INTERNATIONAL INDIAN SCHOOL DAMMAM
MIDDLE SECTION 2025-26

MIDTERM REVISION WORKSHEET

CLASS: 8 **SUBJECT: GENERAL SCIENCE**

L- 2 MICRO ORGANISMS: FRIEND AND FOE

I. CHOOSE THE CORRECT ANSWER:

1. Which of the following reproduces only inside a host cell?
   (a)Bacteria (b) Amoeba (c) Virus (d) Fungus.
2. Cholera is caused by --
   (a) Bacteria (b) Fungus (c) Virus (d) Protozoa
3. Penicillium is a --
   (a) Alga (b) Fungus (c) Bacteria (d) protozoa
4. Which of the following is a viral disease.
   (a) Cholera (b) Typhoid (c) Smallpox (d) All of these
5. Carrier of Malaria is
   (a) Fly (b) Mosquito (c) protozoa (d) virus
6. Rust of wheat is caused by
   (a) Virus (b) Insects (c) Fungi (d) Air
7. Which of the following is a pathogen
   (a) Plasmodium (b) Lactobacillus (c) Rhizobium (d) All of these.
8. The two micro-organisms which live in symbiotic association in lichens are -
   (a) fungus and protozoa (b) bacteria and protozoa (c) alga and bacteria (d) alga and fungus

II. NAME THE FOLLOWING

1. Two Chemical preservatives-
2. A method of preservation of milk-
3. The process of converting sugar into alcohol-
4. Dead or weakened microbes are introduced into the healthy body-
5. Medicines made from microorganisms to kill or stop the growth of pathogens-
6. Two nitrogen fixers-

7. Give two examples of each.

   a) Bacteria:

   b) Fungi:

   c) Algae:

   d) Protozoa:

   e) Virus:

8. Name the Bacterium which causes Anthrax disease-
9. Carrier of Dengue fever. -
10. Another name for microoorganisms-

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. ASSERTION REASONING:

Choose the appropriate option for the questions given below:

(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 (A): Antibiotics should be taken on the advice of doctors for prescribed time and duration.
Reason (R): If taken when not required antibiotics may kill some of useful bacteria in the body.

2. Assertion (A): Disease which spread from an infected person to healthy person is known as non-communicable disease.
Reason (R): The disease spreads from one person to another through air, water, food, physical contact or insect.

VI. CASE STUDY

Rahul lives in Delhi, and he loves to play football. But as of now his half yearly exams were going on, so his mother didn't allow him to go out and play. She promised Rahul that as soon as his exams were over, he could go and play.
Post exams he went out to play football with his friends in the park. Suddenly a mosquito bit him under his left knee. He came home and everything was normal at that time. The next day his health started getting affected. His Parents rushed him to the doctor. The doctor prescribed some medicines and some medical tests. The next day, parents went to the doctor with Rahul's medical report. In that report the platelet counts were very low. The doctor diagnosed him with Dengue fever. Rahul was hospitalised for some time and followed a strict diet to recover as early as possible. And eventually some days passed, and he recovered.

Q1. Organisms which cannot be seen by naked eye.
(a) Plants
(b) Animals
(c) Microorganisms
(d) None of these

Q2. The causative organism of dengue is
(a) Anopheles mosquito
(b) Aedes aegypti mosquito
(c) Dengue virus
(d) None of these

Q3. What is the best way to prevent dengue fever?

a) Taking antibiotics

b) Eliminating mosquito breeding sites

c) Avoiding contact with infected people

d) Drinking boiled water

Q4. Which of the following is NOT a symptom of dengue fever?

a) High fever b) Severe headache c) Joint and muscle pain d) Cough and sore throat

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L-4 COMBUSTION AND FLAME

I. CHOOSE THE CORRECT ANSWER:

1. Calorific value of LPG is_____

   (a) 25000KJ/Kg (b) 45000KJ/Kg (c) 50000KJ/Kg (d) 55000KJ/Kg

2. Incomplete combustion of fuels produces _____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:

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 blows the _____zone of a flame with a metallic blowpipe.
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 Noncombustible 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. Atmospheric gas is responsible for global warming.

IV. GIVE REASON:

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 a candle is a chemical process.
5. Food is a fuel for our body.

