

HALF YEARLY EXAMINATION, 2024-25

SCIENCE

Time – 3:00 Hrs.

Class – VII

M.M. : 80

Date – 11.09.2024 (Wednesday)

Name of the student _____ Section _____

GENERAL INSTRUCTIONS:

1. Read all the instructions given below carefully and marks allotted to each question.
2. There are two sections in this question paper – Section A and Section B.
3. Answer all the questions from section A.
4. Section B - answer all questions from Q.5, any six from Q.6 and any six from Q.7.
5. Draw diagram wherever required.

SECTION - A

Q.1 Choose the correct answer from each of the following: (8x1=8)

- i) Nitrogen is an essential nutrient for plants growth. But farmers who cultivate crops as gram, peas, moong do not apply nitrogenous fertilizers during cultivation. An organism which traps nitrogen from the atmosphere and convert it into a soluble form is –
a) Cuscuta b) Rhizobium c) Yeast d) Amoeba
- ii) Which of the following represents the correct sequence of nutrition ?
a) Egestion → Digestion → Ingestion → Absorption → Assimilation
b) Ingestion → Digestion → Absorption → Assimilation → Egestion
c) Digestion → Ingestion → Absorption → Assimilation → Egestion
d) Absorption → Assimilation → Digestion → Ingestion → Egestion
- iii) Plants do not grow well if the soil is either too acidic or too basic. A sample of soil solution was taken and it was tested with pH indicator. The reading on pH scale was found to be 5.6. What can you say about the nature of soil solution?
a) neutral b) basic c) acidic d) both (a) and (b)
- iv) How does an amoeba ingest food?
a) Through mouth b) Through gills c) Through skin d) Using pseudopodia
- v) What prevents falling of mercury in clinical thermometer after removing from mouth?
a) The bulb b) The glass tube c) The kink d) The scale
- vi) Which of these is a physical change?
a) A flower turning into fruit b) Melting of ice
c) Photosynthesis in plants d) Burning crackers

Assertion Reason - The following questions consists of two statements. Assertion (A) and Reason (R). Answer the questions by selecting appropriate option given below.

- a) Both A and R are true and R is correct explanation of A
- b) Both A and R are true and R is not correct explanation of A
- c) A is true, R is false
- d) A is false, R is true

vii) Assertion (A) - Dolphins and whales keep coming to the water surface.

Reason (R) - Dolphin and whales come to the surface for breathing.

viii) Assertion (A) - Conversion of water into steam is a physical change.

Reason (R) - New substance is formed when water changes into steam.

Q.2 Fill in the blanks. (4x1=4)

- a) Bile juice produced by liver gets stored in a sac-like structure called _____.
- b) The heat from the sun comes to us by the process of _____.
- c) A change in which a substance undergoes a change in physical properties is called _____ change.
- d) Tiny openings in insects through which gases enter and leave are called _____.

Q.3 Correct the following statements. (4x1=4)

- a) The mode of nutrition in which organisms live together and share shelter and nutrients is called saprotrophic nutrition.
- b) Saliva breaks down starch into amino acids.
- c) When an ant bites, it injects acetic acid into the skin.
- d) Rusting is an example of physical change.

Q.4 Write one word answer: (4x1=4)

- a) The mode of heat transfer which takes place in liquid and gases is called _____.
- b) Term for the special type of substances which are used to test whether substance is acidic, basic or neutral.
- c) When acetic acid is added to baking soda bubbles are formed due to evolution of _____ gas.
- d) A muscular sheet forming floor of the chest cavity.

SECTION-B

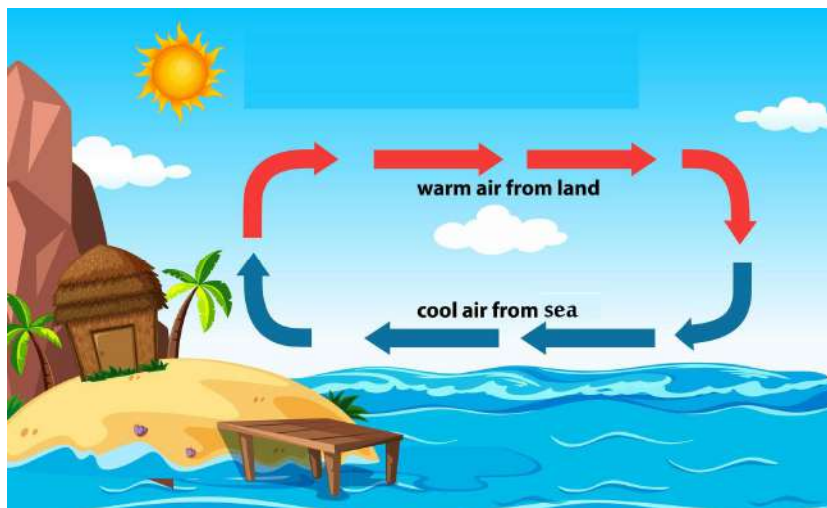
Q.5 Very short answer type questions. (6x2=12)

