



யா/ஹாட்லிக் கல்லூரி,பருத்தித்துறை.
J/ Hartley College, Point Pedro.



முதலாம் தவணைப் பரீட்சை-2020 – தரம் 09
First Term Examination – 2020 – Grade 09

Science

09

E

I, II

இரண்டு மணித்தியாலம்
Two Hours

சுட்டுெண்
Index No

--	--	--	--	--

Science

Part - I

01. . What is the unit of weight?

1. kg

2. Nm⁻²

3. N

4. W

2. Which of the following bacteria act as free living Nitrogen Fixing bacteria

1. Rhizobium

2. Azotobacter

3. Sacchromyces

4. Methano coccus

3. Which of the following group of organism causing Leishmaniasis

1. Bacteria

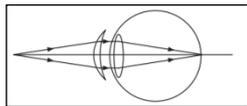
2. Fungus

3. Virus

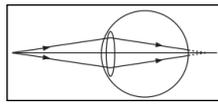
4. Protozoa

4. Which of the following diagram related with short sight

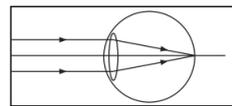
1.



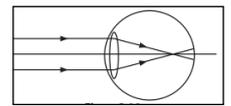
2.



3.



4.



5. The part of the ear responsible to maintain the body balance

1. Semi – circular canals

2. Ossicles

3. Cochlea

4. Eustachian tube

6. The frequency which can be sensed by human ear

1. 50 KHz

2. 15KHz

3. 25 KHz

4. 0.01KHz

7. Total numbers of hydrogen found in an Ammonia molecule

1. 2

2. 3

3. 4

4. 5

8. The method suitable to separating various fuels from Crude oil

- | | |
|-----------------------|----------------------------|
| 1. Evaporating | 2. Fractional distillation |
| 3. Steam distillation | 4. Simple distillation |

9. The vaccine made from killed microbes used to prevent the disease of

- | | | | |
|------------|----------|------------|----------------|
| 1. Typhoid | 2. Polio | 3. Tetanus | 4. Hepatitis B |
|------------|----------|------------|----------------|

10.

5Kg

 An Object placed on a horizontal plane Surface with the Contact area of 2m^2 . what is the pressure exerted on the table

- | | | | |
|---------|-----------|----------|---------|
| 1. 25pa | 2. 2.5 pa | 3. 10 pa | 4. 50pa |
|---------|-----------|----------|---------|

11. Which of the following physical quantity Consist the unit of watt?

- | | | | |
|-------------|----------|----------|---------|
| 1. Pressure | 2. Force | 3. Power | 4. Mass |
|-------------|----------|----------|---------|

12. Action of micro – organism on the food rich of Protein

- | | | | |
|-----------------|--------------------|-----------------|-----------------|
| 1. Fermentation | 2. Rancidification | 3. Putrefaction | 4. All of above |
|-----------------|--------------------|-----------------|-----------------|

13. The Latin name of silver

- | | | | |
|-----------|------------|------------|-------------|
| 1. Ferrum | 2. Natrium | 3. Plumbum | 4. Argentum |
|-----------|------------|------------|-------------|

14. Consider the following statement regarding the common salt

- a. Its chemical name Calcium Chloride
- b. It consist sodium and chlorine
- c. It can be used to Preserve some food
- d. Its pH – 8

The Correct Statements

- | | | | |
|----------|--------|--------|----------|
| 1. a,b,c | 2. c,d | 3. b,c | 4. a,b,d |
|----------|--------|--------|----------|

15. Which of the following Plant commonly affected by late blight

- | | | | |
|-----------|-----------|----------|-----------|
| 1. Grapes | 2. Potato | 3. Papaw | 4. Tomato |
|-----------|-----------|----------|-----------|

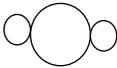
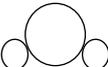
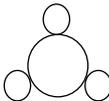
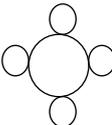
16. The antibiotic used to against the fungal infection

1. Penicillin 2. Griseo Fulvin 3. Amoxicillin 4. Erythromycin

17. The term bioleaching related to the

1. Metal Extraction 2. Environmental Conservation
3. Disease Prevention 4. Producing bio gas

18. Which of the following diagram resembles to the molecule of methane

1.  2.  3.  4. 