V ASSERTION 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)

b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of 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) Burning of coal and diesel release Sulphur dioxide gas, which causes acid rain.
   Reason: (R) -Sulphur dioxide dissolves in water vapours to produce carbonic acid.

2. Assertion: (A) Middle zone of a candle is non-luminous.
   Reason: (R) - Partial combustion of wax vapours takes place in the middle zone.

3. Assertion (A): carbon dioxide can be stored as a liquid in cylinders.

   Reason (R): Gases have high compressibility.

4. Assertion (A): Burning of phosphorus in air is a rapid combustion.
   Reason (R): phosphorus burns without the application of any apparent cause.

VI. CASE STUDY

The air that we breathe today is more polluted than it was before. More factories, more vehicles, greater use of aerosols and sprays, increasing number of refrigerators and air conditioners that release CFC gases, have all contributed toward pollution. When certain chemicals from the smoke and fumes rise up into the air they mix with the water vapour in the clouds and make it acidic. When rain or snow falls from such polluted clouds, it is also acidic in nature. This acidic rain falls on the leaves of trees, on the fertile soil and also runs into lakes and rivers. The effects of the rain are disastrous. Trees slowly lose their leaves and die. Fertile soil turns acidic and damages the plants and crops. The fish and animals living in lakes or seas are killed. Even our drinking water can be affected

Based on the above, answer the following

1. What is Acid rain?
2. Define Global warming.
3. Name 2 gaseous oxides which cause acid rain.
4. Carbon fuels release_____which are dangerous pollutants.

L- 8 FORCE AND PRESSURE

I. CHOOSE THE CORRECT OPTION:

1. Fruits fall due to the---------- --.

   a) Gravitational force b) Force of gravity c) Electrostatic force d) Frictional force

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 will the pressure exerted be the maximum?

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

6. 1-kilogram weight is equal to
   a) 98 N b) 9.8 N c) 0.98 N d) 0.098 N

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

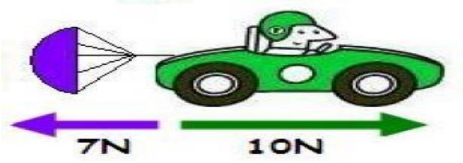
10. The repulsion of two objects could be due to

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

11. Fluids exert pressure in

    a) All directions b) sideways c) Upwards d) Downwards

12. The resultant force in the given picture is_____.
    a) 17N b)10N c) 3 N d) 4N



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

III. IDENTIFY THE TYPE OF FORCE

1. Cars and buses can run on roads. _
2. Force exists 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. Contraction and expansion of lungs_
6. Force that makes all the planets move in their own orbit. -

IV GIVE REASON

1. A truck or a motorbike has much wider tyres.

2. Wall of a dam reservoir thicker at the bottom.

3. Camels can walk easily in the desert.

V. ASSERTION- 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 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): A potter makes pots of different sizes and shapes from kneaded clay.

   Reason (R): Force may bring about change in the size or shape of an object.
2. Assertion(A): Force of friction acts opposite to the direction of motion.
   Reason (R): Frictional force is a contact force.
3. Assertion(A): Pressure is directly proportional to the area on which force is applied.

   Reason (R) - Pressure increases with decrease in area.
4. Assertion (A)- In tug a war, when both the teams pull the rope, with equal and opposite force the rope will remain stationary.

   Reason (R): The unequal force may not bring about change in state of rest.

VI. CASE STUDY

The atmospheric pressure on the earth's surface at sea level is one hundred thousand pascals, i.e., 100 KPa. The atmospheric pressure at a place decrease with an increase in altitude. Atmospheric pressure at a place is the force exerted by the weight of the air column above that place. As we go up the length of the air column above us decreases. This means that its weight and the atmospheric pressure are smaller at higher places than at sea level. If the pressure of the atmosphere is removed suddenly, our blood vessels and tissues will rupture due to the pressure of the blood and other fluids inside. Thus, the spacemen also wear special pressurised suits as in space there is no air and hence, no air pressure. At the top of a mountain, some people can feel their ears "popping" due to a decrease in air pressure. The ears pop to balance the difference in pressure inside and outside the body.

