

INTERNATIONAL INDIAN SCHOOL DAMMAM

MIDDLE SECTION(GMS/BMS)

MID TERM REVISION WORKSHEET 2024-2025

CLASS: VIII

SUBJECT: GENERAL SCIENCE

Lesson - 2 MICRO ORGANISMS: FRIEND AND FOE

I. CHOOSE THE CORRECT ANSWER:

1. Cholera is caused by -----
a) Bacteria b) Fungus c) Virus d) Protozoa
2. Penicillium is a -----
a) Alga b) Fungus c) Bacteria d) protozoa
3. Which of the following is a viral disease.
a) Cholera b) Small pox c) Typhoid d) All of these
4. Carrier of Malaria is
a) Fly b) Mosquito c) protozoa d) virus
5. Rust of wheat is caused by
a) Virus b) Insects c) Fungi d) Air
6. Which of the following is a pathogen
a) Plasmodium b) Lactobacillus c) Rhizobium d) All of these.

II. NAME THE FOLLOWING

1. Two Chemical preservatives.
2. A method of preservation of milk.
3. The process of conversion of sugar into alcohol.
4. Dead or weakened microbes introduced into the healthy body.
5. Medicines made from microorganisms to kill or stop the growth of pathogens.
6. Two nitrogen fixers.
7. Chemicals used to prevent the spoilage of food.
8. Bacterium causes Anthrax.

9. Carrier of Dengue fever.-

10. Other name of microorganisms.

III. Write the causative organisms of the following diseases.

1. Hepatitis B

2. Citrus canker -

3. Measles-

4. Yellow vein mosaic of Okra -

5. Foot and mouth disease.

6. polio

7. Dysentery -

8. Dengue

IV. Give reason

1. Yeast is used in the baking industry.

2. It is advised not to let water collect anywhere in the neighbourhood.

3. Sugar is a good preservative.

V. Questions number 1 & 2 are Assertion and Reason based questions .Two statements are given, one labelled as Assertion(A) and the other is labelled as Reason(R). Select the correct answer to these questions from the codes (a),(b),(c) and (d) as given below.

(a) Both Assertion (A) and Reason (R) are true and Reason(R) is the correct explanation of the Assertion(A).

(b) Both Assertion (A) and Reason (R) are true ,but Reason (R) is not the correct explanation of the Assertion (A).

(c) Assertion (A) is true, but Reason (R) is false.

(d) Assertion (A) is false ,but Reason (R) is true

1. Assertion (A): Rhizobium and Blue green Algae are called Biological nitrogen fixers.

Reason (R): Rhizobium and Blue green algae are able to convert gaseous nitrogen into compounds.

2. Assertion (A): food spoiled by microbes emits bad smell and taste.

Reason (R): Spoiling of food is a physical change.

CASE STUDY

These days vaccines are made on a large scale from microorganisms to protect humans and other animals from several diseases. It is essential to protect all children against diseases. Polio drops given to children are vaccines. Necessary vaccines are available in the nearby hospitals. Through vaccination small pox was eradicated world wide by 1980 and polio cases declined by 99 percent. Prior to the use of small pox vaccine principle of vaccination was applied by Asian physicians who gave children dried crusts from the lesions of people suffering from small pox to protect against the disease.

Based on the above, answer the following

1. Name three diseases that can be prevented by vaccination.
 2. How does a vaccine work?
 3. _____ discovered the vaccine for small pox.
 4. What are antibodies?
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L4/6-COMBUSTION AND FLAME

I. Multiple Choice Question (MCQ)

1. Coal burns in air to produce
(a) Nitrogen (b) Oxygen (c) Carbon dioxide (d) None of these.
2. Incomplete combustion of fuels produce _____ gas.
(a) Nitrogen dioxide (b) sulphur dioxide (c) oxygen (d) carbon monoxide.
3. Burning of phosphorous is _____ combustion.
(a) rapid (b) spontaneous (c) slow (d) explosion
4. Baking soda gives off _____ near the fire.
(a) carbon dioxide (b) carbon monoxide (c) nitrogen dioxide (d) sulphur dioxide.
5. calorific value is expressed in a unit called
(a) kg per kilojoule (b) kilojoule per kg (c) joule per km (d) km per joules
6. The best domestic fuel among the following is
(a) wood (b) coal (c) cow dung cake (d) L.P.G.
7. Which of the following burns with a flame?
(a) coal (b) charcoal (c) camphor (d) All of these.

