

සියලු හිමිකම් ඇවිරිණි / முழுப் பதிப்புரிமையுடையது / All Rights reserved



Grade : 08

YEAR END TEST - 2019

34 E I

Science - I

Time : 2 Hours

Name / Index No:.....

Part - I

● Answer all the questions

- 1) X → Grass Hopper → Chameleon
 Select the most suitable organism that should be at x
 1. Frog 2. Aquatic plant 3. Marine plant 4. Grass
- 2) Not an example for tuberous root
 1. Potato 2. Carrot 3. Sweet potato 4. Radish
- 3) Select the false statement about the microorganisms
 1. Cannot see from naked eye, if taken as single organism
 2. Is made out of by collecting one or many cells together
 3. Microorganisms can change the properties of some matter
 4. Microorganisms causes only harmful effects
- 4) What is the type of energy stored in objects due to change in its shape?
 1. Chemical energy 2. Kinetic energy 3. Potential energy 4. Radiation energy
- 5) Select the correct statement about pure matter
 1. Composed of one type of atom 2. Composed of one or many types of atoms
 3. Made out of matter of same type 4. Made by combining metal or nonmetals
- 6) A student who observes the night sky recorded the followings. Select the true statement/s
 A. Even though the position of a star relative to its constellation is not changing but the position of a planet changes with the time
 B. There is no any hindrance from outer energy sources to observe the constellations
 C. The twinkling nature in stars are not observed in planets
 1. A and B 2. B and C 3. A and C 4. A, B and C
- 7) Which process is not directly related with human in the occurrence of flood?
 1. Excess rain 2. Irregular land fillings
 3. Removal of forest covering 4. Irregular buildings
- 8) Which cannot be explained using the given statements?
 · Having particles which are separated from each other
 · Having a space among particles
 1. Discontinuous nature of matter 2. Continuous nature of matter
 3. Rising of ink through a piece of black board chalk 4. Compressibility of a gas
- 9) What is the unit used to measure electrical energy
 1. Ampere 2. Volt 3. Joules 4. Ohms

10) Given below are some reasons for adding food additives. Which statements are correct?

- A. Prevention of food spoilage
 B. Increasing the taste of the food
 C. Prevent the reaction of food with oxygen
1. A and B 2. B and C 3. A and C 4. A, B and C

11) Select the false statement given about the photosynthesis

1. Occur only in green plants
 2. The main product is glucose
 3. Sunlight is an external factor which is essential for photosynthesis
 4. Leaves are the organs that specially adapted for photosynthesis

12) Using what we can control the current flow according to the need?

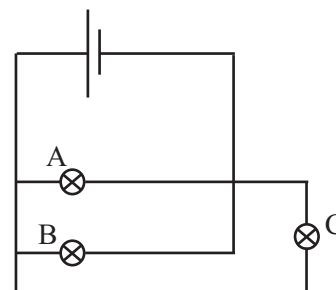
1. Fixed value resistor 2. Bulb
 3. Diode 4. Light sensitive resistor

13) Select the false statement about the kidneys

1. Blood flows into the kidney through renal vein
 2. Located in the abdominal cavity
 3. Left kidney is positioned little higher than the right kidney
 4. Urea is produced in kidneys

14) Select the correct statement about the given circuit

1. Bulb A and B show same brightness while bulb C has less brightness
 2. The brightness of all bulbs are same
 3. The brightness of all three bulbs are different
 4. Bulb B and C show same brightness and bulb A has more brightness



15) Which animal possess radial symmetry?

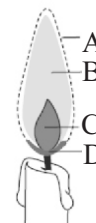
1. Leech 2. Earthworm 3. Hydra 4. Bivalve

16) When phenolphthalein was added to a liquid, it turns pink. When few drops of X was added to the same solution the pink disappears and the solution became colourless. What can be X?

1. Acid 2. Base 3. Salt 4. Distilled water

17) Which zone contains unburnt wax vapour?

1. Zone A 2. Zone B 3. Zone C 4. Zone D



18) Which is used during electroplating?

1. Magnetic product of electricity 2. Chemical product of electricity
 3. Heat product of electricity 4. Light product of electricity

19) Magnetism is,

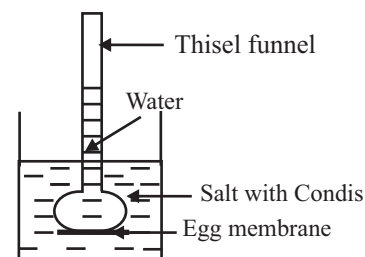
- A. A contact force B. Remote force C. Not a contact or remote force
 1. A 2. B 3. C 4. Not any of above

20) Which cannot be observed during a chemical change?

