

MKSSS's VISION ENGLISH MEDIUM SCHOOL
Term II Examination 2019-20

Sub.: General Science
Std.: VIII

Time: 3 Hrs.
Marks: 80

Instructions:

1. It is necessary to solve all the questions.
2. Draw neat and labelled diagrams wherever necessary.
3. Start every new main question on separate page.
4. Figures on the right indicate marks.
5. For each Multiple Choice Question (1.B), ONLY first answer will be considered.
6. For q. 1A, write only the chosen answer with the correct option's number. Do not rewrite the sentence.

Eg. i) A. ii) C.

.....
Q.1A) Chose the correct alternative and fill in the blanks. (12M)

1. Chloroplast converts the solar energy into _____ energy.
A) sound B) light C) electric D) chemical
2. Weight of our heart is about _____ .
A) 250 grams B) 360 grams C) 100 grams D) 150 grams
3. Vinegar has _____ acid in it.
A) Acetic B) Tartaric C) Sulphuric D) Lactic
4. Electron _____ is complete in each Hydrogen atom in a Hydrogen molecule.
A) Octet B) Triplet C) Duplet D) Quadruplet
5. Temperature is the measure of the _____ of the atoms in a substance.
A) average kinetic energy B) total kinetic energy
C) average potential energy D) total heat energy
6. If the total number of compressions and rarefactions produced per second a sound wave is 1000, the frequency of the sound wave is _____ .
A) 500 Hz B) 100 Hz C) 2000 Hz D) 1000 Hz
7. Identify the source of light from the following alternatives.
A) a glow worm B) the earth C) the moon D) the mirror

8. _____ is the main ingredient in all types of glasses.
- A) Calcium hydroxide B) Silica c) Potassium hydroxide D) Iron oxide
9. Micro-organisms which convert the organic components of a dead body into inorganic components are termed as _____ .
- A) Scavengers B) Saprophytes C) Autotrophs D) Decomposers
10. For measuring the distance between any two celestial bodies, _____ is used as a unit.
- A) Light year B) Fathom C) Nanometer D) Kilometer
11. Hydrilla, Azolla, Nitella, Typha are some of the examples of _____.
- A) producers growing in a forest ecosystem.
- B) producers growing in a grassland ecosystem.
- C) consumers living in an aquatic ecosystem.
- D) producers belonging to the fresh water ecosystem.
12. If the angle between the incident ray and the reflected ray is 90° , which of the following statements is valid?
- A) $i = r = 90^\circ$ B) $i = 30^\circ$ and $r = 60^\circ$
- C) $i = r = 45^\circ$ D) $i = 60^\circ$ and $r = 30^\circ$

Q.1B) Match the following.

(3M)

Column A	Column B
1. RBCs	A. To protect the body from microbial diseases.
2. Platelets	B. Providing oxygen to the body.
3. WBCs	C. To clot the blood.
	D. To keep the blood thin and free-flowing.

(2)

Q.1C) Do as directed.

(10M)

1. What is the full form of ATP?
2. Complete the correlation - Acid : H^+ :: Base : _____ .
3. Why indicator does not get affected by common salt?
4. Write the equation for combustion of a fuel.
5. Write the names of any two gadgets which convert electrical energy to heat energy.
6. State whether the given statement is true or false and correct if it is false: Tabla is a string instrument.
7. What is meant by 'Biomes'?
8. How many images will be formed if we place two plane mirrors exactly in front of each other?
9. What is the relation between frequency and pitch of sound?
10. Why is alcohol used in thermometers now a days instead of mercury?

Q.3) Give scientific reasons. (Any three)

(6M)

