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**I.P.S.Sr.Sec.School**

**Max Time : 1 hr** **Class : 10th Science Max Marks : 30**

**Unit Test Code : A**

1. **Answer the following Multiple Choice Questions :** [ 1 x 3 = 3 ]
2. Which of the following is not a thermal decomposition reaction ?

|  |  |
| --- | --- |
| a) CaCO3 (s) → CaO (s) + CO2 (g) | b) 2 AgCl (s) → 2 Ag (s) + Cl2 (g) |
| c) 2 KClO3 (s) → 2 KCl (s) + 3 O2 (g) | d) 2 NaHCO3 (s) → Na2CO3 (s) + CO2 (g) + H2O (l) |

1. Which of the following mirror is used by a dentist to examine a small cavity?

|  |  |
| --- | --- |
| a) Concave mirror | b) Convex mirror |
| c) Combination of (a) and (b) | d) None of these |

1. Which of these mirrors will give the full image of a large object?

|  |  |  |  |
| --- | --- | --- | --- |
| (a) Plane mirror | (b) Concave mirror | (c) Convex mirror | (d) None of these |

1. What is meant by skeletal equation? [ 1 ]
2. Balance the following chemical equation : Pb(NO3)2 (s) PbO (s) + NO2 (g) + O2 (g) [ 1 ]
3. What type of reaction is represented by the digestion of food in our body? [ 1 ]
4. Which is the largest gland in the human body? [ 1 ]
5. Why is respiration considered as an exothermic reaction? Explain. [ 2 ]
6. Why is convex mirror used as a rear view mirror in vehicles? State any one reason. [ 2 ]
7. Define principal focus of a concave mirror. [ 2 ]
8. A concave mirror produces three times magnified (enlarged) real image of an object placed at 10 cm in front of it. Where is the image located? [ 2 ]
9. Explain photosynthesis both light phase and dark phase. [ 3 ]
10. Write the balanced chemical equations for the following reactions : [ 3 ]
11. Calcium hydroxide + Carbon dioxide Calcium carbonate + Water
12. Zinc + Silver nitrate Zinc nitrate + Silver
13. Aluminium + Copper chloride Aluminium chloride + Copper
14. The image of a candle flame placed at a distance of 30 cm from a mirror is formed on a screen placed in front of the mirror at a distance of 60 cm from its pole. What is the nature of the mirror? Find its focal length. If the height of the flame is 2.4 cm, find the height of its image. State whether the image formed is erect or inverted.

[ 3 ]

1. The image of an object formed by a mirror is real , inverted and is of magnification – 1. If the image is at a distance of 40 cm from the mirror, where is the object placed? Where would the image be if the object is moved 20 cm towards the mirror? State reason and also draw ray diagram for the new position of the object to justify your answer. [ 3 ]
2. Draw the diagram of alimentary canal of man and label the following parts : Mouth , Oesophagus , stomach , Intestine [ 3 ]

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**Max Time : 1 hr** **Class : 10th Science Max Marks : 30**

**Unit Test Code : B**

1. **Answer the following Multiple Choice Questions :** [ 1 x 3 = 3 ]
2. Which of the following is not a thermal decomposition reaction ?

|  |  |
| --- | --- |
| a) CaCO3 (s) → CaO (s) + CO2 (g) | b) 2 AgCl (s) → 2 Ag (s) + Cl2 (g) |
| c) 2 KClO3 (s) → 2 KCl (s) + 3 O2 (g) | d) 2 NaHCO3 (s) → Na2CO3 (s) + CO2 (g) + H2O (l) |

1. The following examples of decomposition reactions represent respectively

2 AgBr (s) → 2 Ag (s) + Br2 (g) ; 2 H2O (l) → 2 H2 (g) + O2 (g)

a) thermal decomposition , electrolytic decomposition

b) thermal decomposition , thermal decomposition

c) photodecomposition , electrolytic decomposition

d) photodecomposition , thermal decomposition

1. Which of the following mirror is used by a dentist to examine a small cavity?

|  |  |
| --- | --- |
| a) Concave mirror | b) Convex mirror |
| c) Combination of (a) and (b) | d) None of these |

1. Which is the largest gland in the human body? [ 1 ]
2. What is meant by skeletal equation? [ 1 ]
3. What type of reaction is represented by the digestion of food in our body? [ 1 ]
4. Balance the following chemical equation : Pb(NO3)2 (s) PbO (s) + NO2 (g) + O2 (g) [ 1 ]
5. A concave mirror produces three times magnified (enlarged) real image of an object placed at 10 cm in front of it. Where is the image located? [ 2 ]
6. Why is convex mirror used as a rear view mirror in vehicles? State any one reason. [ 2 ]
7. Define principal focus of a concave mirror. [ 2 ]
8. Why is respiration considered as an exothermic reaction? Explain. [ 2 ]
9. Explain photosynthesis both light phase and dark phase. [ 3 ]
10. Define Principal Focus and Focal length of concave mirror [ 3 ]
11. The image of an object formed by a mirror is real , inverted and is of magnification – 1. If the image is at a distance of 40 cm from the mirror, where is the object placed? Where would the image be if the object is moved 20 cm towards the mirror? State reason and also draw ray diagram for the new position of the object to justify your answer. [ 3 ]
12. Draw the diagram of alimentary canal of man and label the following parts : Mouth , Oesophagus , stomach , Intestine [ 3 ]
13. Write the balanced chemical equations for the following reactions : [ 3 ]
14. Calcium hydroxide + Carbon dioxide Calcium carbonate + Water
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