



SECOND TERMINAL EVALUATION 2016-17  
**Basic Science**

Standard : VIII

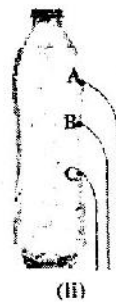
Score : 60  
Time : 120 minute

**Instructions**

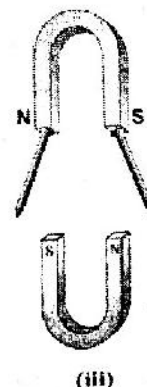
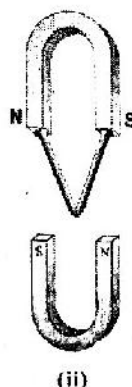
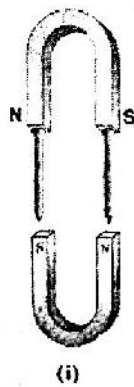
1. The total cool off time for Physics, Chemistry and Biology is 15 minutes. Read the questions carefully and understand them during this time.
2. Answer all questions.
3. Answer any one in the case of questions having choice.
4. The score for each question is given along with the question.
5. Answers 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**

1. Water coming out from three bottles is depicted.



- a) Choose the correct figure. (1)
  - b) Specify the scientific base for selecting the picture. (1)
  - c) Describe a situation that makes use of this scientific base. (1)
2. Describe the procedure of an experiment to prove the atmospheric pressure. (2)
3. Describe the scientific base behind the mode of construction in the following.
- a) The front portion of boats is narrowed. (1)
  - b) The cutting edge of knives is sharpened. (1)
4. Pins hanging from each pole of a U magnet are depicted.



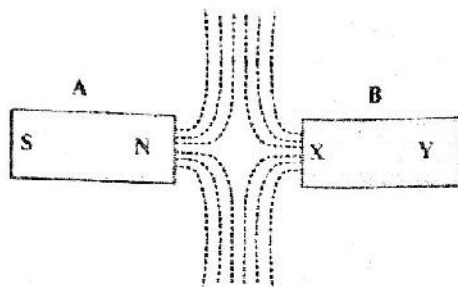
Which is the correct figure? Justify the answer.

(2)

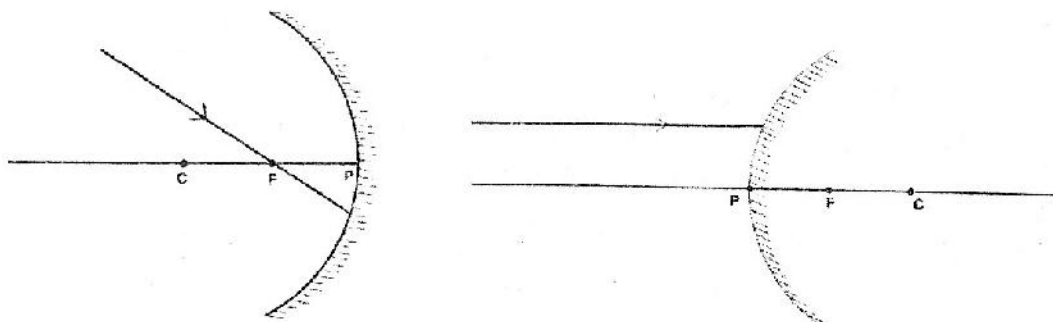
5

Insulated copper wire, battery, softiron piece, piece of steel

- a) Draw the diagram needed to make a temporary magnet by selecting the appropriate items from those given in the box and describe the method. (2)
  - b) Write down two methods to increase the strength of an electromagnet (2)
6. The focal length of a rear view mirror used in a car is 0.8 m.
- a) Which type of mirror is this? (1)
  - b) Calculate its radius of curvature. (1)
7. Observe the figure.



- a) Indicate the polarity at X and Y in the bar magnet B. (1)
  - b) Redraw the figure and mark the direction of magnetic lines of force. (2)
8. Redraw the diagram and draw the path of reflected rays. (2)



## Chemistry

1. Two chemical equations are given below. Identify the difference in energy change taking place in each of these reactions.
  - a) Magnesium + dilute hydrochloric acid  $\rightarrow$  magnesium chloride + hydrogen + heat.
  - b) Potassium permanganate + heat  $\rightarrow$  potassium manganite + manganese dioxide + oxygen. (2)
2. Iron and gold are two metals that we use in daily life.
  - a) In coastal areas, iron bars undergo corrosion easily. Why?
  - b) Give any two characteristics of gold by which it is used to make ornaments. (2)

3. The uses and properties of some metals are given below. Match them correctly. (3)

Use	Properties
For making electrical wires	Hardness
For making foil to cover food materials	High electrical conductivity
For making agricultural tools	Can convert into thin sheets.

