

E 806

ANNUAL EVALUATION 2017 - 18 BASIC SCIENCE

Standard: VIII

Time: 2 hour Total 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 subject is 40 minutes. The answer book must be returned to the teacher after writing each subject.

PHYSICS

Time: 40 minutes Total Score: 20

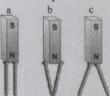
One score each for questions 1to 4.

- 1. Which of the following is the correct representation?
 - a) kg per m3
- b) kg/m3

- c) kilogram /m3
- (1)

(1)

2. Which of the following is the correct picture?



Which type of spherical mirror is used as rear view mirror in vehicles?
 (concave mirror, convex mirror, plane mirror)

(1)

4. Identify the relation in first word- pair and complete the second one.

(1)

Pressure

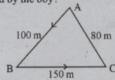
pascal

Electric charge

Answer any FIVE questions from 5 to 10. Each question carries 2 score.

 $(5 \times 2 = 10)$

- 5. A boy started from A, took 80 s to reach C through B. If so,
 - a. What is the distance travelled by the boy?



- b. What is the displacement made?
- c. Find out his average speed.

(2)

- Noise pollution affects our health badly. 6.
 - Write any two methods to minimize noise pollution. (2)
- Lightning conductors which are not properly earthed, are dangerous. Justify this statement. 7.
- Classify the following situations based on advantages and disadvantages of friction. (2) 8.
 - holding objects.
 - wear and tear of tyres. b.
 - wearing out of machine parts.
 - walking on floor.
- The observations of an experiment using a simple pendulum is given below. 9.

	Oscillations		
lulum(cm)	10	20	x
	20	25	У
	100	100	100

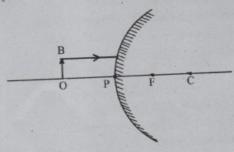
Find the value of x and y and complete the table. a.

(1)

- From the observations, find out the relationship between the length of pendulum and b. (1) its frequency.
- An ebonite rod is rubbed against a piece of wool.
 - (1) What is the electric charge gained by the ebonite rod?
 - If the charged ebonite rod is earthed, electron transfer will be from b.
 - i) ebonite rod to the earth.
 - (1) ii) the earth to ebonite rod.

 $(2 \times 3 = 6)$ Answer any TWO questions from 11 to 13. Each question carries 3 score.

Complete the ray diagram of image formation of the object OB placed in front of the 11. mirror.



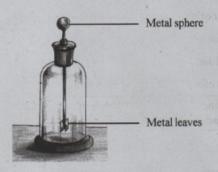
Write two features of the image formed? b.

(1)

12. Complete the columns A, B, C suitably.

A	В	C	
Ultrasonic sound	Below 20 Hz	Man	
Infrasonic sound	20 Hz- 20 KHz	Galton whistle	
Audibility Range	Above 20000 Hz	Waves of earthquake	

13. Observe the picture.



- a. Identify the device.
- h Write its use. (1)
- c. If a negatively charged object is brought near the metal sphere of the device, what will be the charge acquired on. (1)
 - i) the metal sphere?
 - ii) the metal leaves?

CHEMISTRY

Score: 20

Time: 40 Minutes

Attempt any three of the following questions from 1 to 4 (1 Score each)

Which of the following substance shows sublimation.

[Sodium Chloride, Camphor, Methanol]

2. Fill up the following suitably.

Salt Solution: True Solution

Milk : -----

3. The volume of waterwhen it solidifies

(increases, decreases, does not change)

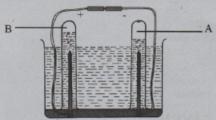
- 4. Choose the correct statement from the following
 - a. Rubber is not an elastic polymer.
 - b. Nylon is a natural polymer.
 - c. Glucose is the monomer of starch.

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(3)

(1)

Attempt any four of the following questions from 5 to 9 (2 Scores each) 5. Plastic and rubber are two common polymers used in our daily life. a. Which is the monomer of natural rubber? (1) b. Give one example for a plastic? (1) The arrangement showing the electrolysis of water is given below. Analyse the 6. diagram and answer the following. B



a. Identify the gases A&B

b. Name an instrument used for the electrolysis of water in a convenient manner. (1)

- 7. A few statements regarding plastics are given below. Classify them as applicable to thermoplastic and thermosetting plastics.
 - a. Chemical change occurs on heating.
 - b. Only physical change occurs on heating.
 - c. Can be recycled.

d. Cannot be recycled. (2)

- 8. Analyse the following reactions and answer the questions given below.
 - A) Magnesium + Hydrochloric acid Magnesium Chloride + Hydrogen + Heat
 - B) Potassium Permanganate + Heat ->

Potassium Manganate+Manganese Dioxide+Oxygen

- a. What are the reactants used in reaction A? (1)
- b. Which one of the above reactions is endothermic? (1)
- 9. Classify the following molecules as Polyatomic and Diatomic

K, H, P, S, N,

Polyatomic Diatomic

Attempt any three of the following questions from 10 to 13 (3 Scores each)

We wear clothes made of various types of fibres in our daily life. 10.

a. Write down an example for a natural fibre (1)

b. Write down any two advantages of natural fibres over artificial fibres

(2)

(2)

(1)

- 11. Water pollution is a major issue we face today
 - a. Write down any two situations in which water in your locality gets polluted (2)
 - b. Suggest a method to prevent water pollution.

