

## ANNUAL EVALUATION 2022-23

## BASIC SCIENCE

Class: VIII

Time: 2 hour  
Score : 60**Instructions**

- The total cool off time for Physics, Chemistry and Biology is 15 minutes. 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 minutes. The answer books must be returned to the teacher after writing each subject.

**Physics**Time: 40 min  
Score : 20Answer any Three questions from 1 to 4 . Each carries 1 score.

(3 x 1 = 3)

- Find the relation between the first word pair and complete the second pair suitably.  
Electric charge : coulomb :: Capacitance : .....
- Choose the derived unit from the following.  
(m, kg, N, s)
- Which among the following statements is correct.
  - Like poles attract each other.
  - Magnetic field is experienced in all directions around a magnet.
  - The direction of magnetic lines of force is from the south pole to the north pole outside the magnet.
- Which type of spherical mirror always gives an erect and diminished image?

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

(4 x 2 = 8)

- When certain bodies are rubbed against one another, electron transfer takes place between them.

Complete the table given below on the basis of this concept.

(2)

Pair of bodies used for rubbing	Body that loses electron	Body that receives negative charge
Ebonite, Wool	.....(a).....	.....(b).....
Glass rod, Silk	.....(c).....	.....(d).....

- 12) Lightning conductors are fixed to protect tall buildings from the danger of lightning.
- a) Pointed edges are used in lightning conductors. What is the scientific principle behind it. (1)
- b) Write down any other two precautions to protect ourselves when there is lightning. (2)
- 13) Match the following appropriately. (3)

A	B	C
Atmospheric Pressure	m/s	Decibel meter
Speed	dB	Speedometer
Loudness	bar	Barometer
	m/s <sup>2</sup>	Lactometer

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### CHEMISTRY

Score : 20

Time : 40 Minutes

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

(3x1=3)

1. Which one of the following solids changes directly into gas without melting into liquid, on heating?  
( Common salt, Sugar, Wax, Camphor) (1)
2. Fill up suitably  
Glucose : Monomer (1)  
Starch : .....
3. Complete the given chemical equation  
 $Mg + H_2O \rightarrow MgO + \dots\dots\dots$  (1)
4. .... is an elastic polymer  
( Protein, Silk, Rubber, Jute) (1)

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

(4x2=8)

5. a) How many oxygen atoms are present in a molecule of sulphuric acid ( $H_2SO_4$ )? (1)  
b) Determine the total number of atoms present in  $5NH_3$  (1)
6. a) Write the name of the process by which copper is coated on an iron ring. (1)  
b) This process is an electrochemical reaction. Give reason. (1)
7. a) Write the name of the metal used to make filament of electric bulb. (1)  
b) Which property of the metal is utilised here ?  
( Sonority, Ductility, Metallic lustre) (1)

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- Pointed edges are used in lightning conductors. What is the scientific principle behind it. (1)
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### CHEMISTRY

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Time : 40 Minutes

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Answer any 4 questions from 5 to 9. Each carries 2 scores. (4x2=8)

- How many oxygen atoms are present in a molecule of sulphuric acid ( $H_2SO_4$ )? (1)
  - Determine the total number of atoms present in  $5NH_3$  (1)
- Write the name of the process by which copper is coated on an iron ring. (1)
  - This process is an electrochemical reaction. Give reason. (1)
- Write the name of the metal used to make filament of electric bulb. (1)
  - Which property of the metal is utilised here?  
(Sonority, Ductility, Metallic lustre) (1)

8. Identify the property of water shown in each of the following situations.
- (a) Water is used in radiators of automobiles. (1)
- (b) Small water drops assume spherical shape. (1)
9. Which of the following characteristics are related to synthetic fibers?
- a) Can be dried easily on getting wet.
- b) High aeration
- c) Low durability
- d) Wrinkle free (2)

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

**(3x3 = 9)**

10. Analyse the table and answer the questions given below.

Mixture A	Mixture B	Mixture C
<ul style="list-style-type: none"> <li>◆ Particles cannot be separated by filtration</li> <li>◆ On passing an intense beam of light, its path is visible.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Particles can be separated by filtration</li> </ul>	<ul style="list-style-type: none"> <li>◆ Particles cannot be separated by filtration</li> <li>◆ On passing an intense beam of light, its path is not visible.</li> </ul>