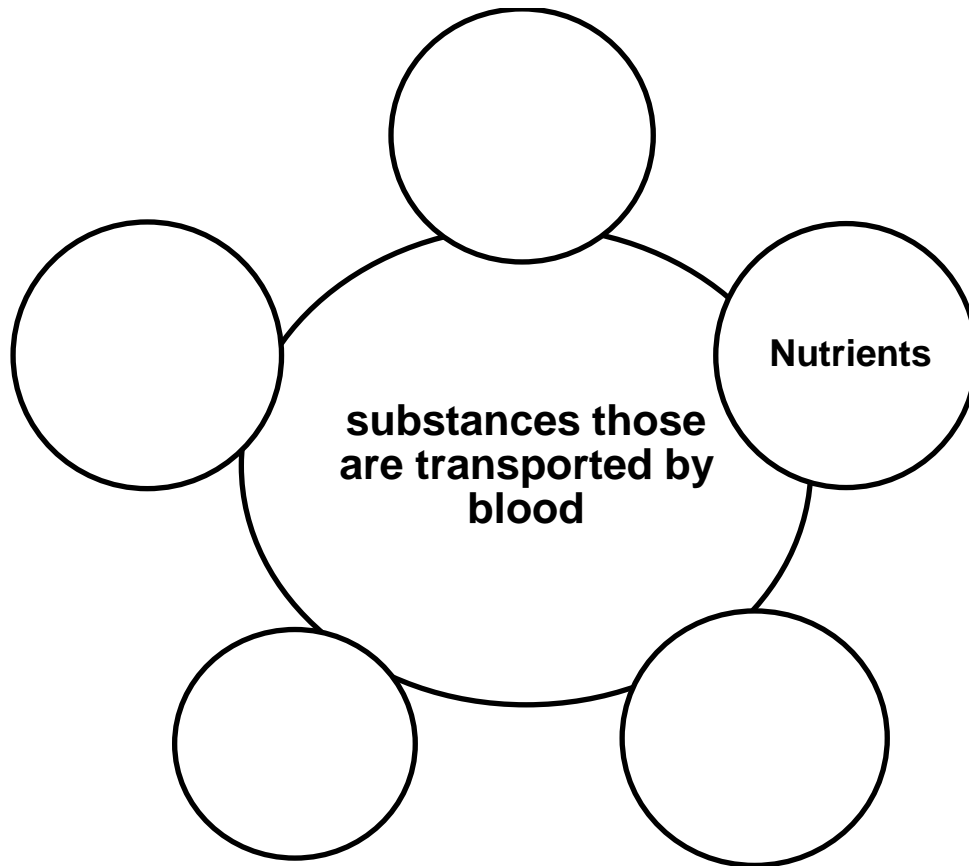
1. For dilution of concentrated acid, we should add acid in small quantities in water.
2. We add washing soda in hard water.
3. Rails have the gaps at specific distances.
4. Large dams destroy the ecosystem.

Q.4) Answer the following in one or two sentences each. (Any six)

(12M)

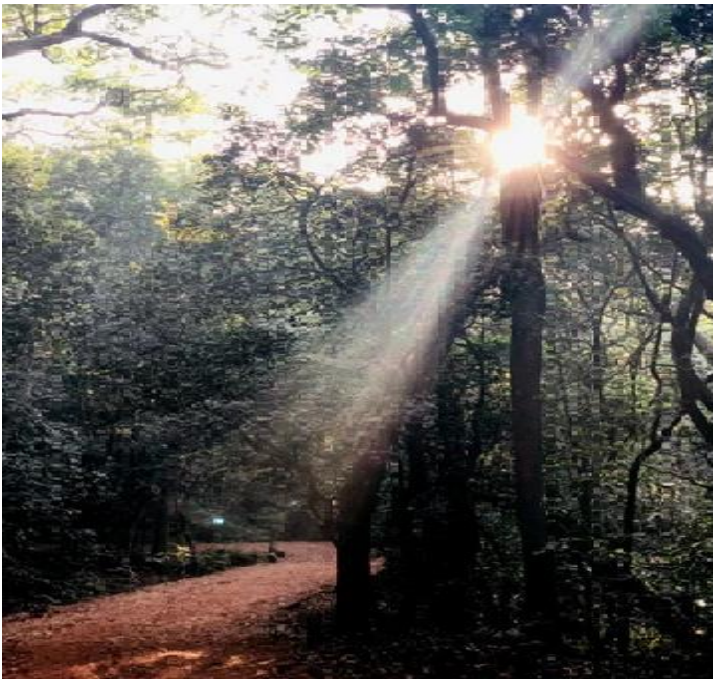
1. State the difference between eukaryotic cell and Prokaryotic cell.
2. By squeezing a lemon on a piece of rock the gas is liberated; which turns lime water milky. Which compound is present in the rock? Also, identify the gas, which was evolved in the reaction.

