

INTERNATIONAL INDIAN SCHOOL- DAMMAM

Annual Worksheet: 2025-26

(MIDDLE SECTION)

Class: VIII

Subject: General Science

L1- CROP PRODUCTION AND MANAGEMENT

I. Multiple Choice Questions (MCQ)

1. Which among the following is a modern method of irrigation.
a) Dhekli b) Rahat c) Moat d) Drip system
2. The process of loosening of the soil is called:
a) Tilling b) Harvesting c) Weeding d) Spraying
3. The agricultural instrument used to remove weed.
a) Sickle b) Kurpi c) Seed drill d) Both b&c
4. Compost is a:
a) Manure b) Fertiliser c) Pesticide d) Weedicide
5. Which among the following is a rabi crop
a) Paddy b) Wheat c) Pulses d) Maize
6. The process of separation of grain from the Chaff after harvesting is known as:
a) Tilling b) Threshing c) Spraying d) Weeding
7. Supply of water to crops at appropriate intervals is called
a) cultivation b) irrigation c) sowing d) harvesting.
8. The branch of science that deals with raising livestock for human use is
a) agriculture b) horticulture c) pisciculture d) animal husbandry.
9. The practice of growing two or more dissimilar crops in the same field one after another is
a) plantation b) sowing c) crop rotation d) weeding
10. Method of transferring seedlings from nursery to field is known as
a) irrigation b) transplantation c) crop rotation d) harvesting.

II. FILL IN THE BLANKS

1. The traditional methods of irrigation are _____, _____ and _____.
2. _____ & _____ are used to store grains at a large scale.
3. Kharif crops are grown in _____ season.
4. Cod liver oil is rich in _____.
5. The process of removing weeds are called _____.
6. _____ crops are sown in winter season.
7. Threshing is carried out with the help of a machine called _____.
8. 2,4D is a _____.
9. Substances added to soil in the form of nutrients for the healthy growth of plants are called _____ and _____.
10. Chemical treatments are required to protect food grains from _____ and _____.

III. GIVE REASONS

1. Seeds are sown at an appropriate depth.
2. Paddy cannot be grown in the winter season.
3. Dry Neem leaves are added to the stored grains.

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

- Both A and R are true and R is the correct explanation of A.
- Both A and R are true but R is not the correct explanation of A.
- A is true but R is false.
- A is false but R is true.

1. **Assertion(A)** :Nowadays seed drill is used for sowing with the help of tractors.

Reason (R): Sowing by seed drill saves time and labour.

2.**Assertion(A)** : The use of fertilizers has helped farmers to get better yield of crops.

Reason(R) : Fertilizers enhance the water holding capacity of the soil..

V. CASE STUDY

All living beings need water to live. Water is important for the growth of plants. Germination of seeds does not take place under dry conditions. To maintain the moisture of the soil for healthy crop growth , fields have to be watered regularly. The supply of water to crops at different intervals is called irrigation. In summer the frequency of watering is higher. Time and frequency of irrigation varies from crop to crop. Nutrients dissolved in water get transported to each part of the plant. Water protects the crop from frost and hot air currents.

- List down the traditional methods of irrigation.
- What is the advantage of modern methods of irrigation ?
- Sprinkler is useful for _____soil.
- In summer the frequency of watering is higher. Why?

CHAPTER -7-REACHING THE AGE OF ADOLESCENCE

I MULTIPLE CHOICE QUESTION

- What are the thread-like structures that carry genetic information in cells called?
A) Hormones B) Chromosomes C) Enzymes D) Antibodies
- Which chromosome combination results in the birth of a female child?
A) XY B) XX C) YY D) None of these
- The unfertilized egg always has----- chromosome.
A) Y B) X C) XY D) XX
- Which hormone regulates the body's metabolism and requires iodine for its production?
A) Insulin B) Adrenalin C) Thyroxine D) Testosterone
- Which hormone is secreted by the pancreas?
A) Insulin B) Testosterone C) Estrogen D) Adrenalin
- Which structure in males becomes prominent during puberty and is known as the Adam's apple?
A) Pituitary gland B) Voice box (larynx) C) Thyroid gland D) Adrenal gland
- Which of the following is a ductless gland?
A) Liver B) Sweat gland C) Endocrine gland D) Salivary gland
- What marks the beginning of adolescence?
A) Birth B) Puberty C) Menopause D) Old age

II NAME THE FOLLOWING

- The hormone responsible for male secondary sexual characteristics.
- The period between childhood and adulthood.
- The transformation from tadpole to frog.
- The condition caused due to deficiency of insulin.
- The structure in boys that causes voice to crack.
- The gland that secretes thyroxine.
- The hormone responsible for female secondary sexual characteristics.

8. Glands that do not have ducts.
9. The hormone that helps the body deal with stress.
10. The master gland.
11. The number of sex chromosomes in human.

III FILL IN THE BLANKS

1. The combination of chromosomes that leads to the birth of a male child is _____.
2. The egg always carries the _____ chromosome.
3. _____ are chemical substances secreted by endocrine glands.
4. The voice box is also known as the _____.
5. The onset of puberty is controlled by the _____ gland.
6. Growth hormone is secreted by _____.

