

## SECOND TERM EVALUATION 2022-23

## BASIC SCIENCE

Standard : VIII

Time: 2 hours

Score : 60

## Instructions

- The total cool off time for Physics, Chemistry and Biology is 15 minute. Read the questions carefully and understand them during this time.
- Answers are to be written in the order Physics, Chemistry and Biology. The time for each section is 40 minute. The answer books must be returned to the teacher after writing each subject.

## Physics

Time: 40 minute

Score : 20

Answer any 3 questions from 1 to 4. Each carries 1 score.

(3 x 1 = 3)

1. Choose the correct figure from the following.

(1)



2. Lubricants are used to reduce friction. Write down the name of a solid lubricant?

(1)

3. The ability of substances to pass magnetic field lines through them is called .....

(1)

4. It is possible to drink juice using a straw because of .....

(1)

Answer any 4 questions from 5 to 9. Each carries 2 score.

(4 x 2 = 8)

5. Find out the magnetic polarity indicated by A and B in the figures given below.

(2)



6. Classify the following as contact force and non-contact force.

(2)

- Like poles repel.
- Pushing a trolley.
- A door is pushed open.
- Mango falling down from a mango tree.

7. Calculate the focal length of a spherical mirror of radius of curvature 24 cm. (2)
8. Liquids also exert pressure. Write down any two factors that influence liquid pressure? (2)
9. Classify the statements given below regarding magnetic induction. (2)

<i>Soft Iron</i>	<i>Steel</i>

- a) Susceptibility is high.  
 b) Susceptibility is low.  
 c) Retentivity is high.  
 d) Retentivity is low.

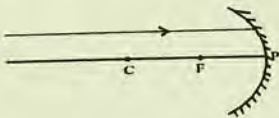
**Answer any 3 questions from 10 to 13. Each question carries 3 score.**

**(3 x 3 = 9)**

10. Electromagnets are temporary magnets that can be artificially made. (3)  
 Suggest three methods to increase the strength of electromagnets.
11. Find the reason for the statements given below. (3)
- a) A sharp nail penetrates more easily than a blunt nail.  
 b) The front end of a boat and an aeroplane are specially designed.  
 c) Mountaineers wear specially designed suits.
12. Match the columns A, B and C suitably. (3)

A	B	C
Atmospheric pressure	newton	Repulsion
Lubricant	Like poles	Attraction
Magnet	bar	Coconut oil
	Friction	Barometer

13. a) A ray of light is incident on the pole of a concave mirror at an angle of  $30^\circ$  with the principal axis. (2)  
 What will be the angle between the incident ray and the reflected ray? Justify your answer.
- b) Copy the diagram and complete the figure by drawing the path of the reflected ray. (1)



**Answer any 3 questions from 1 to 4. Each carries 1 score.**

(3 × 1 = 3)

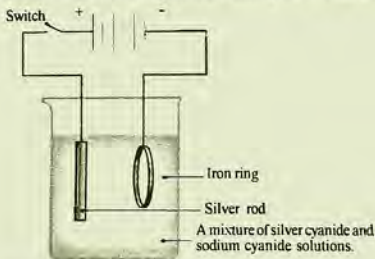
1. Which among the following metals is the most ductile.  
(Iron, Aluminium, Platinum, Gold) (1)
  
2. Identify the relation and fill up.  

Clock	: Dry cell	
Laptop	: .....	(1)
  
3. Which gas is formed when sodium metal reacts with water?  
(Oxygen, Hydrogen, Nitrogen, Chlorine) (1)
  
4. The constituents of Brass are Zinc and ..... (1)

**Answer any 4 questions from 5 to 9. Each carries 2 scores.**

(4 × 2 = 8)

5. Observe the figure which shows the arrangement of coating silver on an iron ring.



- a. Which category does such type of chemical reaction belong to? (1)
- b. Which metal rod is used if copper is to be coated instead of silver? (1)
  
6. a. Which is the solute present in dilute hydrochloric acid? (1)
- b. What is meant by concentration of a solution? (1)
  
7. Take a few crystals of potassium permanganate in a dry test tube. Heat the test tube. Bring a glowing incense stick to the mouth of the test tube.  
What do you observe? Give reason. (2)
  
8. Among the following statements which are suitable to the general characteristics of metals. (2)
  - a. High thermal conductivity.
  - b. Do not conduct electricity
  - c. They have sonority
  - d. Low density

9 What is the difference between saturated and super saturated solutions? (2)

Answer any 3 questions from 10 to 13. Each carries 3 scores. (3 x 3 = 9)