3. Complete the following table.



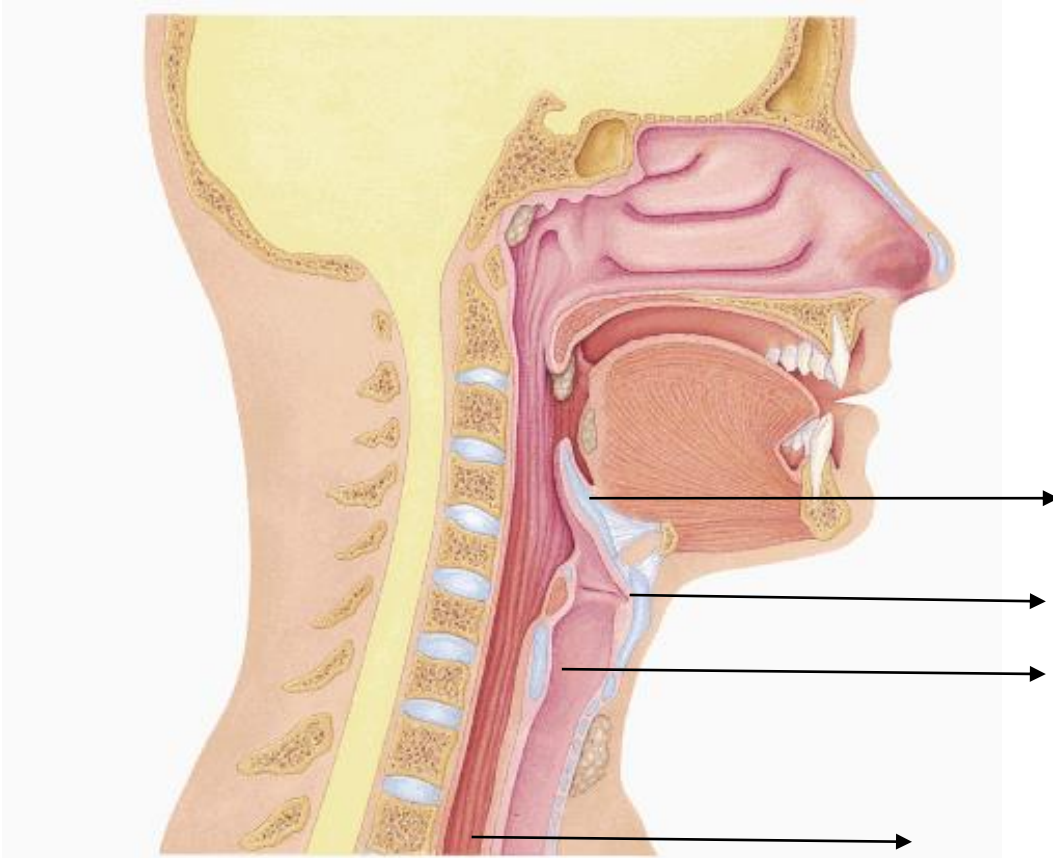
4. What will be the temperature of 59°F in Celsius?

5. Which phenomenon of light is shown in this picture? Explain it.



(4)

6. Identify the organs indicated by the arrows in the diagram of the human larynx.



7. Complete the following table.

Name of the forest:	Main species found there:
1. Geer forest	
2. Ranthambore forest	

3. Kaziranga National Park	
4. The Great Himalayan National Park	

8. What would happen if all the species of honeybees become extinct?

Q.5) Answer the following questions. (Any eight) (24M)

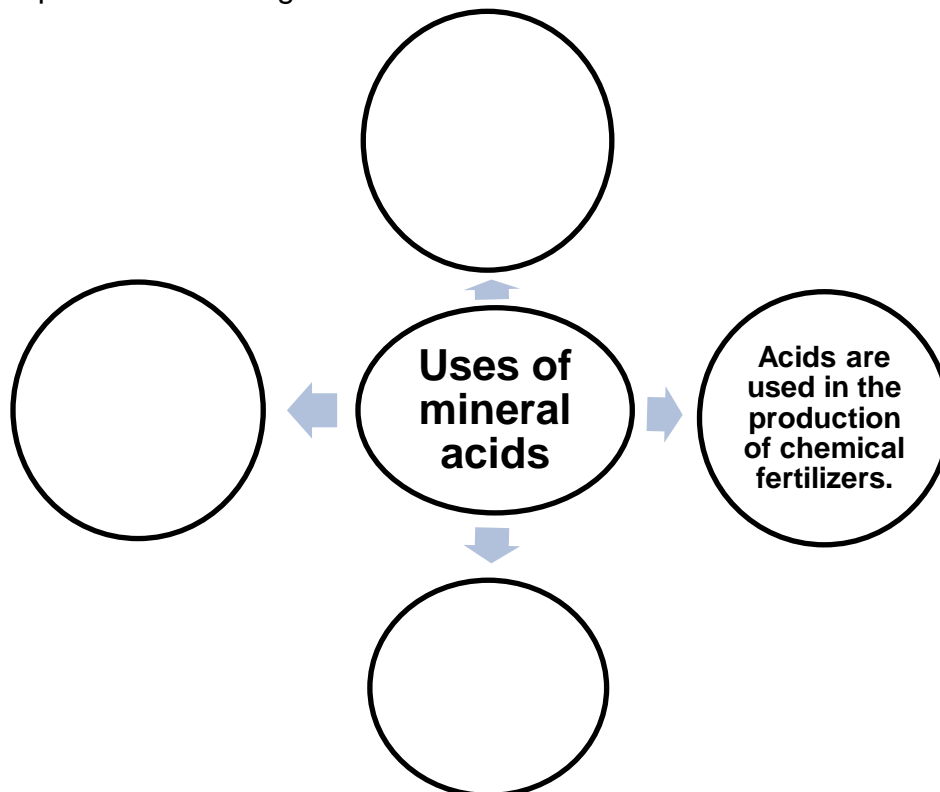
1. Write a short note on capillaries.
2. Complete the following table.