II. Fill in the blanks with appropriate words:

1. Combustible substances are called_____.
2. In the sun, heat and light are produced by _____.
3. The head of safety match contains _____ and _____.
4. Ignition temperature of phosphorous is _____ than wood..
5. Forest fire is due to _____ combustion.
6. Goldsmith blow the _____ zone of a flame with a metallic blow-pipe.
7. _____ substances have very low ignition temperature.
8. _____ in air is essential for combustion.

III. NAME THE FOLLOWING

1. The hottest part of the flame.
2. Calorific value of Hydrogen.
3. Two Non combustible materials.
4. Part of the flame where no combustion takes place.
5. Two gases that cause acid rain.
6. The lowest temperature at which a substance catches fire.
7. A suffocating & corrosive gas released due to the burning of coal and diesel.
8. The least hot part of a flame .
9. Burning of a substance in the presence of oxygen .
10. The atmospheric gas responsible for global warming .

IV. Give Reasons:

1. We should not light a matchstick near a petrol pump.
2. LPG is a better fuel than wood.
3. A washer man uses charcoal for ironing.
4. Burning of candle is a chemical process.
5. Food is a fuel for our body.

IV Questions number 1 &2 are Assertion and Reason based questions .Two statements are given, one labeled as Assertion(A)and the other is labeled as Reason(R).Select the correct answer to these questions from the codes (a),(b),(c) and (d) as given below.

- a) Both Assertion (A) and Reason (R) are true and Reason(R) is the correct explanation of the Assertion (A)
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 - (c) Assertion (A) is true, but Reason (R) is false.
 - (d) Assertion (A) is false ,but Reason (R) is true
1. Assertion (A): carbon dioxide can be stored as a liquid in cylinders.
Reason (R): Gases have high compressibility.
 2. Assertion (A): Burning of phosphorus in air is a rapid combustion.
Reason (R): phosphorus burns without the application of any apparent cause.

CASE STUDY

In many rural parts of our country, people use wood as a fuel because of its low cost. Burning of wood gives lot of smoke which is very harmful for human beings. It causes respiratory problem. Also, trees provide us with useful substances which are lost when wood is used as fuel . Moreover cutting of trees leads to deforestation which is harmful to environment .combustion of most fuels releases carbon dioxide. Burning of coal and diesel releases suffocative and corrosive gases .In automobiles, use of diesel and petrol is being replaced by cleaner fuels.

Based on the above, answer the following

1. What is global warming?
2. It is advised never to sleep in a room with burning coal fire in it.Give reason.
3. what is meant by a cleaner fuel? Give eg.
4. How acid rain is formed?

L5/7: CONSERVATION OF PLANTS AND ANIMALS

FILL IN THE BLANKS

1. _____ means clearing of forest and using that land for other purpose.
2. Some natural causes of deforestation are _____ and _____.
3. All animals found in an area are called _____.
4. _____ is the areas reserved for wildlife where they can freely use the habitats and natural resources.
5. _____ refers to the variety of living organisms in a specific area.

6. A group of population which are capable of interbreeding are called-----
7. _____ of plants and animals are found exclusively in a particular area.
8. _____ is the first reserve forest in India.
- 9 _____ is the restocking of the destroyed forest by planting new trees
10. Birds who cover long distances to reach another land are known as _____.
11. _____ was launched by the government to protect the tigers in the country
12. _____ are the places where killing or capturing of animals is strictly prohibited.
13. An _____ is made of all the plants, animals and microorganisms in an area along with non-living components such as climate, soil etc.
- 14 _____ Act is aimed at preservation and conservation of natural forest .

