

Maharashtra State Board

Class VII Science

Sample Paper – 2

Time: 2 hrs

Max. Marks: 60

General Instructions:

1. All questions are compulsory.
2. The marks related to the question are given in brackets.

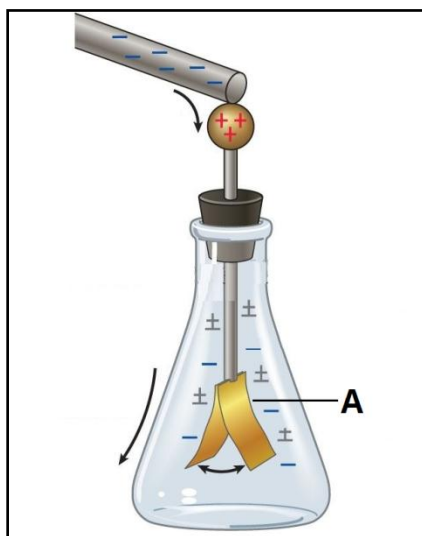
I. Choose the correct alternative:

[15]

1. The properties of constituents are retained in a
 - (a) Compound
 - (b) Mixture
 - (c) Solution
 - (d) Solvent
2. Trapping of heat in the Earth's atmosphere causes the danger of
 - (a) Global warming
 - (b) Ozone depletion
 - (c) Deforestation
 - (d) Forest fires
3. An object which does not allow light to pass through it is said to be
 - (a) Transparent
 - (b) Translucent
 - (c) Opaque
 - (d) Bright
4. The formula for density is
 - (a) $\text{Mass} \times \text{Volume}$
 - (b) $\text{Mass} + \text{Volume}$
 - (c) $\text{Mass} - \text{Volume}$
 - (d) $\text{Mass}/\text{Volume}$
5. Living and non-living factors together form
 - (a) Ecosystem
 - (b) Community
 - (c) Population
 - (d) Biosphere

- 6.** Reproduction by buds is called
- Sporogenesis
 - Fragmentation
 - Budding
 - Cell division
- 7.** Vessels which carry blood from the heart to the different parts of the body are called
- Veins
 - Capillaries
 - Arteries
 - Sinuses
- 8.** Which of the following statements is not true?
- A medium is necessary for the conduction of heat.
 - The speed of conduction of heat depends on the medium.
 - In convection, the particles of the medium vibrate in their own place.
 - In conduction, the particles of the medium vibrate in their own place.
- 9.** *Amoeba* moves by
- Pseudopodia
 - Cilia
 - Flagella
 - Nematocyst
- 10.** Which of the following can be used to preserve foodstuff?
- Citric acid
 - Acetic acid
 - Boric acid
 - All of the above
- 11.** Deficiency of iron causes
- Scurvy
 - Rickets
 - Anaemia
 - Goitre
- 12.** Which of the following is the correct equation for the process of photosynthesis?
- water + carbon dioxide $\xrightarrow[\text{chlorophyll}]{\text{light energy}}$ carbohydrate + oxygen + water
 - water + oxygen $\xrightarrow[\text{chlorophyll}]{\text{light energy}}$ carbohydrate + carbon dioxide + water
 - water + carbon dioxide $\xrightarrow[\text{chlorophyll}]{\text{light energy}}$ carbohydrate + oxygen + ATP
 - water + carbon dioxide \rightarrow carbohydrate + oxygen + water

13. What is the function of part A in the given apparatus?



- (a) To make the apparatus easy to use
- (b) To make the apparatus portable
- (c) To make the apparatus light in weight
- (d) To make the apparatus more sensitive

14. Which of the following is incorrect with respect to the propagation of sound?

- (a) A medium is necessary for the propagation of sound.
- (b) Sound can be propagated through solid, liquid and gaseous media.
- (c) Sound travels faster in gases as compared to liquids.
- (d) Sound travels faster in liquids as compared to gases.

15. Which day is observed as World Water Day every year?

- (a) 22nd March
- (b) 20th March
- (c) 22nd April
- (d) 20th April

II. Answer the following:

[10]

16. State whether the following statements are true or false:

- (a) Oxides of metals are basic in nature.
- (b) Bases are formed by the neutralisation reaction between acids and salts.

17. Draw a neat labelled diagram of a neuron.

18. Match the following:

Column A	Column B
Glass rod	Repel
Ebonite rod	Attract
Like charges	Positive charge
Unlike charges	Negative charge

19. Name the following:

- (a) Juice produced inside the mouth during digestion.
- (b) Gland which produces insulin.

20. State the differences between conduction and convection.

III. Answer the following:

[15]

21. Give reasons: Water is an ideal medium for chemical reactions.

22. Write a note on adulteration of food.

23. Why is a person with kidney stone advised not to eat tomatoes?

24. What causes the crackling sound we hear as we wear a cardigan?

25. How is ultrasound used in medical and other sciences?

IV. Answer the following in brief:

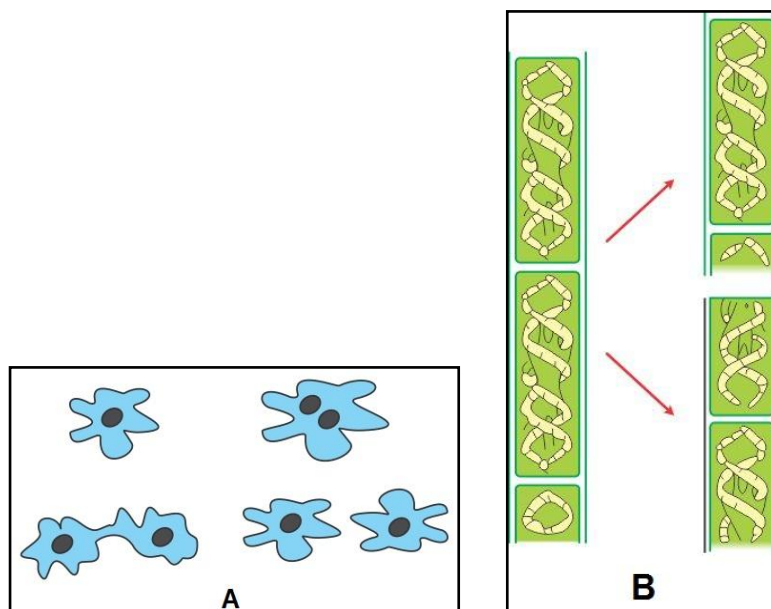
[20]

26. (a) Give two examples each of strong acids and bases.

(b) State the differences between acids and bases.

27. What is meant by growth? Describe the stages of growth.

28. Observe the figures carefully and answer the questions which follow.



(a) Which method of reproduction is shown in figures A and B?

(b) Explain the methods and give one example of each.

29. Write any two points for the following:

(a) Causes of soil pollution

(b) Measures for protecting soil

30. Describe the construction of a thermos flask.