Ripening of raw mango:	Rusting of iron bar:	Melting of ice:
Chemical change,
Slow change,
Irreversible change.

(5)

(P.T.O.)

3. Complete the following chart.



4. Show how the following compounds are formed with the help of electron dot structures.

- i) Magnesium chloride ($MgCl_2$)
- ii) Water (H_2O)
- iii) Potassium fluoride (KF)

5. Nihar is a clumsy boy who often mishandles the objects. His father is a rich person of a society. So, Nihar keeps on breaking the crockery, glassware, windowpanes and even the glass-articles from his school's laboratory. What would you advise him from the environmental point of view?

6. Define the following terms:

- i) Interstellar clouds:
- ii) Specific heat of a substance:
- iii) Alkali silicate glass:

7. How does the excessive use of thermocol affect us and our environment?

8. Write any three functions of lysosomes.

9. What are the three end stages of a star?

10. Separate the following substances as bases, acids and neutral substances.

MgO, HCl, Milk, H₂O, SO₂, Na₂O

(6)

Q.6) Answer the following in detail. (Any one)

(5M)

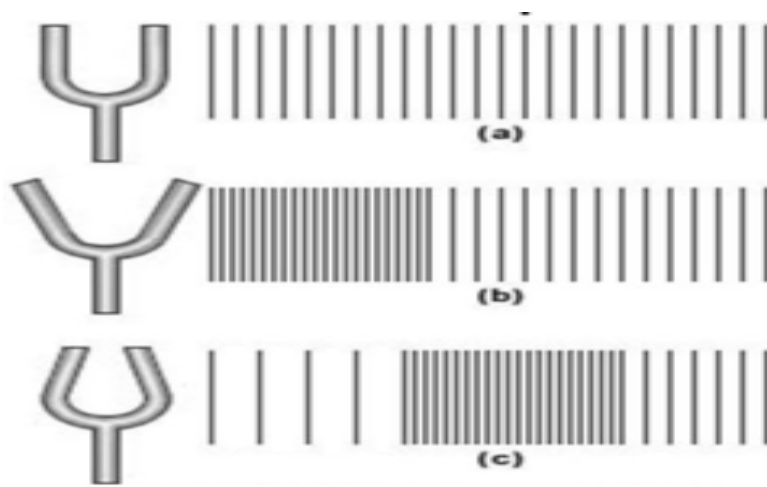
1. Identify the following instrument and answer the questions based on it.



i) What is use and principle of working of this instrument? (2M)

ii) If the masses of the above instrument, the water in it and the hot object which is of copper are the same. The initial temperature of the calorimeter and water is 30 °C and that of hot object is 60°C. The specific heat of copper is 0.09 cal/gm°C and that of water is 1 cal/gm°C. What will be the final temperature of water? (3M)

2. Describe the following diagram.



(7)

(P.T.O.)

Q.7A) Draw neat and labelled diagrams of regular and irregular reflection of light. (4M)

Q.7B) Read the following passage carefully and answer the questions given below it. (4M)

Effects of light pollution.

Light pollution means excess light that obliterates the darkness of the sky at night. It is the reason stars cannot be seen at night in many big cities.

Light pollution refers to the way that electric lights, street lamps and so on, leave cities brightly lit right round the clock. Any kind of light can cause light pollution, but electric lights and sodium vapour lamps are the most common.

1. Sky-glow: Sky-glow is the name for the reddish-yellow glow in the sky that persists throughout the night due to light pollution in the city below.

2. Disrupted sleep patterns. When it seems that the city never sleeps – neither can we. When the lights are on all through the night, we may find it hard to sleep well or relax. Especially if we live with a street lamp burning outside our window. The pituitary gland in the human body responds to bright lights. When the light is bright, this gland releases chemical signals that cause us to feel awake, and when our surroundings are dark it releases signals that leave us feeling sleepy. Obviously, this is useful in non-light polluted areas as it helps us to wake up when the sun rises and sleep when it sets. When we live in a light polluted area, however, the activity of our pituitary gland can lead to us feeling awake all the time.

3. Ecological light pollution. Nocturnal and diurnal animals alike may become confused by the presence of light pollution. Light pollution can disrupt the feeding and sleeping habits of nocturnal animals (such as owls and foxes). This can result in populations of these animals dwindling and thus effecting biodiversity in the region as a whole.

4. Impact on astronomy. Observational astronomy is near impossible when the sky is highly light - polluted. Further, stargazing can become impossible and real darkness may never be experienced by some city dwellers.

Q.I) How does our pituitary gland respond to the bright light?

Q.II) Try to guess the meaning of 'nocturnal animals'.

Q.III) What is the impact of light pollution on astronomy?

Q.IV) How will you contribute in reducing the light pollution?

(8)
