



දෙවන වාර පරික්ෂණය - 09 ශේෂීය - 2024

Second Term Test - Grade 09 - 2024

Science I

02 Hours

Name / Index No.:

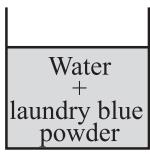
- Select most suitable answer for the questions from 1 - 20

01. Which of the following answer consist with unicellular and multicellure groups of microorganisms.
1. Fungi, Algae 2. Algae, Virus 3. Virus, Fungi 4. Fungi, Bacteria

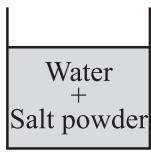
02. The technology used to removal of environmental pollutants using microorganisms is,
1. Bio - remediation 2. Bio - degradation
3. Bio - controlling 4. Bio - leaching

03. The place of formed a sharp clear image in the human eye is,
1. Eye lens 2. Blind spot 3. Yellow spot 4. Choroid layer

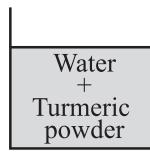
04. Given below are some mixtures



A



B

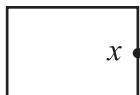


C

Which of the above are homogenous mixtures / mixture

1. A 2. B 3. A and B 4. A and C

05. Given below is an illustration of a force applying on an object



The point 'x' is known as

1. Magnitude of a force 2. Direction of a force
3. Point of application 4. Line of action

06. The correct symbols of elements Sodium, Copper, Iron respectively given in,
1. Na, Cu, I 2. S, K, Fe 3. Na, Cu, Fe 4. S, Cu, Fe

07. The answer contains an invasive plant and invasive animal species is,

1. Gandapana (Lantana), Mannawa (Clown knife fish)
2. Pathenium, Bandula Pethiya
3. Kuppamenia, Tank cleaner
4. Gandapana, Asoka Pethiya

08. The bicuspid valve located in human heart is

1. In between right atrium and right ventricle
2. In between left atrium and left ventricle
3. At the begining of pulmonery artery
4. At the begining of aorta

09. Which of the following is correct about an artery and a vein.

Artery	Vein
1. Blood flows towards the heart	Blood flows away from the heart
2. with valves	with out valves
3. with thick walls	with thin walls
4. walls with less elastic	walls with highly elastic

10. Consider the statements given below

A - If the Rhesus factor is present in one's blood he is considered as Rh+

B - A donor with Rh+ can donate blood to the recipient with Rh-

C - The type of blood of a person is determined by considering both blood group and the Rhesus factor.

1. only B
2. A and B
3. B and C
4. A and C

11. An artificial growth substance used to get fruits in the off season is

1. Cytocell
2. Indoleacitic Acid
3. Naphthaleneacitic Acid
4. Indolebuteric Acid

12. The locomotive appendage of snail is

1. Muscular foot
2. Pseudopodia
3. cillia
4. Flagella

13. Given below are some structures of a human ear

a - Eustachian tube

b - Tympanic membrane

c - Semi circuler canal

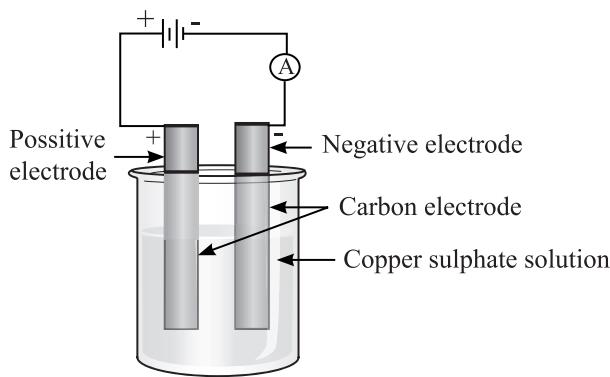
The structure /structures not contributes for hearing is

1. only a
2. only b
3. a and c
4. b and c

14. Not a feature that can be seen in plants in a montane forest.

1. with twist stems
2. Trees are stunted
3. with flat tree tops
4. leaves become thorns

Answer the question No 15 and 16 by using diagram given below.



15. Which of the following is an observation of above set up when electric current flows through it

1. Gas bubbles evolves at positive electrode and negative electrode turns into reddish brown
2. Gas bubbles evolves at negative electrode and positive electrode turns into reddish brown
3. Gas bubbles evolves at negative electrode and negative electrode turns into reddish brown
4. Gas bubbles evolves at positive electrode and positive electrode turns into reddish brown

16. What is the observation can be seen in A when using distilled water instead of copper sulphate solution for above setup.