19. Number of Hydrogen atom found in a molecule of sucrose

1. 22 2. 12 3. 6 4. 11

20. Which of the following is not a homogeneous mixture

1. Blood 2. Air 3. Salt Solution 4. Sugar solution

21. The pressure was 100pa, when a Perpendicular force was applied on a Surface area of 2m^2 . The applied force was

1. $100/2\text{ N}$ 2. $2/100\text{N}$ 3. $2 \times 100\text{N}$ 4. 100N

22. The weight of the object with 500g mass

1. 5N 2. 50 N 3. 10 N 4. 0.5N

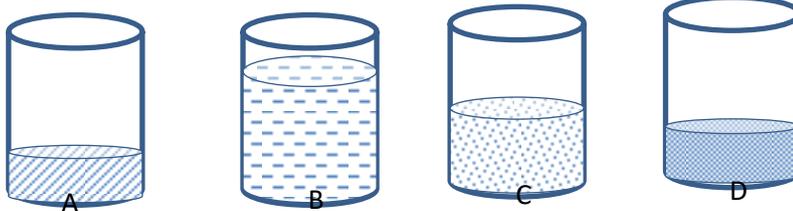
23. Which part of the ear found in middle ear

1. Pinna 2. Cochlea 3. Auditory nerve 4. Eustachian tube

24. Which Part of eye affected by cataract

1. Lens 2. Cornea 3. Retina 4. Iris

25. Equal Mass of different Liquids are found in equal vessels. The correct ascending order of density of liquids from the followings



1. A ,B,C,D

2. B , C, D, A

3. A, D, C, B

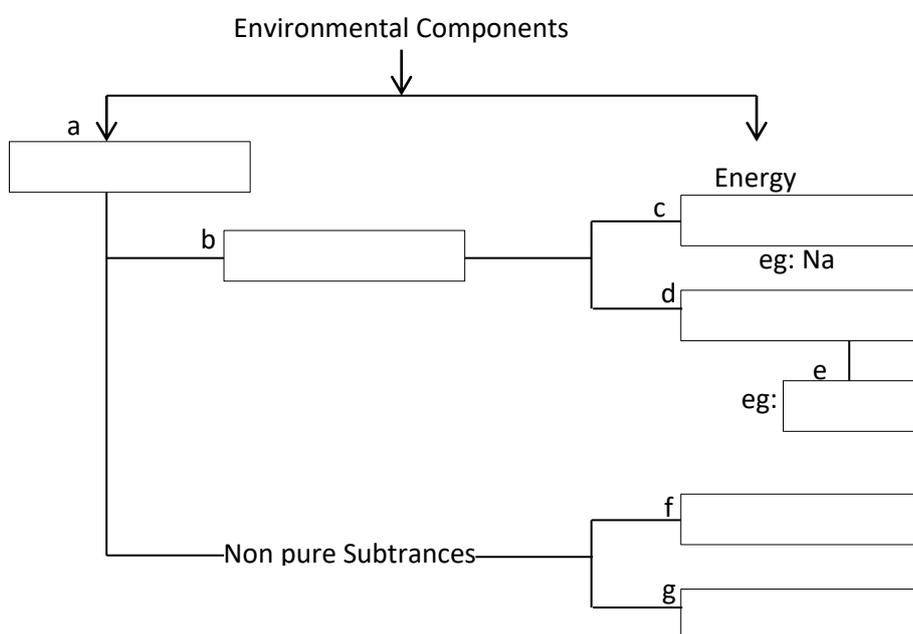
4. C , B, C, D

Part - II

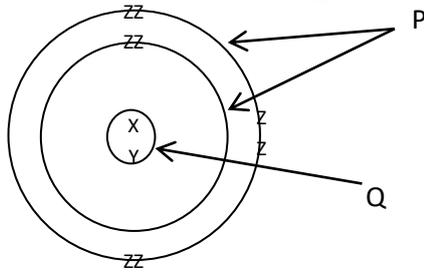
Answer to all questions

01. The basic unit of the matter is atom

i. Complete the following chart



ii. The basic structure of an atom is given below



a. Name the Subatomic particles X, Y & Z

X

Y

Z

b. Name the parts P & Q

P

Q

c. How many negative charged particles found in this atom

.....

d. Write down the number of x particles

.....

iii. In atomic number and atomic weight which is specific for an element

.....

iv. Write down the symbols of following elements

a. Sodium -

b. Silicon -

c. Zinc -

d. Magnesium -

e. Ferrum -

f. Cuprum -

5. Write down the symbols of following Molecules

a. Glucose -

b. Acetic Acid -

c. Carbondioxide -

d. water -

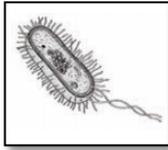
e. Ozone -

02. All living organism are classified as micro organism & macro organism

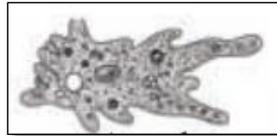
i. Define the term micro organism

.....
.....

