Roll Number		

A

INDIAN SCHOOL MUSCAT
SECOND PERIODIC ASSESSMENT

SCIENCE

CLASS: X | Sub. Code: 086 | Time Allotted: 50 mts

14.05.2019 | Max. Marks: 20

GENERAL INSTRUCTIONS:

- All Questions are compulsory.
- Draw diagrams if necessary.

PHYSICS

1. Define principal focus of a convex lens. 1
2. State the two laws of refraction. 2
3. A spherical lens produces an image of magnification –1. Identify the lens and draw a ray diagram to justify your answer. 2
4. An object of size 2.5 cm is placed at a distance of 25 cm from a concave lens of focal length 20 cm. Find the position and nature of the image. 2

CHEMISTRY

5. What is rancidity? 1
6. Identify the substance that is oxidized and reduced in the following reaction: 2

   $CuO + Zn \rightarrow Cu + ZnO$
7. What is the action of dil.HCl on the following : 2
   a) Magnesium ribbon
   b) Sodium hydrogen carbonate

   (Write balanced chemical equations)
8. a) Dry HCl gas does not turn blue litmus red whereas dil: HCl acid does. Why? 2

   b) State the colour of litmus in dil:HNO_3.

BIOLOGY

9. Name the first breakdown product of glucose during respiration. Where does it take place? 1
10. After a vigorous exercise you may experience cramp in your leg muscles. Why does this happen? 1
11. Differentiate between breathing and respiration .(any two points each) 2
12. a) Name the source of oxygen for terrestrial animal and aquatic animals 2
    b) Why is rate of breathing different between terrestrial and aquatic animals?

End of the Question Paper

Roll Number		

B

INDIAN SCHOOL MUSCAT
SECOND PERIODIC ASSESSMENT

SCIENCE

CLASS: X | Sub. Code: 086 | Time Allotted: 50 mts

14 .05.2019 | Max. Marks: 20

GENERAL INSTRUCTIONS:

- All Questions are compulsory.
- Draw diagrams if necessary.

PHYSICS

1. Define power of a lens. 1
2. Define refractive index of a medium. The refractive index of diamond is 2.42. What is the meaning of this statement? 2
3. The linear magnification produced by a spherical lens is + 0.4 . Identify the lens and draw a ray diagram to justify your answer. 2
4. An object of size 10 cm is placed at a distance of 36 cm from a convex lens of focal length 12 cm. Find the position and nature of the image. 2

CHEMISTRY

5. How will you test for the gas which is liberated when dil: HCl acid reacts with an active metal. 1
6. Suggest two methods to prevent rusting of iron. 2
7. Consider the following chemical equation below and answer the following questions: 2

   $CuO + H_2 \rightarrow Cu + H_2O$

   a) Name the oxidizing and reducing agents.

   b) What type of reaction does this equation represent?
8. Name the gas evolved when dil: HCl reacts with sodium bicarbonate. Write the balanced chemical equation involved in the reaction. 2

BIOLOGY

9. Name the three carbon compound formed during anaerobic respiration in muscles. 1
10. How oxygen and carbon dioxide is transported to all parts of our body? (Two points only) 1
11. Mention any two characteristics to explain alveolus (air sac) as the best respiratory surface in vertebrates. 2
12. Briefly explain the breathing cycle during inhalation, (when air is taken in). 2

End of the Question Paper

Roll Number		

C

INDIAN SCHOOL MUSCAT
SECOND PERIODIC ASSESSMENT

SCIENCE

CLASS: X | Sub. Code: 086 | Time Allotted: 50 mts

14.05.2019 | Max. Marks: 20

GENERAL INSTRUCTIONS:

- All Questions are compulsory.
- Draw diagrams if necessary.

PHYSICS

1. Define principal focus of a concave lens. 1
2. The magnification produced by a spherical lens is – 3. Identify the lens and state the characteristics of the image formed by the lens. 2
3. Draw a ray diagram to illustrate the refraction through a rectangular glass slab and hence define lateral displacement. 2
4. An object of size 5 cm is placed at a distance of 30cm from a concave lens of focal length 15 cm. Find the position and nature of the image. 2

CHEMISTRY

5. What is the colour of litmus in a solution of acetic acid? 1
6. Suggest two methods by which food industries prevent rancidity. 2
7. a) Identify the oxidizing and reducing agent in the following reaction: 2

   $CuO + Zn \rightarrow Cu + ZnO$

   b) What type of reaction does this equation represent?
8. What is the action of dil: HCl on the following: 2
   a) Granulated Zinc
   b) Sodium carbonate

   (Write the balanced chemical equations)

BIOLOGY

9. Name the respiratory pigment in human being. What is its role in human being? 1
10. What are the major gaseous exchange activities in plants during the day and night? 1
11. Give reason for the following 2
    a) Trachea is closed by epiglottis when required
    b) Lung alveoli are covered with blood capillaries
12. Briefly explain the breathing cycle during exhalation, (when air is given out). 2

End of the Question Paper