



Grade 8

Science

U01- Unit 1-Importance of  
microorganisms

Underline the most suitable answer

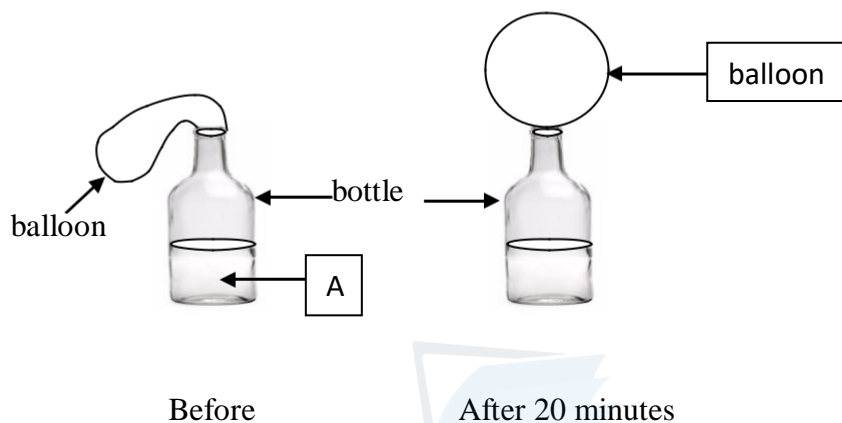
- 1) The unicellular organism present mainly in coconut water left open for three days is
  - i) Bacteria
  - ii) Yeast
  - iii) Paramecium
  - iv) Algae
  
- 2) An infectious disease caused by viruses,
  - i) Pityriasis
  - ii) Leprosy
  - iii) Dengue
  - iv) Malaria
  
- 3) The microbial activity on food high in sugar is known as,
  - i) Putrefaction
  - ii) Rancidity
  - iii) Decomposition
  - iv) Fermentation
  
- 4) Out of the following statements select the most suitable statement regarding micro - organism?
  - i) A hand lense can be used to observe micro - organisms
  - ii) Micro - organisms are uni - cellular organisms
  - iii) These organisms cannot be seen to the naked eye
  - iv) All the micro - organisms cause diseases to man
  
- 5) The temperature range for the microbial growth is,
  - i)  $20^{\circ}\text{C} - 30^{\circ}\text{C}$
  - ii)  $25^{\circ}\text{C} - 35^{\circ}\text{C}$
  - iii)  $25^{\circ}\text{C} - 30^{\circ}\text{C}$
  - iv)  $20^{\circ}\text{C} - 30^{\circ}\text{C}$
  
- 6) Which is an infectious disease caused to animals by micro - organisms?
  - i) Blight
  - ii) Putrefaction
  - iii) Mastitis
  - iv) Mosaic disease
  
- 7) Making jam is one of the fruit preserving method which factor is controlled in the above method?
  - i) Water
  - ii) Temperature
  - iii) pH range
  - iv) Substrate

State whether the following statements are true ( ✓ ) or false ( x )

- 08) The scientist Antonie Van Leeuwenhoek observed microorganisms for the first time. ( )
- 09) Malaria is a bacterial disease. ( )
- 10) Chlamydomonas is unicellular microorganisms ( )

### PART III

1)



The above activity is done by grade 8 students to observe the activity of micro - organisms.

- a) Write the way of preparing the above solution "A"
  - b) State two other observations of this activity.
  - c) Name two hostile environments that microorganisms can live.
- 2)
- 1) State 4 applications of micro- organisms.
  - 2) Briefly explain the way that micro- organisms contribute to the well - being of the environment.
  - 3) Write 3 harmful effects of micro organisms
- 3)
- 1) Name an infectious disease that caused to man by following micro- organisms.
    - i) Virus
    - ii) Bacteria
    - iii) Protozoa
  - 2) State 2 infectious diseases caused to animals by micro-organisms.
  - 3) State 2 infectious diseases caused to plants by micro-organisms.



Grade 8

Science

Unit 2 - Animal  
Classification

Underline the most suitable answer

- 1) The animal group with a muscular foot is  
 i) Mollusca ii) Arthropoda  
 iii) Cnidaria iv) Annelida
- 2) The invertebrate group which doesn't show bilateral symmetry is  
 i) Annelida ii) Cnidaria  
 iii) Mollusca iv) Pisces
- 3) Which animal correctly corresponds with the relevant animal group?  
 i) Salamander - Reptilia ii) Dolphin - Pisces  
 iii) Loris - Mammalia iv) Tortoise - Amphibia
- 4) Select the answer that includes only vertebrates  
 i) Leech, Snail, Dragonfly, Python  
 ii) Cock, Dog, Python, Bat  
 iii) Spider, Sea anemone, Dragonfly, Snake  
 iv) Bat, Beetle, Sea anemone, Butterfly
- 5) Has mammary glands  
 Skin has sweat glands  
 Posses an external ear  
 Above features are present in the group of,  
 i) Aves ii) Mammalia iii) Reptilia iv) Amphibia
- 6) What is the vertebrate group which shows metamorphosis?  
 i) Amphibia ii) Arthropoda iii) Mollusca iv) Aves
- 7) This is not a correct statement above reptilian group?  
 i) Breath using lungs ii) Possess a dry skin with scales  
 iii) Skin is glandular iv) Use limbs for locomotion
- 08) A segmented worm is,  
 i) Cobra ii) Viper iii) Nereis iv) Snail
- 09) This animal does not belong to the group of Aves?  
 i) Bat ii) Swan iii) Owl iv) Parrot
- 10) An amphibian which does not possess limbs is,  
 i) Toad ii) Frog iii) Ichthyophis iv) Salamander

PART II

1) Answer the following questions by using given pictures.

