



Royal College - Colombo 07

Grade 8 – First Term Test – April 2019

Science – I

Name :- Grade :- Index number:-.....

- Answer all questions.
- Select the correct or most suitable answer for each of the following questions from (1) to (20)
- Underline the correct answer.

(1) The unicellular fungi is,

- (1) Yeast (2) Mucor (3) Amoeba (4) Paramecium

(2) The beneficial effect of micro-organisms for human is,

- (1) Changing the nature of non-living surface due to the growth of micro-organisms on it.
 (2) Decomposition of dead animal and plant materials.
 (3) The food becoming unsuitable for consumption

(4) Spreading diseases among plants and animals.

(3) The micro-organism group which can be seen in a sample of coconut water, which is exposed to atmosphere and observed under microscope is,

- (1) Clamydomonas (2) Virus
 (3) Yeast (4) Paramecium

(4) The most suitable temperature range for the growth of micro-organisms is,

- (1) 20 °c – 25 °c (2) 25 °c – 30 °c
 (3) 0 °c – 50 °c (4) more than 50 °c

(5) What occurs during decaying of organic matter?

- (1) Using micro-organisms to control pests.
 (2) Changing nature of food unsuitable for consumption by micro-organisms.
 (3) Decomposition of dead animal and plant materials by micro-organisms.
 (4) Causing damages to economy by growing on non-living surfaces.

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- (6) The organism which can be subjected to rabies due to infection of micro-organisms is,
 (1) Parrot (2) Squirrel (3) Lizard (4) Rat snake
- (7) The organism which secrete poison by chnidocytes to paralyze the pray is,
 (1) Spider (2) Caterpillar (3) Snake (4) Hydra
- (8) The group of organisms which has an exoskeleton over the body is,
 (1) Mollusca (2) Arthropoda (3) Reptilia (4) Mammalia
- (9) Select the answer which included the group of organisms having streamlined body shape.
 (1) Piscase, Aves (2) Aves, Reptilia
 (3) Reptilia, Piscase (4) Arthropoda, Annelida
- (10) The group of organisms which show metamorphosis is,
 (1) Mammalia (2) Aves (3) Piscase (4) Amphibia
- (11) Select the answer which includes mammals only,
 (1) Dolphin, bear, duck billed platypus, blue whale
 (2) Penguin, duck billed platypus, kiwi, loris
 (3) Bear, dolphin, penguin, ulama
 (4) Penguin, ulama, gorilla, blue whale.
- (12) Not a function performed by underground stems,
 (1) Storage of food (2) Perinnation
 (3) Vegetative propagation (4) Photosynthesis
- (13) Not an example for propagative roots,
 (1) Curry leaves (2) Guava (3) Uguressa (4) Beli
- (14) The leaf with a tendril at the tip of it is,
 (1) Bo (2) Koboleela
 (3) Niyangala (4) Temple tree

- (15) Standard unit of measuring density is,
- (1) Kilogrammes per cubic meter
 - (2) Grammes per cubic centimeter
 - (3) Kilogrammes per cubic centimeter meter
 - (4) Grammes per cubic meter
- (16) Plants with underground stems are,
- | | |
|------------------------------------|----------------------------------|
| (1) Ginger, corn, leeks. | (2) Corn, turmeric, sweet potato |
| (3) Sweet potato, turmeric, potato | (4) Potato, turmeric, ginger |
- (17) Elements contained in water is,
- | | |
|----------------------|------------------------|
| (1) Carbon, Oxygen | (2) Oxygen, Nitrogen |
| (3) Hydrogen, Oxygen | (4) Nitrogen, Hydrogen |
- (18) Particulate nature of matter was first put forward by,
- | | |
|---------------------|------------------|
| (1) Democritus | (2) Aristotle |
| (3) Galileo Galilei | (4) Issac Newton |
- (19) A physical property which cannot be used to determine the purity of a substance is,
- | | |
|-------------------|-------------------|
| (1) Density | (2) Expansion |
| (3) Melting point | (4) Boiling point |
- (20) Select the correct statement.
- (1) Boiling point decrease when the pressure increase.
 - (2) There in no relationship between pressure and boiling point.
 - (3) Boiling point of water at sea level is greater than 100 °c.
 - (4) Boiling point of water is less than 100 °c at a mountain top.

Marks = 2 x 20

Total = 40 marks.



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Grade 8 – First Term Test – April 2019

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Science – II

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Name :- Grade : -..... Index number:-.....

- **Question number 01 is compulsory. Answer 05 questions including the first question.**

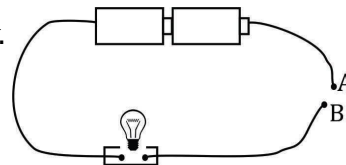
(1) A group of student in grade 8, sprayed few drops of water on a slice of bread and kept it few days for the growth of micro-organisms. Then they observed a part of it under the compound microscope.

