

This Guess paper is presented to our Young Viewer's

With lot's of best wishes

For

Board Exams - 2010

Vivek sir

For any queries, please feel free to contact to :-

## **Career Academy Tutorials**

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**Practice Paper - 2010**  
**Class - X**  
**Subject - Science(Theory)**

**Time : 2½ hrs**

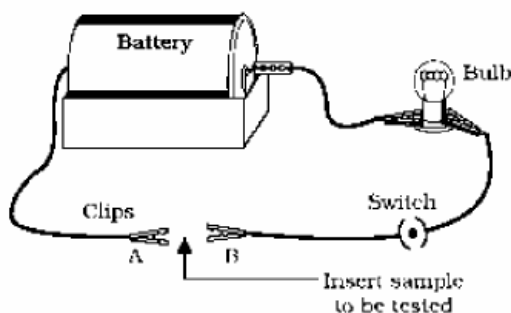
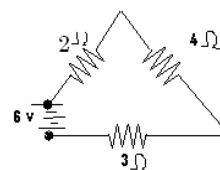
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**General instructions :**

1. All Questions are compulsory.
2. The question paper consists of 27 questions divided into two sections A and B.
3. All questions in both the section are to be answered as per the exact requirement of the question.
4. There is no overall choice. However internal choice has been provided in long answer type question. You have to attempt only one of the alternatives in all such questions.
5. Uses of calculators are not permitted. However you may ask for mathematical tables.

**Section- A**

1. Write symbols of physical state and type of reaction :  $CO() + 2H_2O() \xrightarrow{240atm} CH_3OH()$  [1]
2. Name the metal that can be burn in absence of air ? [1]
3. What will be the pH of our blood. [1]
4. Find the total resistance in fig. [1]
5. How is the amount of light entering the eye controlled ?
6. If  $f_1$  and  $f_2$  are the focal length of two lenses, then what will be the focal length of combination ?
7. Draw the electron dot structures of :  $MgO$ ,  $S_8$ ,  $CO_2$  and  $NaCl$  [2]
8. [2]



A student setup an electric circuit as shown in figure. He placed the metal to be tested in the circuits between terminals A and B as shown in figure

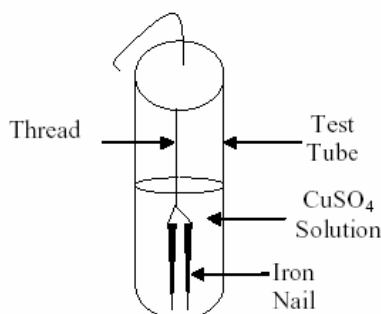
- (a) Does the bulb glow ? What does this indicate ?
- (b) Why are electric wires coated with rubber like material ?

9. Define Resistance ? What factors affect the resistance ? Relate these factors with resistance. [ $\frac{1}{2}$  + 1 +  $\frac{1}{2}$ ]
10. [i] What is the direction of current conventionally ? What is meant by electric circuit ?  
 [ii] Draw the circuit diagram to verify Ohm's Law ? [1+1]

11.[a] An object of size 5 cm is placed at a distance of 25 cm from the pole of a concave mirror of radius of curvature 30 cm. Calculate the distance and size of the image so formed. What will be the nature of image ?

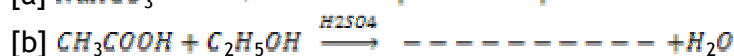
[b] If magnification of convex lens is 5, what will be its focal length ? [2+1]

12.[a] Name the type of reaction seen in the diagram below, hence write the reaction for the same ? [2]



[b] Sulphur is burn in air , gas evolved is dissolved in water , name the substance formed either it is an acid or base ? [1]

14. Complete the following chemical reactions :



15. [a] A person dissolved ammonium chloride in water, water becomes cool .Name the reaction, and tell whether the solution is acidic or basic. Give reason in support of your answer.

[b] " Bhigona, Dhona ,Hogaya." is said by some one about soap/detergents, is it true , explain ?

[c] Are decomposition reactions are opposite of combination reaction ? Write two examples. [1 + 2 + 2]

Or

[a] Identify the hydrocarbon that turns bromine water colorless :  $\text{CH}_4, \text{C}_2\text{H}_6, \text{C}_2\text{H}_2, \text{C}_3\text{H}_4, \text{C}_2\text{H}_4$

[b] Name two metals which will displace hydrogen from dilute acids, but not with conc. Acids

[c] My mother fry some thing in vegetable oil in aluminum fry pane, for cleaning the fry pane she puts water and boil, she got surprised that oil becomes like ghee. Is it possible, explain the reason.

[d] Women do not like to have an artificial jewelry, why ?

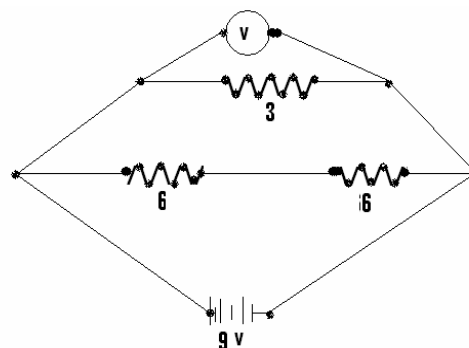
[e] Bleaching powder (yellow) turns white when exposed to air? Write chemical reaction. [1 x 5 = 5]

16[i] Find in this fig.

[a] Total resistance in the circuit.

[b] Current flow in 3 ohms resistance

[c] Total voltage across 3 ohms resistance



[ii]. What is the frequency of AC in India ? Explain the use of fuse in short.

[3 + 2]

Or

[a] In a household electric circuit different appliances are connected in parallel to one another. Give two reasons. [2 + 1 + 2]

[b] An electron enters a magnetic field at right angle, what will be the direction of the force acting on the electron ?

[c] The stars seem to be slightly higher than they actually are. Why ?

### Section B

17. Define fertilization. What is the function of testosterone ?

[1/2 + 1/2]

18. Write the full form of IUCD, OC, HIV, AIDS

[1/2 × 4 = 1]

19. Why hydrogen gas is better than C.N.G fuel ?

[1]

20. What is the role of villi in small intestine ? And why carnivorous have shorter small intestine ?

[2]

21. Write plant hormones and which of them is responsible for growth of tree.

[2]

22. Write the importance of D.N.A copying in reproduction.

[2]

23. Write four qualities of an ideal source of energy.

[2]

24. Write the aquatic organisms in order of who eats whom and form a chain of at least three steps.

[2]

25. How can you as an individual contribute or make a difference in the management of

[i] Water resources [ii] forest and wild life [iii] coal and petroleum.

[3]

26. Compare the functioning of alveoli in the lungs and nephron in the kidney with respect to their structure and functioning.

[3]

27. [a] Distinguish between arteries and veins.

[b] Which chamber of heart pumps blood into lungs ?

[c] How do unicellular organisms dispose of their waste materials ?

[2 + 2 + 1]

Or

[a] Draw a labeled diagram of Female reproductive system.

[b] What happens when egg is not fertilized ?

[c] How does the embryo get nourishment inside the mother's body ?

[2 + 2 + 1]

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