NAME THE FOLLOWING→

1. The species which are in danger of extinction-
 2. All the plants found in a particular area-
 3. The book which keeps the record of endangered plants and animals-
 4. Cutting of forest on a large scale-
 5. Areas where animals are protected from any disturbance to them and their habitat-
 6. The reserve forest in which the finest Indian teak is found-
 7. The areas meant for conservation of biodiversity-
 8. Two endemic flora and fauna of Pachmarhi Biosphere Reserve.
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L 8/11 - FORCE AND PRESSURE

I. CHOOSE THE CORRECT OPTION

1. Liquids and gases exert pressure
 - a) In all directions
 - b) On sideways
 - c) Upwards
 - d) Downwards
2. The force between two charged bodies
 - a) Magnetic force
 - b) Muscular force
 - c) Frictional force
 - d) Electrostatic force.
3. The ratio of force acting perpendicular to the area, on which it acts is known as
 - a) Density
 - b) Pressure
 - c) Friction
 - d) none of these

4. If two forces acting in opposite direction are equal, the net resultant force is

a) One b) Infinite c) Zero d) Two

5. The same force 'F' acts on 4 different objects having the areas given below one by one. In which case the pressure exerted will be the maximum?

a) 10sq.m b) 50sq.m c) 20sq.m d) 100sq.m

6. Fruits fall on ground due to

a) Magnetic force b) Force of gravity c) Frictional force d) Electrostatic force.

7. Gravity is_____

a) Repulsive force b) Attractive force c) both a) & b) d) None

8. The pressure by atmospheric air----- with height..

a) Increases b) No change c) Decreases d) Becomes zero

9. A body is said to be under balanced force, when the resultant force applied on that body is

a) One b) Infinite c) Zero d) Two

10. The repulsion of two objects could be due to

a) Frictional force b) Muscular force c) Electrostatic force d) Gravitational force

II. FILL IN THE BLANKS

1. The strength of a force is usually expressed by its_____ .

2. As the area of contact decreases, the pressure____ .

3. Friction always acts_____ to the direction of applied force.

4. A force arises due to_____ between the two objects.

5. Liquids exert_____ pressure at the same depth

6. Liquid pressure_____ with depth.

7. A rubber sucker sticks to a surface because of_____ .

8. Walls of dams are thickened at the base to withstand _____.

III. IDENTIFY THE TYPE OF FORCE

1. Cars and buses are able to run on roads.-

2. Force that exist between two astronauts in space.- .

3. Force that act from a distance and pull iron objects.- .

4. During dry weather clothes made of synthetic fibres stick to the skin.
5. Lightning striking earth.
6. Contraction and expansion of lungs.
7. Force that makes all the planets to move in their own orbit.-

IV GIVE REASON

- 1 .A truck or a motorbike has much wider tyres.
2. Army tank rests upon a continuous chain.
3. Camels can walk easily on desert sand ,but we are not comfortable walking on the sand.

V . Questions number 1 &2 are Assertion and Reason based questions .Two statements are given, one labelled as Assertion(A)and the other is labelled as Reason(R).Select the correct answer to these questions from the codes (a),(b),(c) and (d) as given below.

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1. Assertion (A): Force of friction acts opposite to the direction of motion.
Reason (R): Frictional force is a contact force.
2. Assertion (A): Pressure is directly proportional to the area on which force is applied.
Reason (R): Pressure increases with decrease in area.