A



B



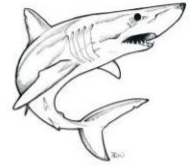
C



D



E



- Classify the above animals into vertebrate and invertebrates.
- Which type of symmetry can be observed in animal "A"?
- Name an animal that possesses an exoskeleton.
- Who is having a stream lined body shape?
- What is meant by animal classification?
- Write two uses of classifying animals.

2) Fill in the blanks with suitable words.

- Mammalian skin has ..... glands
- Aves breathe using .....
- ..... and ..... groups are having stream lined body shape.
- Amphibians do not have ..... in the skin.
- Group of ..... possess eyes without eye lids.
- Slug belongs to the group of .....
- Cnidarians have two forms as ..... and .....
- The coral is an example for the ..... form of cnidarians.

3) If the following statements are correct put a tick (✓) and if wrong put a cross (x)

- Arthropods are bilaterally symmetrical. ( )
- Annelids show metamorphosis ( )
- Cnidarians are having special tentacles with cnidocytes ( )
- Molluscs are having muscular foot ( )
- All Arthropods are not having jointed appendages ( )



# Nalanda VidyalayaA– Colombo 10 VIDYALAYA

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NALANDA VIDYALAYA  
Unit Test Project

NALANDA VIDYALAYA

Grade 8

Science

Unit 3 - Diversity and  
functions of plant  
parts.

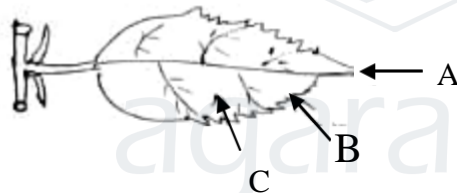
Underline the most suitable answer.

- 1) The plants which grow in the arid zone have adapted to reduce transpiration from their leaves. Reduced leaves is one of the adaptation in some plants. Select the above type of plant?  
i) Kaneru      ii) Kasa      iii) Heerassa      iv) Aloe

- 2) Which plant has vegetative stem?  
i) Begonia      ii) Kithul      iii) Potatoes      iv) Venival

- 3) Which plant has aerial roots?  
i) Rath Kadol      ii) Vanilla      iii) Delia      iv) Pepper

04)



According to the above diagram, which answer shows A, B, and C in correct order?

- i) Leaf tip, leaf blade, leaf margin  
ii) Leaf tip, leaf margin, leaf blade  
iii) Leaf stalk, leaf margin, leaf blade  
iv) Lead stalk, leaf margin, leaf veins
- 5) What is the incorrect statement regarding plant stems?  
i) Gotuklola is a climbing stem.  
ii) Sugar cane is a storage stem.  
iii) Ginger has underground stems.  
iv) Cactus is a photosynthetic stem.
- 6) Spiral leaf arrangement can be observed in,  
i) Anoda      ii) Kanda      iii) Guava      iv) Rukkaththana
- 7) This is not a plant that store food in the top root?  
i) Carrot      ii) Beet root      iii) Radish      iv) Sweet potato

- 8) Select the answer with the correct type of roots and the plant?
- Respiratory roots - orchid
  - Aerial roots - beetle
  - Stilt roots - beetle
  - Adventitious roots - pepper
- 9) Select the function of aerial roots
- Absorb air from the atmosphere
  - Absorb moisture from the atmosphere
  - To store food
  - Support the stem
- 10) A leaf fixes to the stem by,
- Mid rib
  - Petiole
  - internode
  - Margins

## PART II

### Answer all questions.

- What do you mean by plant diversity?
  - Write the basic function of stem, root and leaf?
  - Write two examples for plants which show following adaptations?
    - Leaves produce new plants through asexual reproduction.
    - Plants store food in aerial stems.
    - Plants reproduced by suckers
    - Plants having prop roots
    - Plants having stilt roots
- Fill in the blanks by using suitable words.
  - Roots which arise from other parts of the plants are known as .....
  - Banyan is having ..... roots
  - Some underground ..... show the function of perennation.
  - Guava is having ..... roots.
  - Radish is having ..... roots.
- What do you mean by leaf arrangement?
  - State two types of leaf arrangements.
  - What is meant by transpiration?
  - Write an adaptation of following plants that helps to minimize transpiration.
    - Cactus
    - Navahandi
    - Temple tree