Based on the above, answer the following

1) What is atmospheric pressure?

2)We know that there is a huge amount of atmospheric pressure on us. But we do not experience its effect. Why?

3)Why do some people feel their ears "popping" at the top of the mountain?

4) Name the scientific instrument used to measure atmospheric pressure.

L -5 CONSERVATION OF PLANTS AND ANIMALS

I. NAME THE FOLLOWING:

1. The place where wild animals are protected in their natural habitat-
2. The species which are on the verge of extinction-
3. The variety of plants and animals found in a particular area-
4. The species which are no longer found on Earth-
5. The government organization that maintains the Red Data Book in India-
6. The book that keeps a record of all endangered species-
7. The practice of replanting trees in deforested areas-
8. The areas reserved for wild animals where they can live freely-
9. The phenomenon of movement of a species from its own habitat to some other habitat for a particular time period every year for a specific purpose-
10. The method of planting trees on a large scale to restore forests-

II. FILL IN THE BLANKS:

1. Cutting down trees on a large scale is called_____.
2. The place where animals are protected in their natural habitat is called a _____.
3. _____is the replanting of trees in a deforested area.
4. Species that no longer exist are called _____species.
5. The book that maintains information about endangered species is called the _____.
6. _____ is the variety of different life forms found on Earth.
7. Kaziranga National Park is located in _____.
8. Animals like tigers and lions are protected in _____.
9. Excessive deforestation leads to _____soil.
10. _____is made of all the plants, animals, microorganisms and non-living components in an area.

III. ASSERTION -REASON QUESTIONS:

Choose the correct answer for the questions from the options given below:

A. Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.

B. Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.

C. Assertion is correct, but Reason is incorrect.

D. Assertion is incorrect, but Reason is correct.

1. **Assertion:** National parks and sanctuaries help in the conservation of wildlife.
   Reason: These are areas where animals are protected in their natural habitat.

2. **Assertion:** Red Data Book contains the names of animals only.
   Reason: It is maintained to keep a record of endangered species.

IV. CASE STUDY:

Read the passage and answer the questions that follow:

Deforestation is a major environmental problem caused by cutting down trees for agriculture, urban development, and timber. It leads to several harmful effects such as soil erosion, decreased rainfall, loss of biodiversity, and climate change. In many hilly regions of India, deforestation has made the soil loose and prone to landslides. One such example is in the **North-Eastern states**, where heavy rainfall combined with deforestation has led to frequent **floods and landslides**, destroying homes and crops. Forests play a key role in absorbing rainwater, preventing floods, and maintaining ecological balance.

1. What are the main causes of deforestation mentioned in the passage?

2. Name two environmental problems caused by deforestation.

3. What is the importance of forests in maintaining ecological balance?

4. How do forests help in preventing natural disasters?

L-9 FRICTION

I. CHOOSE THE CORRECT ANSWER:

1. Which of the following reduces friction?
   a) Rough surfaces b) Oil c) Sandpaper d) Gravel

2. Which type of friction is the least?
   a) Static friction **b)** Sliding friction **c)** Rolling friction **d)** Fluid friction

3. Which of these is an example of fluid friction?
   a) A ball rolling on the floor b) A car driving on a road

   c) A fish swimming in water d) book sliding on a table

4. Friction is increased by:
   a) Lubricants b) Polishing surfaces c) Making surfaces rough d) Using rollers

5. Which of the following statements is true?
   a) Friction can be eliminated.
   b) Friction is always harmful.
   c) Friction always acts along the direction of motion.
   d) Friction depends on the nature of surfaces in contact.

II. NAME THE FOLLOWING:

1. The force that opposes the relative motion between two surfaces in contact-
2. The type of friction that comes into play when an object starts moving-
3. A substance that reduces friction-
4. Friction acting on objects through air-
5. The frictional force between liquid layers.

III. FILL IN THE BLANKS:

1. Friction always acts in the _____ direction of motion.
2. Rolling friction is _____ than sliding friction.
3. _____is used to reduce friction in machines.
4. Friction produces _____ as a byproduct.
5. The force of friction depends on the _____of the surfaces in contact.

IV ASSERTION AND REASON:

For the following questions, choose the correct answer from the options given below:

A. Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.

B. Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.