4. It is easy to prepare food using pressure cooker. (The reason behind this can be explained on the basis of relation between boiling point and pressure). Explain. (2)

5. The observations made by some experiments using mixtures A,B and C are given below.

- The path of the light beam is not visible in solution A, particles cannot be filtered off.
- The particles in solution B do not undergo sedimentation, path of the light beam is visible.
- The particles in solution C can be filtered off, path of the light beam is not visible.

a) Which of the above is a true solution? (1)

b) Which of the above possess largest particle size? Name the type of this mixture. (2)

c) Explain the reason for the difference in the observations? (1)

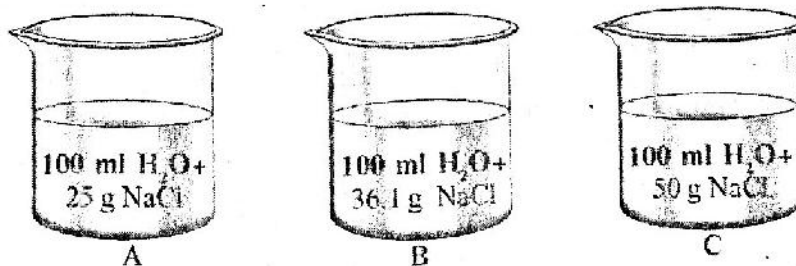
6. 'Making eco-friendly substances is an aim of learning science'. Substantiate the statement. (2)

7. Silver bromide is taken in two dry watch glasses and one of them is covered with black paper. Keep the two samples in sunlight for some time.

a) Which one of the watch glass with silver bromide undergo colour change?

b) Which form of energy is responsible for the chemical change? (2)

8. Solutions of NaCl in 100 ml water are shown below. (Solubility of NaCl is 36.1g / 100 ml).



a) Which of the above is saturated solution? (1)

b) Which of the above has the possibility to be a super saturated solution? Give its reason. (2)

# Biology

1. Rewrite the following sentences correctly if there is any error in the underlined part: (1)

- a) Taxonomy is the branch of Science that classifies organisms and provides scientific names.
- b) Theophrastus used the term species for the first time.
- c) Taxonomic keys are the scientific indicators used for identifying and classifying plants and animals.

2. Evaluate the opinions given below and answer the questions. (2)

- i) There is no need of indigenous varieties when hybrid varieties are available in plenty.
- ii) It is essential to conserve indigenous varieties.

Which of these opinions do you agree with? Why?

3. Does the variation in the number of a particular organism in the food web affect the existence of other organisms? If so, how? (2)

4.A. Arrange the terms in the box appropriately in the table given below. (2)

*Cassia fistula*, cow, *Corvus splendens*, kanikonna, *Bos taurus*,  
*Felis domesticus*, crow.

Organism	Scientific name
a) Cow	<i>Bos taurus</i>
b)	
c)	

OR

B. Fill in the blanks in the levels of classification (taxonomic hierarchy) of coconut palm.

Kingdom	Plantae
(a) .....	Angiospermophyta
Class	Monocotyledonae
(b) .....	Calycinae
(c) .....	Arecaceae
Genus	(d) .....
Species	nucifera

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

*‘Mixing biofertilisers, microbial fertilisers and chemical fertilisers help to enhance soil fertility’*

- a) Do you agree with this statement? Why?  
 b) What are microbial fertilisers?  
 c) What are the things to be taken care of while applying microbial fertilisers?

6. Examples for soilless cultivation are (1)

- i) Polyhouse farming                      ii) Aeroponics  
 iii) Precision farming                      iv) Hydroponics

- a) i, ii Correct    b) ii, iii Correct    c) ii, iv Correct    d) iii, iv Correct

7. Arrange columns B and C to match with column A (3)

A	B	C
Cuniculture	Mushroom culture	Mellifera
Apiculture	Rearing of rabbits	Button mushroom
Pisciculture	Rearing bees	White giant
	Rearing fish	Rohu

8. Evaluate the opinion of the farmer and answer the question. (2)

*"Application of chemical fertilisers causes environmental destruction. If not, leads to crop loss."*

Which method ensures pest control without disturbing the environment? What is the basic principle of this method?

9. Prepare a note on "Modern trends in taxonomy" based on the hints given below. (2)

*Hints:*

- 5 kingdoms – limitation
- Contribution of Carl Woes

10. Observe the collage.

No space for cultivation

A

No profit even if there is crop yield

B

What are your suggestions to overcome the crises mentioned in the collage?