1. Reading not change	2. Increase the reading
3. Decrease the reading	4. Reading becomes zero

17. "Weevils are originated from decayed saw dust". The most suitable answer for given statement is,

1. Theory of special creation	2. Theory of spontaneous generation
3. Theory of biochemical evolution	4. Theory of cosmozoic

18. Number of elements consist in chemical compound KMnO_4 is

1. 6	2. 5	3. 4	4. 3
------	------	------	------

19. Not an example for fossil is

1. Death bodies of mamath found in glaziers of polar regions
2. Foot prints of dinosaurs in extrem environments
3. Seals of animals deposited on rocks formed due to cooling of magma
4. Preserved samples of organisms in laboratories

20. An eco system which identified as a wet patana grassland is

1. Haldummulla	2. Rakwana	3. Bopaththalawa	4. Wasgamuwa
----------------	------------	------------------	--------------



වයඹ පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව Provincial Department of Education - NWP

දෙවන වාර පරීක්ෂණය - 09 ක්‍රේඩිය - 2024

Second Term Test - Grade 09 - 2024

Science II

Name / Index No.:

- First question is compulsory
- Answer 05 questions including first one



01. A. Given above is a picture drawn to investigate bio diversity of the environment.

- Define the term of 'bio diversity' (1 mark)
- Write 02 levels that can be used to identify bio diversity. (2 marks)
- Name a natural aquatic environment given in the picture. (1 mark)
- Mention a living - non living relationship can be seen in this environment. (1 mark)
- State a character can be used to identify this as a man - made eco system (1 mark)
- What is known as an eco system? (2 marks)

B. Given below are the steps and the observations of an activity done by a group of student.

- Measure the mass of an empty beaker (mass of it is 75g)
- Then put 200cm^3 of x liquid into the beaker. Measure the mass of beaker with liquid. (It is 275g)
 - Mention a suitable instrument used to measure the mass (1 mark)
 - Find the mass of added liquid volume (2 marks)
 - Write a relationship can be used to calculate the density of the liquid. (1 mark)
 - Find the density of x liquid using above relationship (1 mark)
 - Name the instrument used to measure the density of a liquid. (1 mark)
 - Mention 02 instances of using above instrument in day to day life. (2 marks)

02. There are favorable as well as unfavorable impacts of micro-organisms

A. (i) Define who are known as micro-organisms (2 marks)
(ii) Name an extreme environment in which microbes can survive (1 mark)
(iii) Name the group of microorganism which all are autotrophs. (1 mark)

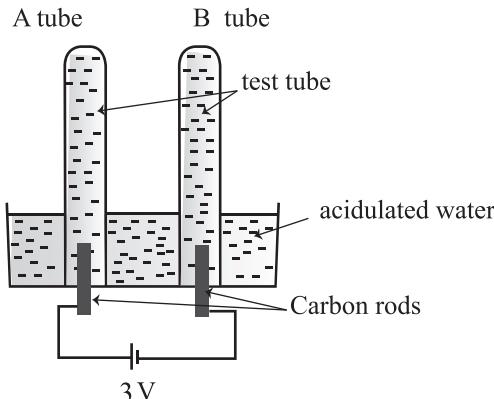
B. Antibiotics are used to treat the diseases caused by microorganisms

(i) What are known as antibiotics? (1 mark)
(ii) Mention a group of microorganism used to produce antibiotics (2 marks)
(iii) Name a vaccine made from weakened microbes (1 mark)

C. In present dengue disease became deadly condition to human

(i) Name the pathogen and the vector of dengue disease (2 marks)
(ii) Write a man made product which is produced by using a harmful pathogenic bacteria called as Anthrax. (1 mark)

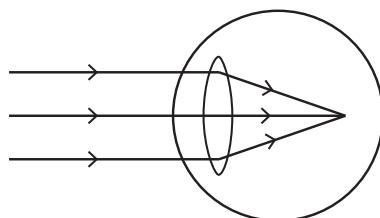
03. A.



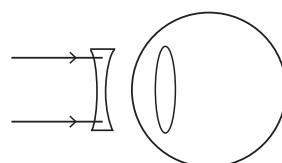
Given above is a set up prepared for electrolysis of acidulated water.

(i) Name the types of gases produced in A and B test tubes (2 marks)
(ii) If the volume of the gas collected at the A tube is 2cm^3 , what is the approximate volume of the gas collected at the B tube? (1 mark)
(iii) After collecting gas in the B tube, put a lighted splint into it. Then what is the observation? (1 mark)
(iv) Write a change can be done to the setup to increase the speed of evolving gas bubbles. (1 mark)
(v) State an application of electrolysis in industrial field. (1 mark)

B. In the figure given a defect eye focused the light rays coming from distant.

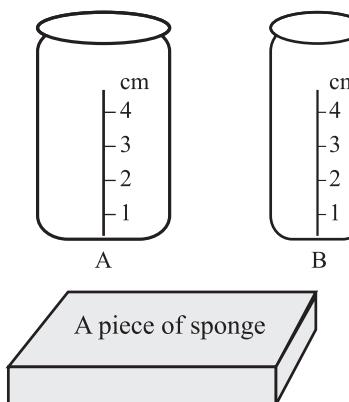


(i) Name the eye defect of this person suffering (1 mark)
(ii) Mention a reason for arises this defect (1 mark)
(iii) An instance of corrected this defect is given in the figure. Draw it on your answer sheet and draw the path of light rays (2 marks)



(iv) Write an eye disease (1 mark)

04. Given below are the steps of an activity designed by a student to identify the factors affect for pressure.



- Two calibrated vessels of same weight, but differnt in cross sectional areas.

