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# COMMON HALF YEARLY EXAMINATION - 2023

## Std - VIII

## SCIENCE

Time : 2.30 Hours

Marks:100

12 x 1 = 12

I. Choose the correct answer:

- Which of the following liquids has more viscosity?  
a) Grease                      b) water                      c) coconut oil                      d) ghee
- The spherical mirror used as a rear view mirror in the vehicle is  
a) concave mirror                      b) convex mirror                      c) plane mirror  
d) none of the above
- The process of converting a liquid into a solid is called .....  
a) sublimation                      b) condensation                      c) freezing                      d) deposition
- Which of the following may be caused by noise?  
a) Irritation                      b) Stress                      c) Nervousness                      d) all the above
- Symbol of Mercury is  
a) Ag                      b) Hg                      c) Au                      d) Pb
- Aerated water contains  
a) air                      b) oxygen                      c) carbon di oxide                      d) nitrogen
- Cathode rays are made up of  
a) neutral particles                      b) positively charged particles  
c) negatively charged particles                      d) none of the above
- Permanent hardness of water is due to the presence of .....  
a) sulphate and chlorides                      b) dust particles  
c) carbonates and bicarbonates                      d) other soluble particles
- ..... shows both living and non living characteristics.  
a) protozoa                      b) virus                      c) bacteria                      d) fungi
- One of the following is an edible mushroom.  
a) polyporus                      b) agaricus                      c) penicillium                      d) aspergillus
- Cockroach moves with the help of its  
a) leg                      b) bone                      c) muscular foot                      d) whole body
- ..... are the chemical substances, secreted by endocrine glands.  
a) Hormones                      b) Enzymes                      c) Proteins                      d) Fatty acids

II. Fill in the blanks:

5 x 1 = 5

- The solid angle is measured in steradian (sr)
- ..... is a device that protects building from lightning strike. lightning arrester
- ..... is the basic material to manufacture urea. Ammonia
- Wasp sting contains alkaline substance
- The largest cell is egg of an Ostrich

III. True or false. If false correct the statement:

5 x 1 = 5

- A body will sink if the weight of the body is greater than the buoyant force. True
- In parallel circuit, current remains the same in all components. false [voltage]
- A chemical reaction is a temporary reaction. false [Permanent]
- Yeast is used in the large scale production of alcohol. True
- Cardiac muscle is a voluntary muscle. false  
involuntary



VIII-SCI  
5 x 1 = 5

## IV. Match the following:

23. a) Universal solvent  
b) hard water  
c) Boiling  
d) Sterilization  
e) Sewage

- Water pollutant e  
- Kills germs c  
- Ozonisation d  
- Water a  
- Stomach ailments b

10 x 2 = 20

## V. Answer any 10 questions:

24. Define - Ampere  
25. Name two instruments which help to measure the pressure of a fluid.  
26. State the Snell's law of refraction.  
27. What are the applications of conduction in our daily life.  
28. A sound wave travel 2000m in 8s. What is the velocity of the sound.  
29. Mention any three compound that exist in liquid state.  
30. What is pollution?  
31. Why does the fish die when it is taken out of water?  
32. Write the properties of anode rays.  
33. What is a neutralization reaction?  
34. What are antibiotics?  
35. Write any two economic importance of fungi.  
36. Mention the function of "Alveoli".  
37. What is cranium?  
38. List out the changes which occur during puberty?

8 x 4 = 32

## V. Answer any 8 questions:

39. Mention any three ways of minimising friction.  
40. Give two applications of a concave and convex lens.  
41. Explain the working of thermos flask.  
42. What steps should be taken to reduce the effect of noise pollution.  
43. Give reason for the following  
a) Sodium and potassium are stored in kerosene.  
b) Mercury is used in thermometers.  
44. Balance the following chemical equation.  
a)  $\text{Na} + \text{O}_2 \rightarrow \text{Na}_2\text{O}$   
b)  $\text{Ca} + \text{N}_2 \rightarrow \text{Ca}_3\text{N}_2$   
c)  $\text{N}_2 + \text{H}_2 \rightarrow \text{NH}_3$   
d)  $\text{CaCO}_3 + \text{HCl} \rightarrow \text{CaCl}_2 + \text{CO}_2 + \text{H}_2\text{O}$   
45. What are the methods of removing hardness of water?  
46. What are the uses of acids?  
47. How microorganisms are useful in the field of medicine?  
48. Write the difference between gymnosperm and angiosperm.  
49. Draw the structure of human eye and label its parts.  
50. Explain the nutritional needs of adolescence in brief.

3 x 7 = 21

## VI. Answer in detail.

51. a) Write a short note on different types of clocks. - (OR)  
b) Explain three ways of charge transfer.  
52. a) Explain the environmental effects of chemical reactions. (OR)  
b) What are the effects of acid rain? How can we prevent them?  
53. a) i) Why microorganisms are essential for agriculture. (OR)  
ii) Write the names of any three protozoans.  
b) i) Tabulate the differences between aerobic and anaerobic respiration.  
ii) State different type of tissues.