



# PANCHSHEEL PUBLIC SCHOOL

10+2 Senior Secondary School (Affiliated & Recognized by CBSE)  
Jaitpur, Badarpur, New Delhi-44

## Sample Annual Examination-2022-23

**Time:** \_\_\_\_\_ **Subject: Science** **Class: VII** **M. Marks: 50**  
**Name.....** **Roll No.....** **Section .....** **Date:** \_\_\_\_\_

**Q1. Choose the correct option. (1x5=5)**

- Which of the following are the tiny filtering units of the kidney?  
(a) ureter (b) urethra (c) nephrons (d) bladder
- During process is energy released?  
(a) external respiration (b) internal respiration (c) inhalation (d) exhalation
- A spherical mirror with its reflecting surface on the outside is a  
(a) plane mirror (b) concave mirror (c) convex mirror (d) either concave or convex mirror
- Which these is absolutely necessary in an electric circuit ?  
(a) bulb (b) switch (c) voltmeter (d) connecting wires
- In which method of transfer of heat do the molecules travel from the hot to the cold portion ?  
(a) conduction (b) convection (c) radiation (d) all of the above

**Q2 Fill in the blanks. (1x 4=4)**

- Digestion begins in the \_\_\_\_\_.
- Milk contains \_\_\_\_\_ acids.
- During cellular respiration, the sugar molecules in food are \_\_\_\_\_ to form carbon dioxide and water.
- We use symbols to draw a circuit \_\_\_\_\_.

**Q3.State True or False. (1x4=4)**

- Prism is the square piece of glass splits white light into different colours.
- The core of an electromagnet can be made up of any metal.
- When water is added to a strong acid, it becomes dilute.
- Gases are insulators of heat.

**Q4.Define the following terms. (Do any 3) (1x3=3)**

- Egestion
- Hemoglobin
- Focal length
- Fuse

**Q5. Differentiate between the following. (Do any 2) (2x3=6)**

- Xylem and Phloem
- Conduction and Convection
- Convex mirror and Concave mirror

**Q6. Give reason for the following.**

**(1x3=3)**

1. What happens when dilute sulphuric acid is added to zinc?
2. Why should we not overwater potted plants?
3. Why do woolen clothes keep us warmer in winters than cotton clothes?

**Q7. Very short answer questions.**

**(1x3=3)**

1. What is a miniature circuit break?
2. What is translocation?
3. What is the function of the polished curved surface at the back of the heating rod in a room heater?

**Q8. Short answer questions. (Do any 3)**

**(2x3=6)**

1. What is the function of:- (a) Saliva (b) Bile juice
2. Give two main uses of Sodium hydroxide.
3. Explain the set-up used by Newton to obtain a spectrum.
4. Give two uses of electromagnets

**Q9. Long answer questions. (Do any 3)**

**(3x3=9)**

1. Explain the working of simple electric bell.
2. Write any three characteristics of the image formed by a plane mirror?
3. Explain how heat is conducted from heated end of a rod to its cold end.
4. How do the nostrils contribute to the process of breathing?

**Q10. HOTS questions.**

**(2x2=4)**

1. Which side of the heart has oxygen-rich blood and which side has carbon-dioxide-rich blood?
2. How do the feathers of a bird protect it from the cold?

**Q11. Draw the well-labelled diagram of the human urinary system and mark its various organs.**

**(1x3=3)**