- a) Write any two advantages of growing fruits and vegetables in green house. (2)
- b) Why do we get instant energy from glucose? (2)
- c) Convert 25 degree Celsius to degree Fahrenheit. (2)
- d) How would you verify whether distilled water is acidic, basic or neutral? (2)
- e) Explain how burning of candle is both physical and chemical change. (2)
- f) Why do we sneeze when we inhale dust laden air? (2)

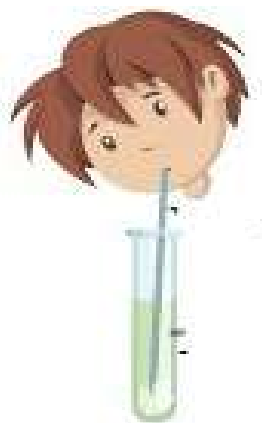
Q.6 Short answer type questions. (ANY 6) (6x3=18)

- a) Write any three points of difference between saprotroph and parasite. (3)

- b) What are villi? Write their location and function. (1+1+1)
- c) Define the three modes of heat transfer and write one example of each mode (1+1+1)
- d) What is neutralization? Write a word/chemical equation to show the process. Explain it with an example from our daily lives. (1+1+1)
- e) Differentiate between physical and chemical change. (Any 3 points) (3)
- f) Name one organism which respire anaerobically. What is its use in beverage industry? (1+2)
- g) Study the picture given below and answer the following questions.



- i) Identify the given phenomenon. (1)
- ii) Explain how is it formed? (2)
- h) The picture given below shows a boy exhaling air into a test tube containing lime water.



- i) What are you likely to observe in the change of lime water? (1)
- ii) Give reason for the change you will observe. What type of change is it? (1+1)

Q.7 Long answer type questions. (ANY 6) (6x5=30)

- a) How would you test for the presence of starch in leaves? Explain with the help of a diagram. (5)
- b) i) Write any 1 similarity and 2 differences between nutrition in Amoeba and human beings. (1+2)
- ii) Write the function of incisors and canines teeth in human beings. (2)
- c) i) What is the use of clinical thermometer? What is its range of measuring temperature? (1+1)
- ii) Write three precautions you would take while using a clinical thermometer. (3)

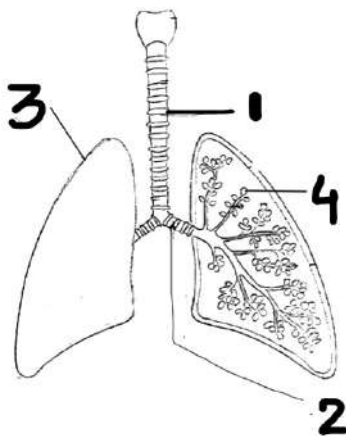
- d) i) Write any 3 differences between acids and bases. (3)
 ii) Write the effect of red litmus on hydrochloric acid and sodium hydroxide. (2)
- e) The diagram below shows a solution of copper sulphate (blue in colour) into which a piece of blade is dropped. After sometime the solution turns green. (1+1)



- i) Identify the type of change. Give reason for your answer. (1+1)
 ii) Why did the solution turn green? (1)
 iii) Write the word/chemical equation to show the process. (2)

OR

Study the diagram given below and answer the questions that follow:



- i) Label parts 1, 2, 3, 4. (2)
 ii) Write the function of part 4. (1)
 iii) What is breathing rate? Why do we breathe faster after a heavy exercise? (1+1)
- f) Write 3 point of difference between aerobic and anaerobic respiration. We get relief from cramps after a hot water bath or massage. Explain. (3+2)
- g) **Read the following passage and fill in the blanks from i to v.** (5)
 During inhalation, the ribs move (i) _____ and (ii) _____ and diaphragm moves (iii) _____. This movement (iv) _____ space in our chest cavity and air (v) _____ into the lungs.