(1)

(1)

(3)

- 12. In water from certain sources soap lathers easily. But in water from some other sources soap does lather easily
 - a. What is the name of water in which soap doesn't lather easily?
 - b. Give an example of any salt responsible for this defect of water. (1)
 - c. Write a method to remove this defect. (1)

13. Match the following most suitably.

A	В	C		
Tungsten	Moisture	Filament	ament	
Iron	Soft Metal	Electric motor	1	
Copper	Ductility	Rust		
	Electrical conductivity	Agricultural Implements	1	

BIOLOGY

Score: 20

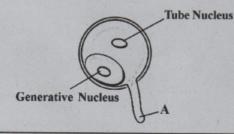
Time: 40 Minutes

- I. Answer <u>all questions</u> from 1 to 3. Each question carries 1 score. $(3 \times 1 = 3)$
- Pickout the organisms that are related to commensalism from the following and write as a pair.

 Mango tree, Loranthus, Vanda.

Butterfly, Snail, Flower

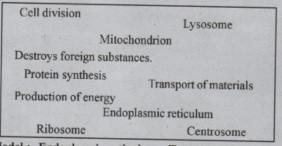
- 2. Correct mistakes if any, in the underlined part of the following statements.
 - <u>Dodo</u> is an extinct organism.
 - Palode Tropical Botanical Garden is an example for <u>In-Situ conservation</u>.
 - Indo-Burma Region is an Ecological hotspot.
- 3. Observe the following figure and answer the questions.



- (a) Identify the part labelled as A.
- (b) To which part does it grow?

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- II. Answer any 4 questions from 4 to 9. Each question carries 2 score. $(4 \times 2 = 8)$
- 4. Analyse the box given below and pair them as per the model.



Model: Endoplasmic reticulum - Transport of materials

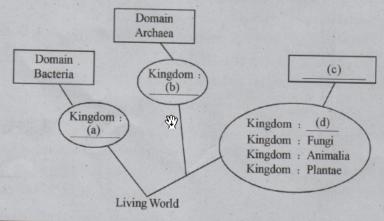
5. Identify the figure of the given tissue and write its function.



Analyse the given statement and answer the questions.

Bacteria like Rhizobium, Azotobacter and aquatic plants like Azolla can be used to increase the fertility of the soil.

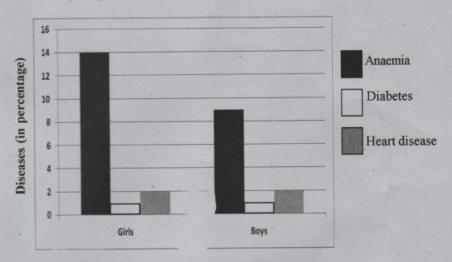
- (a) How the above mentioned organisms increase the soil fertility?
- (b) Which are the precautions (any two) to be assured before the application of these?
- An incomplete illustration of six kingdom classification proposed by Carl Woese is given below. Analyse and complete it.



8. "If we can say an emphatic 'No' at the right time, it will help you to avoid many crisis in adolescent period." This is an opinion that arose in a seminar 'challenges in adolescent period'.

Do you agree with this statement? Why?

9. Health survey result of students in a school is given in the following graph. Analyse it and answer the questions.



- (a) Which disease condition is more common in children?
- (b) Mention the reason that leads to this condition? Write your suggestion to overcome this.

III. Answer any 3 questions from 10 to 13. Each question carries 3 score.(3x3=9)

10. Rearrange B and C columns in accordance with column A.

A	В	C
Ecologically important places located in populated areas.	National Park	North-Eastern Himalayas
2. Protect wild lives along with the protection of historical monuments and geographical features of an area.	Ecological hotspot	Nilgiri
3. Areas rich in endemic species but facing the threat of habitat destruction.	Biosphere reserve	Kadalundi
	Community reserve	Silent Valley

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11. Analyse the given food chain and answer the following.

A: Paddy \rightarrow Hen \rightarrow Fox \rightarrow Lion

B: Grass → Deer → Tiger

- (a) In these food chains A and B, Lion and Tiger belong to which trophic levels.
- (b) What is the role of these organisms in maintaining ecological balance?
- (c) Write two messages for the conservation of these organisms, for preparing a poster.
- Analyse the following statement and answer the questions.

"Though fertilization takes place inside the oviduct, the embryo develops by attaching itself to the endometrium."

- (a) Name the organ that forms here. How is it formed?
- (b) Write any 2 functions of it.
- 13. Observe the following figure and answer the questions.



- (a) Identify the cell.
- (b) In which human reproductive part, does it form?
- (c) Temperature is a factor that influences the formation of these cells. How is it maintained?