10. Classify the following substances into True solution, Colloid and Suspension (3)

Muddy water, Fog, Milk, Sugar solution, Copper sulphate solution,  
mixture of chalk powder and water

11. a. Write any two factors which favour the corrosion of an iron nail kept exposed to atmosphere? (1)

b. Metals like sodium and potassium are stored in kerosene. Why? (1)

c. Suggest a method to prevent the corrosion of iron? (1)

12. Match the following. (3)

Reaction	Type of chemical reaction
LED light glows using lemon, zinc and copper.	.....(a).....
Silver bromide turns black in presence of sunlight.	.....(b).....
Sodium hydroxide reacts with dilute hydrochloric acid	.....(c).....

13. The name of some metals are given below.

Gold, Sodium, Copper, Iron, Magnesium

a. Which metal with high malleability is used for making ornaments? (1)

b. Which of these metals reacts with cold water? (1)

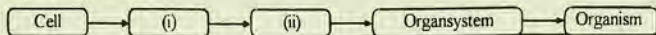
c. Which of these is a hard metal but corrodes easily? (1)

Answer any 3 from questions 1 to 4. Each question carries one score. (3x1 = 3)

1. Find the odd one and write the common feature of others. (1)

Athulya, Gramalekshmi, Bob white, White Leghorn

2. Complete the flowchart. (1)



3. Correct the mistakes if any in the underlined part of the given statements. (1)

- a. Binomial nomenclature is the method of giving scientific name to organisms.
- b. Robert Brown introduced Binomial nomenclature.
- c. According to binomial nomenclature, the scientific name of cat is Felis domesticus.

4. Choose the indigenous varieties of cow. (1)

- (i) Vechoor, Kasargode kullan
- (ii) Malabari, Boyer
- (iii) Badavari, Mura
- (iv) Jersey, Holstein Friesian

Answer any 4 from questions 5 to 9. Each question carries two score. (4x2 = 8)

5. Certain agricultural sectors are given below. Explain each. (2)

- a. Pisciculture
- b. Sericulture

6. Give reason. (2)

Virus cannot be included in any of the prevailing classification methods.

7. Analyse the statement on the basis of indicators given below. (2)

**“Waste management is possible by practising sustainable agriculture.”**

**Hints :** Compost  
Biogas.

8. Scientists and their contributions in the field of taxonomy are given below. Make suitable pairs according to the model. (2)

- |                       |  |
|-----------------------|--|
| • Aristotle           | • Five kingdom classification  |
| • Carl Woese          | • Used the term species for the first time   |
| • Robert H. Whittaker | • Classified organisms as those with red blood cells and those without red blood cells |
| • Theofrastus         | • Six kingdom classification   |
| • John Ray            | • Classified plants into annuals, biennials, perennials                                |

**Model : Robert H. Whittaker - Five kingdom classification**

9. Given below is a concept arose in a seminar on modern agricultural practices. Analyse this and answer the questions.

**“Cultivation without soil”**

- a. Name two such methods of cultivation. (1)
- b. Write any two advantages of these techniques. (1)

Answer any 3 from questions 10 to 13. Each question carries three score.

(3x3 = 9)

10. Analyse the statement given below and answer the following questions. (3)

**“Microbial fertilizers are substances that contain micro organisms which help to increase the fertility of the soil”**

- Name any two bacteria that are used in such fertilizers. (1)
- What are the things to be taken care of while using this fertilizer? (2)

11. Complete the table by arranging the following suitably by giving the names of suitable agricultural practices as headings. (3)

- Agricultural practise in which soil is covered with polythene sheet.
- Temperature and moisture content can be constantly regulated.
- Effective control of weed is possible.
- Pest infestation will be less.

.....	.....
●	●
●	●

12. Arrange column B and C according to column A. (3)

A Organisms	B Kingdom	C Peculiarities
Amoeba	Monera	Autotrophic Multicellular Nonmotile organisms
Mushrooms	Protista	Unicellular organisms without nucleus
Bacteria	Fungi	Unicellular organisms with nucleus
	Animalia	Non motile heterotrophic Unicellular / multi cellular organisms.

13. The various levels of classification of 'Lion' based on the six kingdom classification are given below. Complete the table given suitably. (3)

Domain	Eukarya
(i).....	Animalia
Phylum	(ii).....
Class	Mammalia
Order	(iii).....
Family	(iv).....
(vi).....	Panthera
Species	(vi).....