- (a) Which one of the given mixtures represents a true solution? (1)
- (b) In which mixture particles settle down when kept undisturbed for sometime? (1)
- (c) To which of these mixtures does milk belong? (1)
11. Two samples of water are given.
- Sample 1 - Soap gives lather easily.
- Sample 2 - Soap does not give lather easily.
- a) Which sample represents hard water? (1)
- b) Which among the following salts causes hardness of water? (1)
- (Sodium carbonate, Magnesium chloride, Zinc hydroxide, Ammonium chloride)
- c) Which type of hardness of water can be removed by boiling? (1)
12. Thermoplastics and thermosetting plastics are two types of plastics.
- a) How do they differ? (2)
- b) Choose the thermosetting plastic from the following. (1)
- (Polythene, Bakelite, PVC, Rubber)
13. Water pollution is a burning issue now-a-days.
- a) How do aquatic animals and plants get oxygen for respiration? (1)
- b) The wastes dumped into rivers and ponds result in the destruction of aquatic life. Explain. (1)
- c) Write any other activity that causes water pollution. (1)

# BIOLOGY

Score : 20

Time : 40 Minutes

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

(3x 1 = 3)

1. Choose the cell organelle which is seen in plenty in glandular cells.

(1)

- a) Mitochondrion
- b) Ribosome
- c) Golgi complex
- d) Endoplasmic reticulum

2. Identify the word pair relation and fill in the blank.

(1)

Ovary : Estrogen

Testis : .....

3. Identify the odd one and write the common feature of others.

(1)

- a) Nilgiri Tahr    b) Lion-tailed macaque    c) Dodo    d) Malabar civet cat

4. Choose the correct pairs from the following.

(1)

Community Reserves	Peppara
National Parks	Silent Valley
Biosphere reserves	Wayanad
Wild Life Sanctuary	Periyar

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

(4x 2 = 8)

5. Correct the mistake if any in the underlined part of the given statements.

(2)

- a) Zoological gardens are example of in-situ conservation.
- b) Community reserves are areas protected with the participation of the public.
- c) Biosphere reserves are designed to protect wild lives along with the protection of historical monuments, natural resources etc of an area.

6. Analyse the statement and answer the questions

**The scientific name of dog is *Canis familiaris***

- a) How is this method of giving scientific names to organisms known as? (1)
- b) What does the words *Canis* and *familiaris* in the scientific name indicate? (1)

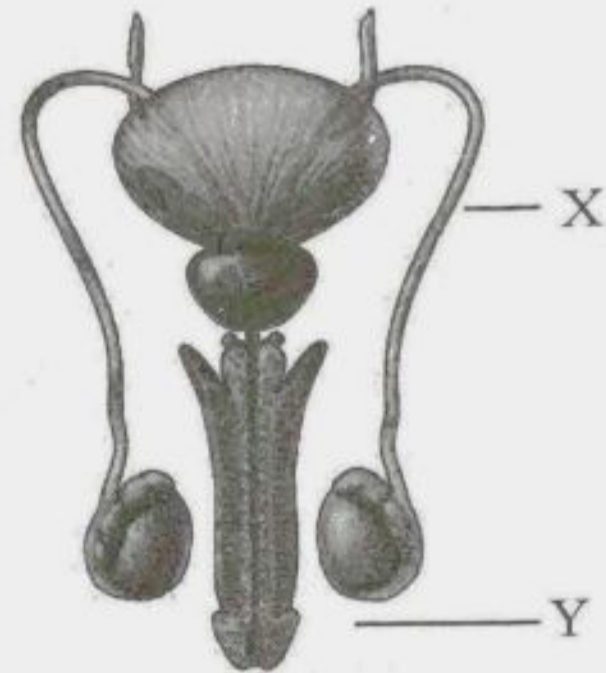
7. Analyse the news report and answer the questions.

*The Ministry of Health has launched a project to supply iron tablets to 13 crores of students coming under the age group of 10 – 19 years.*

- a) This project is launched to cure which disease? (1)
- b) What is the role of food habits to overcome this situation? (1)

8. Observe the figure and answer the questions.

- a) Identify the parts labelled as X and Y in the figure. (1)
- b) Write the function of X. (1)