1. Change in state 2. Emission of heat
 3. Emission of gas bubbles 4. Change in colour

21) What can you observe after the given set up is kept for few minutes?

1. The liquid level inside the thistle funnel increases
 2. The liquid level the beaker and thistle funnel will be equal
 3. Water inside the thistle funnel turns purple
 4. The liquid level inside thistle funnel decreases



22) Not an excretory organ

1. Skin 2. Anus 3. Lungs 4. Kidneys

23) Select the correct statement

1. Music is created through the regular vibration
2. The frequency of a can be changed by changing the length of it
3. The frequency of the biggest wire in the guitar is high
4. Human ear is audible to any frequency

24) Which processes are responsible for renal stones?

- | | |
|------------------------------|--|
| A. Less consumption of water | B. Consumption of salty foods frequently |
| C. Smoking and taking liquor | D. Addition of heavy metals and toxic substances to the body |
1. A and B
 2. A and C
 3. B and C
 4. C and D

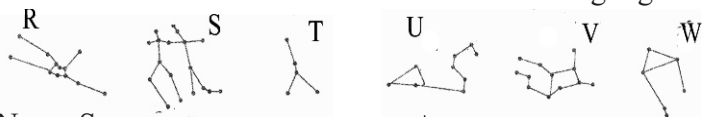
25) Select the hypothesis

1. The clock might be not working due to the fault in the batteries
2. Anhydrous copper sulphate turns blue with addition of water
3. The frequency of a copper wire is 20 hertz
4. During a chemical reaction the mass stays as a constant

Part - A

Answer all the three questions

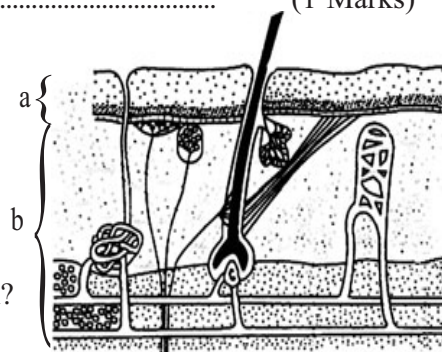
01. A. Given below are some Constellations visible during night sky



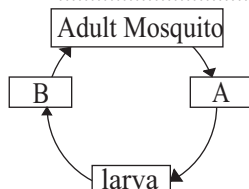
- i. Name S (1 Marks)
- ii. What is the brightest star in U? (1 Marks)
- iii. What is the main difference that can be observed between a star and a planet when observed through a telescope? (1 Marks)
- iv. The tilting is responsible for the occurrence of seasons on the earth. Give another reason (1 Marks)
- v. Name a star pattern that is used to identify the direction of the Earth that is not mentioned above (1 Marks)
- vi. What is the name given to the star patterns which is used to describe the apparent motion of sun? (1 Marks)

B. Given diagram shows a part of a skin

- i. Name a and b (2 Marks)
- ii. Give a function of skin (1 Marks)
- iii. What is responsible pigment for the colour in human skin? (6 Marks)



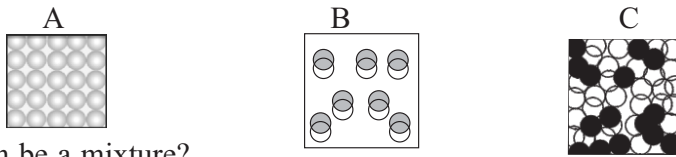
02. A.



An incomplete diagram of mosquito life cycle is given below
i. Name the stages A, B and C (2 Marks)

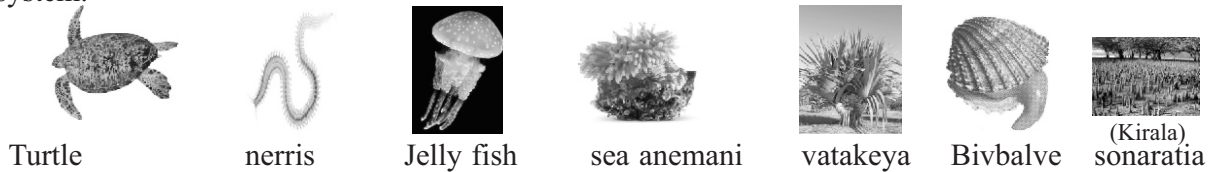
- ii. What is the name given to the life cycles having physiologically different stages? (1 Marks)
- iii. Name an insect that can be seen in household who shows incomplete metamorphosis (1 Marks)
- iv. Name the sensitive stage in the life cycle of turtles which are having a threat to extinct (1 Marks)

