

**ATOMIC ENERGY EDUCATION SOCIETY
HALF YEARLY EXAMINATION (2018-19)**

**CLASS : VII
SUBJECT : SCIENCE**

DATE OF EXAM: 25-09-18

**TIME : 3 HOURS
MARKS : 80**

General Instruction : All questions are compulsory.

QI Choose the correct option for the questions given below: (10x1=10)

1. Which of the following pair of teeth differ in structure but are similar in function?

- | | |
|-------------------------|--------------------------|
| a) canines and incisors | b) molars and premolars |
| c) incisors and molars | d) premolars and canines |

2. Which of the following statements is/are correct?

- i) All green plants can prepare their own food.
- ii) Most animals are autotrophs
- iii) Carbon di oxide is not required for photosynthesis
- iv) Oxygen is liberated during photosynthesis

Choose the correct answer from the options given below:

- | | | | |
|-------------|------------|---------------|-------------|
| a) i and iv | b) only ii | c) ii and iii | d) i and ii |
|-------------|------------|---------------|-------------|

3. Wool fibre cannot be obtained from which of the following?

- | | | | |
|---------|----------|-----------|---------|
| a) Goat | b) Llama | c) Alpaca | d) Moth |
|---------|----------|-----------|---------|

4. A beggar wrapped himself with a few layers of news papers on a cold winter night.

This helped him to keep himself warm because:

- a) friction between layers of news paper produces heat
- b) air trapped between the layers of news paper is a bad conductor of heat.
- c) news paper is a conductor of heat.
- d) news paper is at a higher temperature than the temperature of the surroundings

5. Which of the following is an acid base indicator?

- | | | | |
|------------|---------------|-------------|----------------|
| a) vinegar | b) lime water | c) turmeric | d) baking soda |
|------------|---------------|-------------|----------------|

6. During galvanization which metal is coated over iron?

- a) zinc b) copper c) aluminium d) magnesium

7. Which of the following best describes the climate of a desert?

- a) hot and humid b) dry and humid c) hot and dry d) hot and wet

8. The warning of a cyclone is issued:

- a) 48 hours in advance b) 24 hours in advance
c) 6 hours in advance d) 12 hours in advance

9. Soil conservation measures are mainly aimed at protecting which of the following?

- a) plants b) top soil c) sub soil d) parent rock

10. The enzyme present in saliva converts:

- a) fats into fatty acids and glycerol b) starch into simple sugars
c) proteins into amino acids d) proteins into ammonia

Q II Fill In the Blanks

(10x1 =10)

1. The process of breakdown of food into simpler substances is called _____.
2. The openings present on the surface of the leaves are called _____.
3. A violent tornado can travel at the speed of about _____.
4. Silkworms are _____ of silk moth.
5. _____ wool is common in Tibet and Ladakh.
6. _____ acid is present in curd.
7. Grinding of wheat grains changes its size. It is an example of _____ change.
8. In solids, heat is transferred by _____ method.
9. Cotton is grown in _____ soil.
10. Removing the fleece of the sheep along with a thin layer of skin is called _____.

QIII Answer the following in one or two sentences.

(8x2=16)

1. A person got her gall bladder surgically removed as he was diagnosed with stone in her gall bladder. After surgery she faced problem in digestion of certain food items when consumed in bulk. Which type of food items would they be? Give reason for your answer.
2. Explain land breeze.
3. Suggest two methods to prevent rusting.
4. Write any four elements of weather.
5. What is a thunderstorm?
6. Write two factors due to which winds blow over the earth.
7. What are insectivorous plants? Give one example.
8. a) Four solutions are kept in four different test tubes. Their nature is given in the table.

A piece of red litmus paper is dropped in each of the test tubes. Indicate the colour change in each test tube in the table given below.

TEST TUBE	NATURE OF SOLUTION	CHANGE IN COLOUR OF RED LITMUS PAPER
A (MILK IN WATER)	NEUTRAL	
B (BAKING POWDER IN WATER)	BASIC	
C (VINEGAR IN WATER)	ACIDIC	
D (GLUCOSE IN WATER)	NEUTRAL	

QIV Answer the following in three to four sentences.

(8x3=24)

1. Write three differences between a laboratory thermometer and clinical thermometer.
2. What is symbiotic association? Explain this association in lichens.
3. a) At a camp site there are tents of two shades one made with black fabric and the other with white fabric. Which one will you prefer for resting on a hot summer afternoon?
Give reason for your choice. Would you prefer the same tent during winter?
b) While constructing a house in coastal area windows should preferably face sea beach. Why?
4. Write a word equation for photosynthesis and also draw a diagram to represent this process.
5. Describe an activity to show that high speed winds are accompanied by low pressure.

(Draw diagram)

6. a) While playing in the garden a child was stung by a honey bee and was in great pain. Immediately the child went home and his mother applied baking soda on the affected area and then took him to the doctor.
- What could be the reason for this burning pain?
 - Why did his mother apply baking soda on affected area?
- b) Why do some farmers add quick lime to their fields?
7. A student took a solution of copper Sulphate in a beaker and put clean iron nail into it and left it for about an hour.
- What changes do you expect?
 - Write a word equation for this change.
8. Write three differences between Physical and chemical change.

Q V Answer the following in five to seven sentences. (4x5=20)

- Explain the process of nutrition in amoeba with the help of a neat labeled diagram.
- Explain various steps for processing fibres into wool. (five steps)
- Explain any three adaptations of polar bear which help it to survive in polar climate.
 - What advantage do the following animals derive from the given adaptations?
 - sticky pads in red eyed frog
 - long large beak in bird toucan.
- During a field trip, some students visited an agricultural farm and saw a few birds eating earthworms. They enjoyed the scene and then they started picking and killing the earthworms for pleasure. Seeing the crowd of students in a corner, the teacher rushed to see the matter and objected to their action. Neha one of the students asked the reason.

Teacher explained that an earthworm living in the soil is very beneficial for farmers.
 - Mention the importance of earthworms in the soil.
 - What are the values shown by Neha.
 - Write three differences between sandy soil and clayey soil.