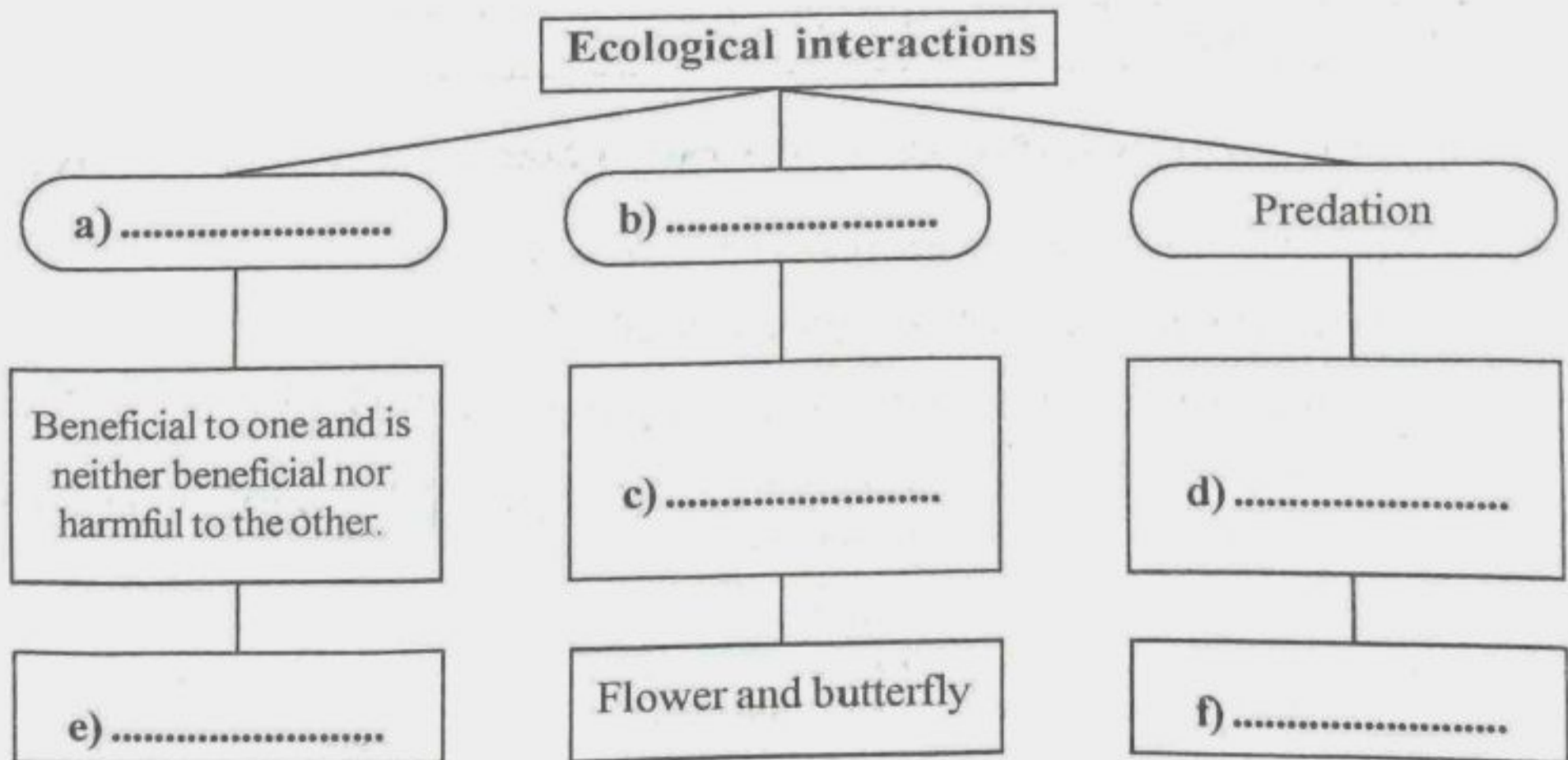


9. Analyse the statements given below and give reasons for each.

- a) One of the most important ecological hotspots in India is western ghats. (1)
- b) Sacred groves are to be protected and maintained. (1)

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

10. Analyse the illustration and complete it. (3)



11. Redraw the diagram, identify and label the parts mentioned below.

Redraw the diagram.

- a) The part which transforms into endosperm after fusing with the male gamete.
- b) The part which develops from pollen grain and grows towards ovary.



(1)  
(1)  
(1)

12. Some of the services that biodiversity provide us are given below. Analyze them and complete the following table.

(3)

- ◆ O<sub>2</sub> - CO<sub>2</sub> balance
- ◆ Pollination
- ◆ Nutrient recycling
- ◆ Soil formation
- ◆ Climate control

Auxiliary services	.....
◆ ◆	◆ ◆ ◆

13. Complete the given table suitably.

(3)

Gametes	Characteristics		
	Size	Motility	Morphology
a) .....	.....(b).....	Yes	.....(c).....
Ovum	.....(d).....	.....(e).....	.....(f).....