- B. i. Music can be created using the opening and closing of the holes in a flute. Give reasons for it
 (1 Marks)
 ii. Name a disease condition that can be cured using music (1 Marks)
- C. Given below is a part of a poster displayed in a classroom regarding composition of the matter



- i. Which can be a mixture? (1 Marks)
 ii. What is the more denser out of A and B if both of them are having same sized particles (1 Marks)

03. A. The given diagram are about some living organisms found by a group of student in an oceanic ecosystem.



- Turtle nerris Jelly fish sea anemani vatakeya Bivbalve (Kerala) sonarattia
- i. Name an animal belongs to group Annelida (1 Marks)

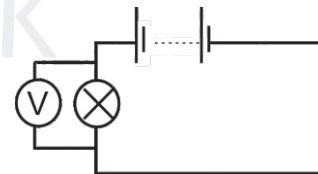
 ii. Which animal cannot do locomotion? (1 Marks)

 iii. Which animal bears a vertebral column? (1 Marks)

 iv. a. Name a plant with respiratory roots b. Name a plant with stilt roots
 a. b. (2 Marks)

B. Given below is about some readings obtained during an experiment

No. Cells	Volt meter Reading	Nature of Illumination
1	1.5	Weak
2	3.0	Low Brightness
3	4.5	High Brightness

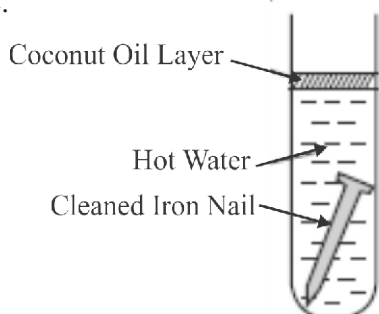


- i. What is the relationship between the number of cells and the voltmeter reading (1 Marks)

 ii. What is expected by inserting cells to a circuit? (1 Marks)

 iii. If you want to find the relationship between the brightness of the bulb and the current flow through the circuit, what apparatus should be connected? (1 Marks)

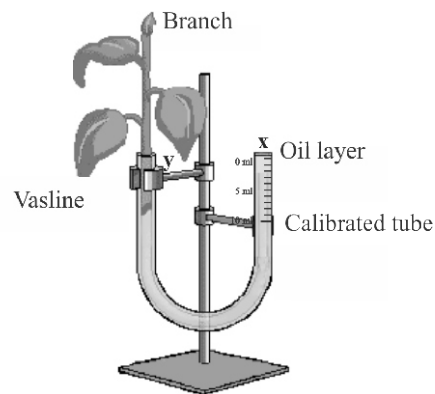
C.



- i. Which factor is absent in the test tube, if the nails are not rusted
 (1 Marks)
 ii. Give a strategy used to prevent the rusting in engines

Part- B • Answer only three questions

01. A. The setup is used to observe the transpiration process in the laboratory
- What is meant by transpiration? (1 Marks)
 - Initially if the level in the X is 0ml and after 5min 10ml is shown, find the rate of transpiration

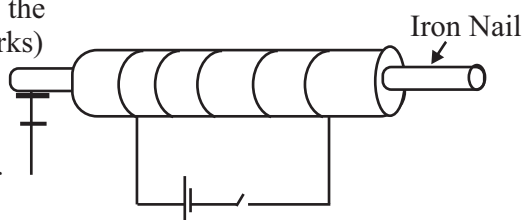


If
$$\text{Rate of Transpiration} = \frac{\text{Volume of Transpired water}}{\text{Time Taken}}$$

Calculate the rate of Transpiration (2 Marks)

- Give an adaptation shown by plants to reduce the transpiration(1 Marks)
- Give one difference between guttation and transpiration (1 Marks)

- B. The give setup can be used to make an electromagnet
- How the current should be send through the circuit? (1 Marks)
 - Name the instrument that can be used to identify the magnetic field created around the iron nail (1 Marks)



- Draw a diagram to show the magnetic field lines that can be seen around a bar magnet (2 Marks)
- Give two reasons for the loss of magnetic power in a magnet (1 Marks)

- C. Following ray diagram shows the formation of Earth Shadow.



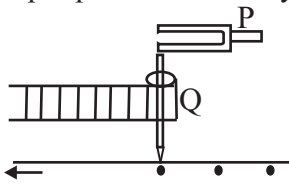
- Name the zones a and b (2 Marks)
- If the moon comes to the zone b,
 - In which colour the moon is visible? (1 Marks)
 - What is the name given to that phenomena (1 Marks)
- A person on the earth will see only one side of the moon every time. Give the reasons for that (1 Marks)

02. A. part of human nervous system is given below

- Name A and C (2 Marks)
- Give a function performed by B (1 Marks)
- Name the protective layers that can be seen around , B and C (1 Marks)
- Give a function performed by the peripheral nervous system (1 Marks)



- B.



