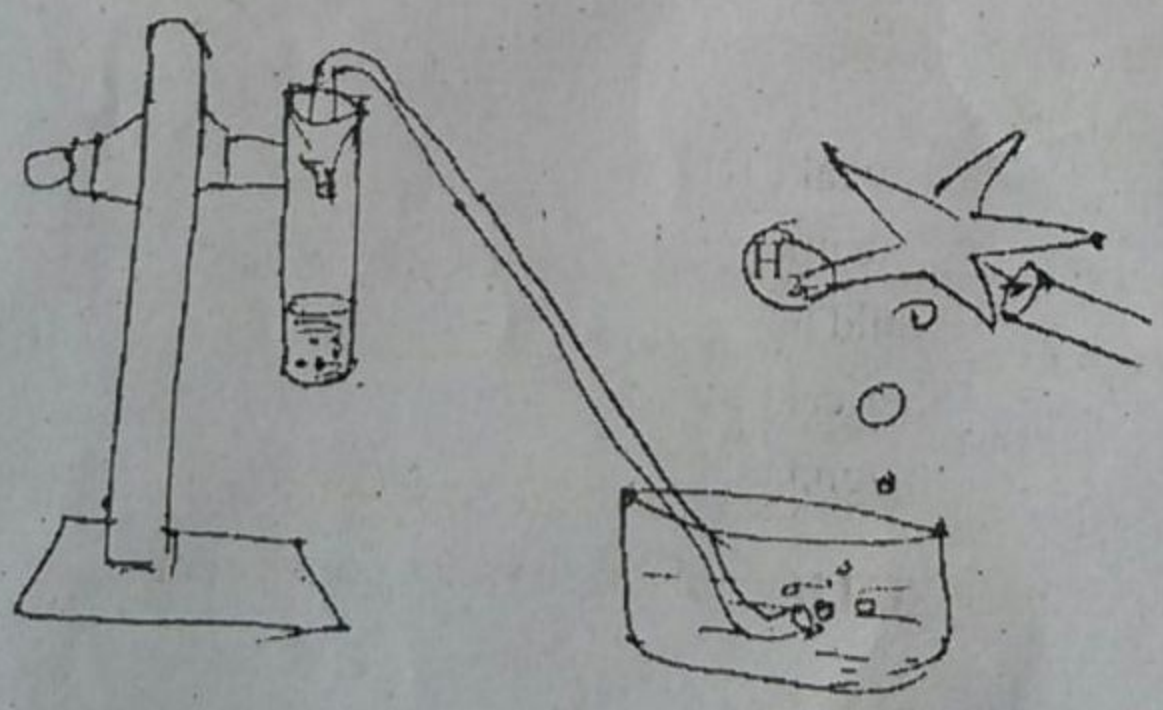
iv) Answer each question in 8 to 10 sentences.

14.a) In Nature, Why is the specific heat different for different sub stances ? Explain with reasons ?

(OR)

b) An object 4 cm in size is placed 25 cm infront of a cancave mirror of focal length 15 cm. At what distance image formed and write its charectaristics ?

15.a)



Observe the above diagram and answer the following question.

a) What are the apparatus used above diagram.

b) What do you observe on the surface of the zinc granules.

c) Why are bubbles formed in the soap solution.

d) Write the chemical equation above the reaction.

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(OR)

Observe the following chemical equation and write the answer to question.

1. $Zn + 2HCl \rightarrow ZnCl_2 + H_2\uparrow$
2. $2H_2O_2 \xrightarrow{MnO_2} 2H_2O + O_2\uparrow$
3. $Ag\,NO_3 + NaCl \rightarrow Agcl + NaNO_3$
4. $2Pb\,(NO_3)_2 \xrightarrow{Heat} 2PbO + 4NO_2 + O_2\uparrow$

a) Write the reactant and products of equation '1' ?

b) Equation '2' has which type of chemical reaction ?

c) In equation '3' what type of precipitate occur.

d) In equation '4' which type of colour of gas released ?

16.a) Compounds such as alcohols and glucose contain hydrogen but are not categorized as acids in an experiment. Write required apparatus and observation ?

(OR)

b) Describe the process of an experiment to prove that moistaires necessary for corrosion of metal ?

17.a) Draw the ray diagram of cancave lens and the following position and explain the nature and position of image.

i) Object is placed at C_2

ii) Object is placed between F_2 and optic centre (P).

(OR)

Draw the ray diagram in the following situations.

a) When light ray enter from denses to Rarer media.

b) When light ray Rarer to denser media.

PART - B

Instructions 10x1/2=5

i) Answer all the questions

ii) Each question carries 1/2 mark

iii) Each question has 4 choices. Choose the correct answer for each question and write the relevant alphabet (A,B,C,D).

iv) Attach the Part-B With you answer booklet.

18. Rusting of iron, copper is an example of ( )
A) Rancidation B) Reduction C) Corrosion D) Oxidation

19. In which of the following reactions only one product is formed. ( )
A) Chemical combination B) Chemical decomposition
C) Chemical displacement D) Double decomposition

20. The colour of methyl orange indicator in acidic medium is ( )
A) Yellow B) Green C) Red D) While

21. Temperature of a body directly proportional to ( )
A) Density B) Potential energy C) Kinetic energy D) Pressure

22. $n_1 \sin i = n_2 \sin r$ is which law ( )
A) Snell's Law B) Fermat Law C) Newton Laws D) Geleleo Law

23. Who introduced the p^H ( )
A) Einstein B) Newton C) Soren sen D) Archmedice

24. The refractive index of a glass is 2 which respect to air. The critical angle of the sunface separating glass and air ( )
A) 45^0 B) 30^0 C) 60^0 D) 90^0

25. Air bubble in water be haves like a which lens ( )
A) Cancave B) Convex C) Plane mirror D) Double cancave

26. Plaster of paris formula ( )
A) $CaSO_4 \frac{1}{2} H_2O$ B) $CaOCl_2$ C) $NaHCO_3$ D) $CaSO_4 2H_2O$

27. Flush bags of chips are filled with..... gas to prevent rancidiing ( )
A) Oxygen B) Hydrogen C) Nitrogen D) Chlorine

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