

HOLY MISSION HIGH SCHOOL

[Affiliated to C.B.S.E, Delhi, +2 Level]

SAMASTIPUR - 848101

Std.- VII

F.M. - 80

Subject:- Science

Time : 2.30 hrs.

Section - A (Physics) - 25 Marks

1. Match the given columns

5x1=5

<u>Column 'A'</u>	<u>Column 'B'</u>
(a) S.I. unit of heat	(i) 4.186 J b.
(b) 1 calorie	(ii) Joule. a.
(c) 1 mile	(iii) $\frac{10}{36}$ m/s. d.
(d) 1 km/h	(iv) Instantaneous speed. e.
(e) Speedometer	(v) 1.609 km. c.

2. Define speed. Give its S.I. unit

2

3. A car travels 240 km in 3 hours at uniform speed. Express its speed in
(a) km/h (b) m/s (c) mph.

3

4. How will you determine the equivalent resistance in a parallel circuit ?

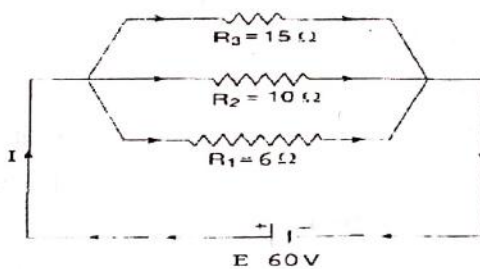
4

5. Explain heating effect of electric current and discuss its application

4

6. Find the total current in the following parallel circuit.

2



7. Why are liquid and gases poor conductors of heat

2

8. How will you determine the speed of a car moving on a road ?

3

Section - B (Chemistry) - 28 Marks

1. Fill in the blanks:-

5x1=5

- Air is a substance which helps in addition of oxygen.
- Hydrochloric acid is commonly known as HCl.
- The cut surface of brinjal becomes black on exposure due to presence of Nitric acid.
- The chemical formula of smelling salt is NH_4SCN .
- Dibasic acids have two replaceable OH groups.

P.T.O

2. Match the following 5x1=5
- | | |
|---|--|
| (a) White coloured salt used laxative | (i) Basic medium |
| (b) China rose indicator changes its colour from pink to given in | (ii) Hydrated copper sulphate pentahydrate |
| (c) Salt used as fungicide | (iii) $MgSO_4 \cdot 7H_2O$ |
| (d) Salt used by washerman | (iv) Oxide formed by non-metal |
| (e) Acidic oxide (P_2O_5) | (v) $Na_2CO_3 \cdot 10H_2O$ |

3. Name the type of chemical reaction involved in the following reaction 5x1=5
- | | | |
|-------------------|---|-----------------------|
| (a) $ZnO + C$ | - | $Zn + CO \uparrow$ |
| (b) $CaCO_3$ | - | $CaO + CO_2 \uparrow$ |
| (c) $2AgBr$ | - | $2Ag + Br_2$ |
| (d) $Cl_2 + H_2S$ | - | $2HCl + S \downarrow$ |
| (e) $2H_2 + O_2$ | - | $2H_2O$ |

4. Give four differences between physical and chemical change 4
5. Write the chemical names of the following along with their formula. 5
- (a) Washing soda (b) White vitrol (c) Marble (d) Blue vitrol (e) Baking soda
6. What happens when :- 4
- (a) Baking soda and vinegar mixed. (b) Sodium metals is treated with water.
 (c) Zink is added to copper sulphate solution.
 (d) Sodium hydroxide solution is treated with hydrochloric acid.

Section - C (Biology) - 27 Marks

1. Multiple choice questions :- 5
- (a) Respiration may occur in absence of O_2 in
 (i) Potato (ii) Spirogyra (iii) Yeast (iv) Humans
- (b) Chief site of respiration in plants is
 (i) Lysosome (ii) mitochondria (iii) Ribosome (iv) Chloroplast
- (c) Normal range of breathing rate per minute in an average adult person rest is
 (i) 9 - 12 (ii) 15 - 18 (iii) 21 - 24 (iv) 30 - 33
- (d) In cockroaches air enters the body through
 (i) Lungs (ii) Gills (iii) Spiracles (iv) Skin
- (e) The covering of the lungs is called
 (i) Pericardium (ii) Perichondrium (iii) Ploural membrane (iv) Poritoneum
2. What is lichen ? 2
3. Write down the equation of photo-synthesis 2
4. Enlist six enzymes present in human pancreatic juice 3
5. Describe the structure and function of stomata. 3
6. Explain the transport of respiratory gases in humans. 4
7. Name the various glands which are involved in food digestion 4
8. The tropical rainforest have a large population of animals. Why is it so? Explain 4

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