- Name the group of micro-organisms that they observed under compound microscope. (01 M)
- Define micro-organisms. (01 M)
- Name the person who observed micro-organisms for the first time. (01 M)
- Describe what food spoilage is, (01 M)
- Name two factors which are suitable for the growth of micro-organisms. (02 M)
- Name the activity of micro-organisms on food items containing following types of nutrients.
 - Lipid containing food -
 - Sugar containing food -
 - Protein containing food - (03 M)
- Write two methods of preventing the growth of micro-organisms on food items. (02 M)
- Using micro-organisms to control pests that cause damage to the crops is termed as, (01 M)
- Name two substances formed during the reaction between sugar, warm water and yeast. (02 M)
- Name two groups of micro-organisms which causes diseases to humans. (02 M)

- (2) You were engaged in a field trip to observe the diversity of leaves and the leaf arrangement patterns, of plants. Answer the following questions using the knowledge that you gained from the field trip.
- (i) What is meant by 'leaf arrangement' of plants? (01 M)
- (ii) Write one advantage of different leaf arrangement patterns? (01 M)
- (iii) Write the method of absorbing water and necessary gas in to the plant for 'photosynthesis'.
- a) Water –
- b) Gas – (02 M)
- (iv) Evaporation of water from the plant body is called as "transpiration".
- a) Name the main organ through which transpiration occurs. (01 M)
- b) Write one use of transpiration for the plant body. (01 M)
- c) Write two adaptations that can be seen in 'xerophytic plants' to minimize transpiration with relevant examples. (02 M)
- (v) Write one example for a plant which store water in leaves. (01 M)
- (vi) Write two examples for plants which show vegetative propagation by plant leaves. (02 M)
- (3) Grouping animals considering their common characters is called as classification of organisms. Animals can be divided into two main groups as vertebrates and invertebrates. Name the most suitable vertebrate or invertebrate group for the features given below.
- (i) The phylum which include highest number of organisms-
- (ii) The phylum which include animals with radial symmetry-
- (iii) The phylum with segmented worms-
- (iv) The group which consist of organism who respire through moist skin, mouth, lungs and gills –
- (v) The group of organisms with a body having scales and eyes without eyelids-
- (vi) The group having soft body which is covered by a moist body cover -
- (vii) The group having a dry skin without glands –
- (viii) The group which posses sweat glands, sebaceous glands and mammary glands–
- (ix) The group of organisms with joined appendages –

- (x) The group with a skin covered by feathers –
 (xi) Group which has external ears – (1 x 11)

(4) A group of grade 8 students set an apparatus to check the properties of metals and non-metals. Diagram of that apparatus is given below.



- (i) Which property of matter can be tested using the above apparatus? (01 M)
 (ii) Write the observations separately when following substances are placed in between terminals A and B. (03 M)
- Iron Nail –
 - Carbon rod –
 - Sulphur –
- (iii) Mention the suitable physical property for the following descriptions.
- The temperature at which solid turns in to a liquid –
 - The rough or smooth nature of the surface of a substance –
 - Ability to drawn into thin wires without breaking by applying a force –
 - Mass of a unit volume of particular substance –
 - Increasing the length by applying a force and becoming into original shape after the force –
 - Increasing the volume without increasing the mass when increase the temperature of matter –
 - Breaking into pieces when hammering - (1 x 7 = 7M)

(5) Sounds that we hear in the environment can be classified as natural and artificial sounds. Sounds are produced by vibrating materials.

- (i) What are sources of sound? (01 M)
 (ii) What are the main types of sound sources that can be divided on the basis of the type of material that is vibrating to produce sound? Give one example for each category. (03 M)
- What is the quantity that affects to the 'difference of sound'? (01 M)
 - Name the unit which used to measure that quantity? (01 M)
- (iv) Describe the difference between the musical tones and noise. (01 M)
 (v) What is meant by musical therapy? (01 M)

- (vi) Mention the limits of hearing of human ear? (01 M)
- (vii) Name an animal which can hear higher frequencies than humans. (01 M)
- (viii) Explain the relationship between the length of the metal plates of the xylophone and their frequencies when producing sound by vibrating them. (01 M)
- (6) Shoot system and root system can be named as the two main systems of a plant. There are special functions performed by each of the above parts.
- (i) Name the main function performed by the stem as a part of the shoot system of a plant. (01 M)
- (ii) Some stems are adapted to perform special functions. Copy down the following table in your answer script and fill in the blanks. (04 M)

Function	Name of the stem	Example
1) Generation of new plants.		
2) Store food in areal stem		
3) Photosynthesis		
4) Act as a support to climb up		

- (iii) Anchoring the plant is one of the main functions of plant roots. Name the other main function of the plant roots. (01 M)
- (iv) What are adventitious roots? (01 M)
- (v) Name the special types of roots that can be seen in following plants. (04 M)
- a) Orchid -
- b) Banyan -
- c) Carrot -
- d) Pandanus -