CASE STUDY

Atmospheric pressure affects our everyday life. Weather patterns and forecasts around the world are affected by atmospheric pressure. It varies as the weight of the air above it changes. Air surrounds the earth creates atmospheric pressure. When we go up into the mountains or fly high in an aeroplane the air is thinner. Changes in air pressure are caused by differences in air temperature above the earth. Air temperature differences create wind and cause pressure system to develop. The magnitude of atmospheric pressure is determined by measuring the force exerted by the weight of the air above a certain point on the surface of earth.

Based on the above, answer the following

- 1 .what is atmospheric pressure?
2. How can you show that air exerts great pressure?
3. At high altitude nose bleeding occurs. Why?

4. The weight of air in a column of the height of the atmosphere and area 15cm x 15cm is as large as ----- kg.

L-9/12 FRICTION

I. CHOOSE THE CORRECT ANSWER.

1. A ball is rolling in East direction, then the frictional force will act in_____ direction.

a) North b) South c) East d) West

2. The force which opposes the relative motion between the surfaces in contact with each other.

a) Muscular force b) Frictional force c) Electrostatic force d) Magnetic force

3. The----- friction of an object depends on the shape of an object.:

a) Rolling b) Sliding c) Static d) Fluid

4. Ball bearings are used to :

a) Increase friction b) Decrease friction c) Keep friction same d) All of these

5. The use of lubricants make the surface:

a) Smooth b) Rough c) no change d) none of these

6. The force required to keep an object moving with the same speed is a measure of-----

a) Static friction b) Drag c) Rolling friction d) Sliding friction

7. The spring balance records:

a) Work done b) Pressure applied c) Force acting d) none of these

8. Air cushion between the moving parts of machines--- :

a) Increases friction b) Decreases friction c) Keeps friction same d) all of these

II. NAME THE FOLLOWING

1. The resistance to friction when a body rolls over the surface of another body.

2. The type of friction acts in suitcase fitted with wheels.

3. The type of friction acts in moving a heavy box from rest.

4. Friction due to gases and liquids.

III. FILL IN THE BLANKS

1. Friction is caused by_____ of irregularities in the two surfaces.
2. Rolling friction is_____ than sliding friction.
3. The substances which reduce friction are called_____.
4. The smoother the surface ,the_____ the friction.
- 5 _____ and _____ are applied to moving parts of a machine to reduce friction.
6. Fluid friction can be reduced by giving _____ shape to bodies

IV GIVE REASON

1. Wheel is said to be one of the greatest inventions of mankind.
2. We sprinkle fine powder on the carom board.
3. A motor mechanic uses grease between the moving parts of the machines.

V .Questions number 1 &2 are Assertion and Reason based questions .Two statements are given, one labelled as Assertion(A)and the other is labeled as Reason(R).Select the correct answer to these questions from the codes (a),(b),(c) and (d) as given below

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1. Assertion (A): Graphite powder is used between moving parts of a machine.
Reason (R): By using graphite friction is reduced.
2. Assertion (A): It is easy to drag a mat with nobody is sitting on it.
Reason (R): Friction decreases with increase in weight of an object.

CASE STUDY

Force of friction always opposes the applied force. Friction is not same for all the surfaces. It depends upon many factors like nature of surface, weight of objects, inclination etc. We find it easier to move a box which is already in motion than from rest. Similarly it is easier to drag a mat when nobody sitting on it. Friction has both advantages and disadvantages. It has many consequences, for eg. whenever a motion with friction occurs kinetic energy is converted into heat energy. Another important consequence of many types of friction can be wear, which may lead to damage to components. Friction can never be eliminated completely. It can be reduced by using lubricants. Friction exerted by fluids depend on factors like speed, shape etc. of the object and the nature of the fluid.