Grade 8

Science

Unit 4 - Properties of  
Matters

Underline the most suitable answer

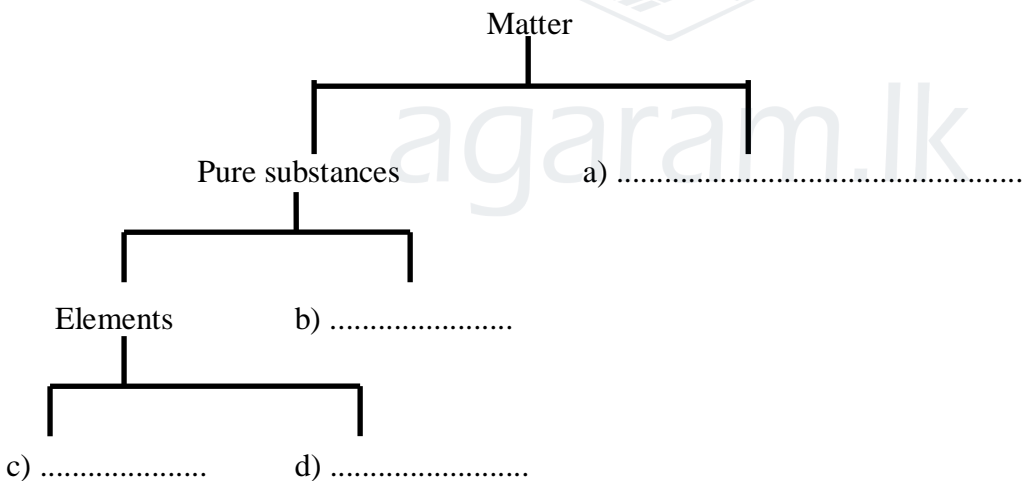
- 1) Which chemical in the laboratory is a solid with yellow colour?
  - i) Calcium carbonate
  - ii) Sulphur
  - iii) Copper Sulphate
  - iv) Condys
  
- 2) Out of these, what is a property of metals?
  - i) Being a poor heat conductor
  - ii) Having a low melting point
  - iii) Brittleness
  - iv) Being a heat and electric conductor
  
- 3) What are the substances with definite properties which cannot be further divided by physical or chemical methods?
  - i) Elements
  - ii) Pure substances
  - iii) Compounds
  - iv) Matter
  
- 4) Drops of wax were kept in equal distance on rods made out of copper, iron, glass, ebonite one end of the rod is heated by a Bunsen burner. So that the wax drops will drop when heated. In which the wax drops will drop first?
  - i) Glass
  - ii) Iron
  - iii) Ebonite
  - iv) Copper
  
- 5) What are the elements in Calcium Carbonate?
  - i) Calcium, Carbon, Oxygen
  - ii) Calcium, Carbon, Hydrogen
  - iii) Carbon, Oxygen, Hydrogen
  - iv) Carbon, Sodium, Calcium
  
- 6) Select the correct statement
  - i) Density is the volume of unit mass
  - ii) Distilled water means cooled water after boiling up to the boiling point.
  - iii) Density is a constant value for pure substances.
  - iv) The purity of solids, liquids and gases cannot be determined by finding their densities.
  
- 7) What is the liquid element at room temperature?
  - i) Iron
  - ii) Mercury
  - iii) Lead
  - iv) Zinc

- 8) This is an instance where gases are used in day today life?
- i) Inflating tyres      ii) Hydraulic jack      iii) Thermometer      iv) To cut glass
- 9) Petrol leaking of a vehicle can be smelled to our nose even from some distance. The scientific principle which explains this phenomenon is,
- i) Discontinuous nature of liquids  
 ii) Discontinuous nature of solids  
 iii) Discontinuous nature of gases  
 iv) Discontinuous nature of solids and liquids
- 10) Select the correct statement
- i) When the surrounding pressure increases, the boiling point decreases.  
 ii) The boiling point of pure water is  $0^{\circ}\text{C}$   
 iii) The boiling point of liquids is a constant value  
 iv) The boiling point is a fixed temperature at which a solid turns into a liquid

## Part II

Answer all questions

01) Matter can be divided as follows.



- i) Name a, b, c and d
- ii) Give 2 examples for elements
- iii) Write a substance which is having following physical property.
- a) Metallic lustre      b) Brittleness  
 c) Elasticity      d) Electrical Conductivity
- iv) Write 3 properties of metals



2) i) Explain the following statement scientific by using particulate nature of matter.

- a) A solid has a definite shape
- b) A gas hasn't a definite volume
- c) Liquids cannot be compressed easily

ii) Name the following elements.



A

B

C

D

3) A group of grade 8 students have done an experiment with their teacher at the lab using Nitrogen dioxide gas as follows.



- i) What is the observation in the above activity?
- ii) What is the reason for the above observation?
- iii) Why Nitrogen dioxide gas is used in it? Write a special characteristic of it?
- iv) Draw the pattern of organization of particles in the Nitrogen dioxide gas.



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