C. Assertion is correct, but Reason is incorrect.

D. Assertion is incorrect, but Reason is correct.

1. **Assertion:** Friction is a necessary evil.
   Reason: Friction helps us in walking but also causes wear and tear.

2. **Assertion:** Sliding friction is greater than static friction.
   Reason: Once motion starts, less force is required to keep the object moving.

V CASE STUDY

Read the passage and answer the questions that follow:

A factory uses conveyor belts to transport goods from one section to another. Initially, the belts required frequent maintenance due to high friction. Engineers applied lubricants and replaced the sliding belts with rollers to reduce wear and tear. They also used ball bearings in the moving parts.

a) What type of friction was primarily reduced by replacing sliding belts with rollers?
b) Why are ball bearings used in machines?
c) Name one advantage and one disadvantage of friction, based on the above case.
d) What is the role of lubricants in machines?

L-6 REPRODUCTION IN ANIMALS

I. CHOOSE THE CORRECT OPTION:

1. In humans, the development of fertilized egg begins in the-
   (a) ovary (b) oviduct (c) testis (d) uterus
2. The number of nuclei present in a zygote is:
   (a) None (b) One (c) Two (d) Four
3. Which of the following animals shows external fertilization?
   (a) Cow (b) Frog (c) Dog (d) Cat
4. Which of the following statements is true?
   (a) Each sperm is a single cell (b) Ovum is a single cell (c) Zygote is a single cell (d) All of these
5. A multi-cellular developing stage from the zygote is called:
   (a) Gamete (b) Zygote (c) Embryo (d) Ovum
6. During Binary fission
   (a) Nucleus divides 1st then Cytoplasm (b) Cytoplasm divides 1st then Nucleus
   (b) Nucleus and cytoplasm divide together (d) No division takes place
7. In which animal Internal fertilization and external development take place in.
   (a) Frog (b) Hen (c) Elephant (d) Human beings
8. Which of the following is/are paired structures in Human Reproductive System?
   (a) Fallopian tubes (b) Testes (c) Ovaries (d) All of these
9. Cloning is a mode of
   (a) Sexual reproduction (b) Asexual reproduction (c) Both I and II (d) None of these
10. Which of the following is not a part of human sperm?
    (a) tail (b) head (c) middle piece (d) sperm duct

II. FILL IN THE BLANKS

1. The type of reproduction in which a single parent is involved is known as _____.
2. In internal fertilization, the fusion of gametes takes place _____ the female body.
3. _____is the term for the fusion of a male and a female gamete.
4. In humans, the zygote develops into a full-grown baby inside the _____.
5. Only a single parent is needed in _____ reproduction.
6. The sperm is a single cell with a _____that helps it move.
7. Asexual reproduction in hydra takes place through a process called _____.
8. _____is essential for continuation of species.
9. _____animals give birth to young ones rather than laying eggs.
10. The process by which a tadpole becomes an adult frog is known as _____.

III NAME THE FOLLOWING:

1. Organs in females that are responsible for the production of eggs-
2. The male reproductive cell in animals-
3. Name the life stage of a frog immediately after it hatches from the egg-
4. This process involves division of a parent cell into two similar daughter cells-
5. Fertilisation in a female human body usually occurs in-
6. This is the male reproductive part where sperms are produced-
7. The first mammal successfully cloned-
8. Oviduct is also called as-
9. The stage of the embryo in which all the body parts are identified –
10. The scientist who successfully performed cloning for the first time.

IV. ASSERTION AND REASON:

Options:
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 (A):** Sexual reproduction results in greater diversity among offspring.
   Reason(R): In sexual reproduction, offspring are produced by a single parent without fertilization.

2. **Assertion (A):** Hydra reproduces asexually by budding.
   Reason(R): Budding involves the formation of a new individual from a small outgrowth on the parent body.

V. CASE STUDY:

Frogs reproduce sexually, and fertilization takes place in water. The female lays hundreds of eggs, which are externally fertilized by the male. The eggs develop into larvae called tadpoles, which undergo metamorphosis to become adult frogs.

1. **What is reproduction?**

2. **What type of fertilization occurs in frogs?**

3. **Why do frogs lay a large number of eggs?**

4. **What is metamorphosis?**

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