Based on the above, answer the following

- 1 .What is friction and how it is acting?
 - 2.How can we increase friction?
 3. How does fluid friction vary with speed?.
 - 4.We slip when we step on a banana peel. Why?
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. L6/9- REPRODUCTION IN ANIMALS

I. Multiple choice questions

1. The type of asexual reproduction in amoeba:
a) Fragmentation b) Budding c) Binary fission d) Spore formation.
2. Internal fertilisation and external development take place in.
a) Hen b) Frog c) Elephant d) Human beings
3. When the embryo can be identified with body parts, it is known as
a) Zygote b) Foetus c) Infant d) Egg
4. Which of the following is/are paired structures in Human Reproductive System?
a) Fallopian tube b) Testes c) Ovary d) All of these
5. Fertilised egg is .
a) Gamete b) Embryo c) Foetus d) Zygote
6. The number of nuclei present in a zygote is:
a) None b) One c) Two d) Four
7. In human beings, after fertilisation, the structure which gets embedded in the wall of uterus is
a) Ovum b) Embryo c) Foetus d) Zygote
8. Aquatic animals in which fertilisation occurs in water are said to be:
a) Viviparous without fertilisation b) Oviparous with external fertilisation.
c) Viviparous with internal fertilisation d) Oviparous with internal fertilisation.
9. In human beings, the correct sequence of events during reproduction is
a) Gamete formation, Fertilisation, Zygote, Embryo
b) Embryo, Zygote, Fertilisation, Gamete formation
c) Fertilisation, Gamete formation, Embryo, Zygote
d) Gamete formation, Fertilisation, Embryo, Zygote
10. Where does the fusion of male and female gametes generally take place?
a) Fallopian tube b) Ovary c) Uterus d) None of these
11. Dolly the Sheep was cloned from which type of differentiated adult cell?
a) Skin cell b) Mammary gland cell c) Blood cell d) Kidney cell
12. During Binary fission
a) Nucleus divides 1st then Cytoplasm b) Cytoplasm divides 1st then Nucleus
c) Nucleus and cytoplasm divide together d) No such relationship

II. Name the following:

1. The two modes by which animals reproduce.
2. The male gametes.
3. The female gametes.
4. Scientist who successfully performed cloning for the first time.
5. Animals which lay eggs.
6. Animals which give birth to young ones.
7. The process of transformation of larva into an adult through drastic changes.
8. The first cloned mammal.
9. The bulges observed on the sides of the body of hydra.
10. Another name of oviduct.

III. Fill in the blanks:

1. Reproduction resulting from the fusion of male and female gametes is called _____
2. The male reproductive organs include, _____, _____ & _____
3. The female reproductive organs are _____, _____ & _____
4. The fusion of egg and sperm is called _____
5. _____ egg is the largest.
6. Zygote divides repeatedly to give rise to an _____.
7. Fertilization that takes place inside the female body is called _____
8. Different stages in the life cycle of frog are _____, _____, _____
9. Babies born through IVF technique are called _____
10. _____ is essential for continuation of species.

IV. The question below consists of an Assertion and a Reason. Use the following key to choose the appropriate answer.

- (a) Both A and R are true and R is the correct explanation of A.
 - (b) Both A and R are true but R is not the correct explanation of A.
 - (c) A is true but R is false.
 - (d) A is false but R is true.
1. Assertion: Internal fertilization occurs in humans.
Reason: In IVF ,fertilization and complete development takes place outside female body.
 2. Assertion: Developing structure of zygote is called embryo.
Reason: Embryo is a unicellular structure .

CASE STUDY

Most animals and plants reproduce by the method of sexual reproduction.

For sexual reproduction to occur two parents- one male and the other female are required. Males and females have different reproductive organs. There are various methods by which fertilization takes place in the living world. The formation of a zygote marks the beginning of a new individual. The zygote undergoes cell division and forms a ball of cells that give rise to the embryo. In animals where fertilization is internal, there are different ways in which the fertilized egg develops into a new organism. Human and most other mammals give birth to their young ones, some other animals lay fertilized eggs and keep them warm by sitting on them.

1. Differentiate between zygote and embryo.
 2. Why does a zygote have only one nucleus?
 3. List the male and female reproductive organs.
 4. Distinguish between viviparous and oviparous animals.
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