

**FACULTY HIGHER SECONDARY SCHOOL**  
**SAMPLE PAPER FOR SECOND PRACTICE TEST 2019-20**

**CLASS- X**  
**SUB- SCIENCE**

**TOTAL MARKS: 80**

**TIME : 3HRS**

**SECTION- A**

1. Choose the most appropriate answer :- (7x1=7)

i) Which is the first enzyme to mix with food in the digestive tract?

- a) Pepsin      b) Cellulase      c) Amylase      d) Trypsin

ii) Involuntary actions in the body are controlled by:

- a) Medulla in forebrain      b) medulla in mid brain  
c) Medulla in hind brain      d) medulla in spinal cord.

iii) Which one of the following is an artificial ecosystem.

- a) Pond      b) Crop field      c) Lake      d) Forest

iv) The commercial unit of energy is :

- (a) Watt      (b) kilowatt      (c) joule      (d) kilowatt -hour

v) A real image of an object is to be obtained . The mirror required for this purpose is :

- (a) Convex      (b) concave      (c) plane      (d) either concave or convex

vi) The coloured light having the maximum speed in glass prism is :

- (a) Blue      (b) green      (c) yellow      (d) violet

vii) The removal of hydrogen from a substance is called:

- (a) Oxidation      (b) reduction      (c) corrosion      (d) rancidity

2. Answer in one word or a sentence. (4x1=4)

i) Why should biodegradable and non - biodegradable wastes be discarded in two separate dustbins?

ii) What do you mean by syngamy?

iii) What are olfactory indicators?

iv) Why hydrogen is placed in the reactivity series ?

3. Fill in the blanks : \_\_\_\_\_ (3x1=3)

i).....gland is said to be 'dual function gland' .

ii)..... lenses and ..... mirrors are both converging in nature.

iii)An example of acidic salt is ..... and a basic salt is .....

4. The following questions consist of two statements - Assertion (A) and Reason(R) . Answer the following questions selecting the appropriate option given below :- (3x1=3)

a) Both A and R are true and R is the correct explanation A

b) Both A and R are true but R is not the correct explanation of A

c) A is true but R is false

d) A is false but R is true

i) Assertion (A): Bile is essential for digestion of lipids

Reason (R) : Bile juice contains enzyme.

ii)Assertion (A): The corrective lens of a person suffering from myopia is diverging in nature.

Reason (R): In a myopic eye the image is formed in front of retina.

iii) Assertion (A): Sodium chloride has a high melting point of  $800^{\circ}\text{C}$  .

Reason (R): The force of attraction between the molecules of a covalent compound is very weak.

### **SECTION - B**

5.a)How is oxygen and carbon dioxide transported in the body?

b)Mention all the organs involved. (3)

6. Explain how our body respond when adrenaline is secreted into the blood? (3)

7. What is ozone and how does it affect any ecosystem.? (3)

8. Why is series arrangement not used for connecting domestic electrical appliances in a circuit?

OR (3)

Explain some applications of heating effects of electric current.

9. What is meant by dispersion of white light? Describe the formation of rainbow in the sky. (3)

10. Metal oxides are basic in nature whereas oxides of non metals are acidic in nature. Justify by giving examples.

**OR** **(3)**

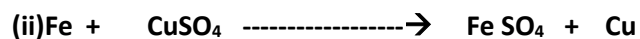
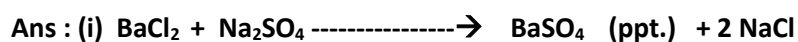
Define rancidity. Mention various methods for preventing rancidity.

11. Write a balanced chemical equation for each of the followings : (3)

(i) Precipitation reaction

(ii) Redox reaction

(iii) Exothermic reaction



**(or any other )**

### SECTION-C

12. a) Why do stem and root move (grow) towards light and the centre of gravity of the Earth respectively?

b) How will you prove hydrotropism? (5)

13. Draw and explain the female reproductive system. (5)

14.(i) What is meant by corrosion ? Name any two methods used for the prevention of corrosion.

(ii) If M is in the middle of the reactivity series , write various steps used in extracting this metal. (5)

**OR**

(i) Compare the chemical properties of metals and non- metals.

(ii) What are ionic compounds ? Explain their properties.

15.(i) Draw an electric circuit with three resistances connected in parallel and derive an expression for the equivalent resistance of the circuit.

(ii) A  $9\Omega$  resistance is cut into three equal parts and connected in parallel . Find the equivalent resistance of the combination. (5)

16. Draw a diagram to show why distant objects cannot be seen distinctly by a myopic eye . List two reasons due to which this defect of vision may be caused.

A person with a myopic eye cannot see clearly beyond a distance of 2m. Name the type of corrective lens that would be needed to correct the defect and draw a ray diagram to show how the defect gets corrected.

**OR** **(5)**

What is atmospheric refraction ? Use this phenomenon to explain the following natural events:

- (a) Twinkling of stars
- (b) Advanced sunrise and delayed sunset

Draw diagrams to illustrate your answer.

17. (i) What is Plaster of Paris chemically called ? How is it prepared? List its two important uses.

(ii) What is baking soda chemically called ? Give reaction involved in its preparation . Write one of its uses. (5)

#### SECTION-D

Choose the correct answer (Q.18 to Q.20)

18. A student is given a permanent slide showing binary fission in Amoeba. What are the steps in focussing the object under the microscope? (1)

a) Place the slide on the stage., look through the eye piece and adjust the mirror and diaphragm to get even illumination.

b) Look through the eye piece and move the slide until the object is visible.

c) Look through the eye piece and raise the objective using coarse adjustment until the object is focused.

d) Make the focus sharp with the help of fine adjustment.

19. The reaction of dilute sulphuric acid with zinc produces the following gas: (1)

- (a) oxygen      (b) sulphur dioxide      (c) hydrogen      (d) zinc oxide

20. The p.d across a  $3\Omega$  resistor is 6V. The current flowing in the resistor will be : (1)

- (a) 0.5A      (b) 1A      (c) 2A      (d) 6A

21. To prepare a good temporary mount of a leaf showing stomata., from where does the student have to get the peel and what are the materials required for the process? (3)

22. Where should an object be placed so that a real and inverted image of the same size is obtained by a convex lens? Draw the ray diagram to show the nature and position of the image. (3)

23. Explain the action of litmus paper, methyl orange and phenolphthaleine on the followings:

(i) Lemon juice (ii) sodium bicarbonate (3)

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