Paper strip at Constant speed

When a vibrating object is kept by touching Q, dots are drawn accordingly in the given strip

- What is named as P? (1 Marks)
- If 240 dots were recorded in 3 seconds, find the frequency of P (2 Marks)

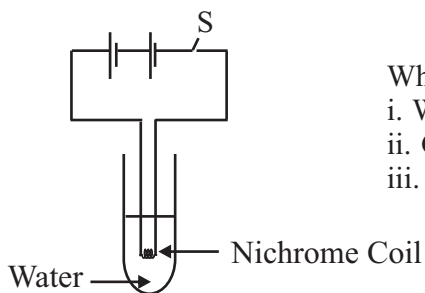
- If a longer arm and shorter arm of device P is used to perform the experiment, which will show more dots on the paper? Give reasons for your answer (2 Marks)

C. Given table is about some properties in liquids

	A	B	C	D	E
Boiling Point /C ⁰	882.9	2595	350	100	- 162
Melting point /C ⁰	97.8	1083	120	0	- 182.5
Ductility	✓	✓	✗	-	✗
Malleability	✓	✓	✗	-	✗
Density	971	8900	900	1000	475
Electric conductivity	✓	✓	✗	✗	✗

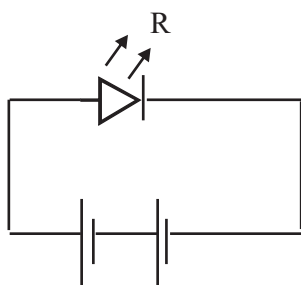
- Which liquid exist as a liquid in room temperature? (1 Marks)
- Which mater is not suitable to make wires even though it can conduct electricity?(1 Marks)
- Name two matter which can float on D (2 Marks)
- Which material can exist as a gaseous nonmetal? (1 Marks)

03. A.



When the switch is closed, it is observed that the water is heated.

- Which product of electricity is shown here? (1 Marks)
- Give the energy conversion occur here (1 Marks)
- Name an appliance uses this principal to operate (1 Marks)

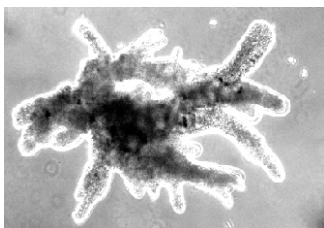


iv. Given below is a circuit diagram used to demonstrate the light product of heat

- Name R (1 Marks)
- How many dry cells are needed to operate R (minimum number) (1 Marks)
- Give two advantages of using R instead of a filament bulb (2 Marks)

- What is meant by a natural disaster? (2 Marks)
 - Name a natural disaster that can occur in hill areas due to excess rain (1 Marks)
 - Give two human activities which leads to drought conditions (1 Marks)
 - Give a precaution you can take to prevent lightening accidents (1 Marks)

C.



- Name the given microorganism (1 Marks)
- Give a disease that can be caused by microorganisms belong to the group of the above said organism (1 Marks)
- What is the mechanism used by this organism to remove excretory products from the body (1 Marks)

04. A. The table is about some observations gained by some students during an experiment

Instance	<u>Observation</u>
P. Mixing Sodium Chloride and Led Nitrate	Formation of White precipitate
Q. Burning of the substance X	Variation of Gas bubble, Formation of Water vapor
R. Heating of Iodin Crystal	Formation of Iodin vapor

- i. In which system there is a mass difference between the reactants and products, if done in an open system? (1 Marks)
 - ii. What are the chemical reactions from given instance. (2 Marks)
 - iii. If the gas produced in Q is bubbled through lime water, it turns milky white. What could be the gas? (1 Marks)
 - iv. Name the instance where a sublimation has occurred (1 Marks)
- B. We use different methods to prevent the spoilage of food as it make the food unsuitable for consumption
- i. Name the two main microorganisms responsible for food spoilage (2 Marks)
 - ii. Give a traditional method of preserving food (1 Marks)
 - iii. Briefly explain how food is preserved through freezing (2 Marks)
 - iv. Give an example for "p" instance (1 Marks)
- C. Many things can be observed in the night sky
- i. What is meant by a geo satellite (1 Marks)
 - ii. Who is the person to say about communication satellite for the first time? (1 Marks)
 - iii. Name a planet which has similar rotational time just like the Earth (1 Marks)
 - iv. Name a planet with a gaseous surface (1 Marks)

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