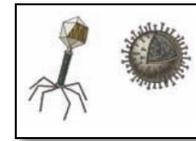
ii. Identify the given micro organism



A



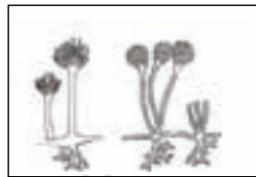
B



C



D



E



F

iii. Mention the specific terms for followings

a. Chemicals produced in the body of a microbe to destroy or sabotage another micro - organism

.....

b. The most effective technology for the metal extraction from low grade ores

.....

c. The technology used to remove environmental pollutants using micro organisms

.....

iv. Identify the disease related with followings

a. The xylem of the plant affected by this disease

.....

b. Brown spot can be seen on the leaves and later they turn in to black

.....

c. This disease spread by sand fly

.....

v. Which group of micro organism can perform photosynthesis

.....

vi. Write down the specific terms for following type of food spoilage

a. Spoilage of protein

.....

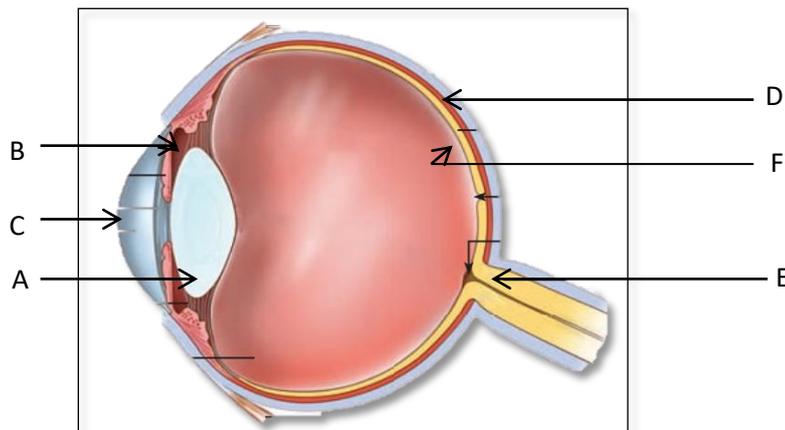
b. Spoilage of carbohydrate

.....

b. Spoilage of lipids

.....

03. The structure of human eye given below



i. Label the parts from A - F

A -

D -

B -

E -

C -

F -

ii. Mention the part of the eye with following function.

a. Convey the visual stimulus from the retina

.....

b. Supplies blood to the eye

.....

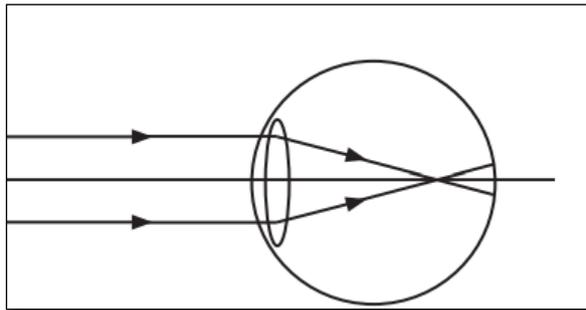
c. Control the size of the pupil

.....

d. Consist light sensitive cells

.....

iii. Identify the eye defects of following diagram



iv. How can you correct this defect

.....

v. Name the bones found in ossicles

.....

04. pressure can be exerted by any type of matter [solid/ liquid/gas]

i. What is known as pressure

.....

ii. What are the 2 factors will determine the pressure exerted by a solid object on a surface

.....

iii. A cubic box is 50kg with the dimension of 1m, 2m, 3m

a. Calculate the maximum pressure can be exerted by this object

.....

b. Calculate the minimum pressure exerted by this object

.....

iv. Why we are using sharpened knife to cutting some thing

.....

v. Write two instances where the pressure decreases in our day to day life

.....

vi. Specify the SI unit of pressure

.....

05. A push or pull is known as force

i. Name one physical Quantity which consist same unit of force

.....

ii. Why force is considered as vector quantity

.....

iii. specify the fact of graphical representation of force in a segment of a straight line

Magnitude -

Direction-

point of application -

iv. Write down the separation methods of followings

a. obtaining salt from sea water

.....

b. Separating chaff from rice

.....

c. Cinnamon oil from cinnamon leaves

.....

v. Give two examples for homogeneous mixtures

.....