- Place them on the sponge.

- Mention the expected observation of this activity (1 mark)
- Explain the reason for it (2 marks)
- Mention another factor affect for pressure, except the factor tested in this activity. (1 mark)
- What is the pressure exerted on a surface of 2m^2 , when a perpendicular force of 400N is acting on it? (2 marks)
- Mention a strategy used to increase pressure in day to day life (1 mark)
- For heavily loaded trucks and containers are made with a large number of wheels. Explain the reason in scientifically. (2 marks)
- If this student wants to measure the weight of this vessels,
 - What is the instrument can be used to measure the weight? (1 mark)
 - Mention the standard unit of weight. (1 mark)

05. A. Matters contribute to create the environment. They can be classified according to the different features

- Explain what are known as mixtures? (1 mark)
- Mention 2 constituents contain in following mixtures.
 - Sea water (1 mark)
 - Crude oil (1 mark)
- Following are some physical methods of separating constituents in a mixture
Panning, steam distillation, fractional, distillation, vapourisation
Select and write the suitable separating technique for following instances
 - Separating cinnamon oil from cinnamon leaves (1 mark)
 - Separatin gems from ores (2 marks)

B. (i) Atom is the builodoing unit of matter complete the table regarding about sub atomic particles of an atom

Sub atomic particle	Charge (relative to electron)	Mass (relative to proton)	
1. Proton	a	b	(1 mark)
2. Electron	c	d	(1 mark)

(ii) The informations related to a fluorine atom is given below.



- What is the atomic number of F element? (1 mark)
- Find the number of neutrons in the F atom. (1 mark)
- What is the type of sub atomic particle which equal to the atomic number of an atom. (1 mark)

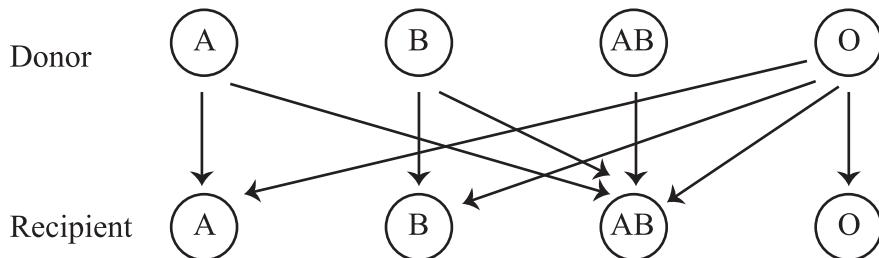
06. Blood is consist with main 2 parts as blood plasma and corpuscles. It is important for proper maintenance of the body functions.

A. (i) Mention 2 components contain in human blood plasma. (2 mark)
 (ii) State the type of corpuscle important for following funtions

Function	Type of corpuscle
a. For blood clotting process
b. For transportation of oxygen
c. For destroying pathogens

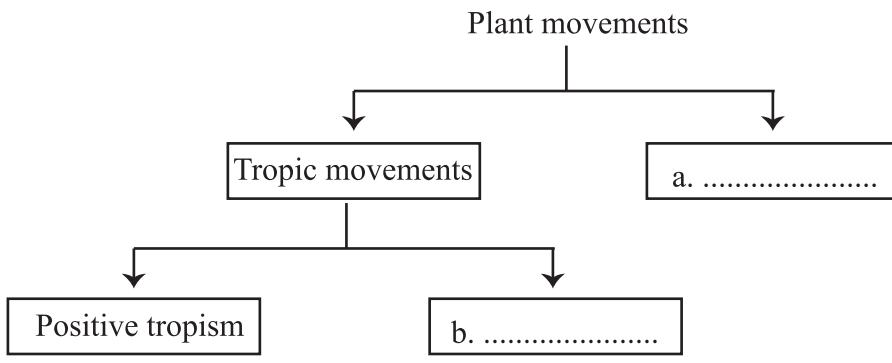
(3 mark)

B. A student prepared following chart for represent the compatibility of blood groups during blood tranfusion



(i) Define what is blood transfusion (2 marks)
 (ii) According to the chart mention the universal donor and universal recipient (2 marks)
 (iii) Mention the condition can be occured when blood groups of donor and recipient are incopatible. (1 mark)
 (iv) Write a favourable habit to maintain healthy blood circulation system. (1 mark)

07. Given below is a chart illustrated by nature diary of a student, prepared for the lesson of support and movements of organisms.



(i) Write the suitable answees for a, b and c blanks of the chart. (3 marks)
 (ii) Explain what are known as tropic movements (2 marks)
 (iii) What helps to maintain rigidity of non - woody plants? (1 mark)
 (iv) Mention an example for non - woody plant (1 mark)
 (v) Name a system important for rigidity in human body (1 mark)
 (vi) The elbow joint is very important for the proper function of the hand.
 a) Name the 2 bones in lower of elbow joint in fore-arm (2 mark)
 b) Which muscle produce energy to the bends elbow joint. (1 mark)