IV MATCH THE FOLLOWING

COLUMN A	COLUMN B
1. Testosterone	a) Controls growth and puberty
2. Estrogen	b) Protruding part of the throat
3. Pituitary gland	c) Beginning of menstruation
4. Menarche	d) Female hormone
5. Menopause	e) Produces thyroxine
6. Adam's apple	f) Male hormone
7. Pancreas	g) Hormone that helps in stress situations
8. Thyroid gland	h) Stoppage of menstruation
9. Adrenalin	i) Produces insulin

V ASSERTION -REASONING

The questions below consist 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 (A):** Adolescence is the period of life when the body undergoes changes leading to reproductive maturity.
Reason (R): Hormones secreted by endocrine glands control these changes.
2. **Assertion (A):** Adrenalin helps the body to handle stress.
Reason (R): Adrenalin is secreted by the pancreas

VI CASE STUDY

1. A group of students was on a nature walk with their biology teacher when they spotted a pond full of tadpoles. Riya was fascinated and asked how these tiny creatures turn into frogs. The teacher explained that the process is called metamorphosis and involves major changes in the body. Later, the class observed how the breathing organs of a tadpole differ from those of an adult frog. They learned that these changes are controlled by hormones.

- a) What is the respiratory organ in tadpoles and how does it change in adult frogs?
- b) What is metamorphosis and what controls this process in frogs?
- c) Name two other animals that undergo metamorphosis
- d) Why is iodine important for metamorphosis in frogs?

L-10 -SOUND

I. Choose the correct option:

1. Sound is produced by
a) Silence b) vibrations c) light d) heat
2. The number of oscillations per second is called
a) Amplitude b) pitch c) frequency d) echo
3. The unit of frequency is
a) Newton b) pascal c) hertz d) decibel
4. Sound cannot travel through
a) Water b) air c) vacuum d) metal
5. The voice box is also called the
a) Pharynx b) larynx c) trachea d) epiglottis
6. The maximum height of a wave is known as
a) Wavelength b) frequency c) amplitude d) pitch
7. Which of the following produces sound with the highest frequency?
a) Man b) dog c) mosquito d) lion
8. Which of the following can humans not hear?
a) 20 Hz b) 1000 Hz c) 15000 Hz d) 50000 Hz
9. The speed of sound is fastest in
a) Air b) water c) steel d) vacuum
10. The time taken by one complete vibration is called
a) Frequency b) period c) amplitude d) pitch
11. Loudness depends on:
a) Frequency b) wavelength c) amplitude d) speed
12. The pitch of sound depends on its:
a) Amplitude b) frequency c) speed d) direction
13. The musical instrument which produces sound by the vibration of the air column.
a) Tabla b) Veena c) Flute d) Dholak
14. 1 Hertz is equal to
a) 1 vibration/second b) 1 vibration/minute c) 60 vibrations/ minute d) both a and c

II Name the following

1. The part of the human ear that receives vibrations.
2. The back-and-forth motion of an object producing sound.
3. The sound that is unpleasant to hear.
4. The medium through which sound cannot travel.
5. The part of the throat that produces sound in humans.
6. The type of sound that has frequency more than 20,000 Hz.
7. The type of sound that has frequency less than 20 Hz.
8. The maximum displacement of a vibrating body from its mean position.

III Answer the following

1. A body vibrates 300 times in 6 seconds. Find out the frequency and time period.
2. Astronauts on the Moon use hand signals to communicate instead of talking. Why?

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 (A):** When a guitar string is tightened, the pitch of the sound produced increases.

Reason (R): Tightening the string increases the frequency of vibrations.

2. **Assertion (A):** Noise is a musical sound.

Reason (R): Musical sound has a definite pitch and noise does not.

3. **Assertion (A):** Sound travels faster in solids than in gases.

Reason (R): Molecules are packed more closely in solids.

V Case Study

Maya noticed that when her father tightened the strings of his guitar, the sound produced by the strings became sharper and higher pitched. One day, she also observed that when she struck a big drum, the sound was loud and deep, but when she struck a small drum, the sound was softer and higher pitched. Curious, Maya asked her science teacher why this happens.

- a) Why does tightening the guitar strings make the sound sharper and higher pitched?
- b) What property of sound is responsible for the difference in pitch between the guitar strings and drums?
- c) Which part of the human ear receives sound vibrations first?
- d) A guitar string vibrates **400 times in 5 seconds** when played. Find the frequency and the time period of the vibration.

L-11-CHEMICAL EFFECTS OF ELECTRIC CURRENT

I. MULTIPLE CHOICE QUESTIONS

1. Which one of the following solutions will not conduct electricity?
(a) Petrol (b) distilled water (c) vegetable oil (d) all of these
2. The electrode connected to the negative terminal of a cell.
(a) cathode (b) anode (c) electrolyte (d) none of these
3. An electric current can produce
(a) heating effect only. (b) chemical effect only.
(c) magnetic effect only. (d) all the above
4. In the electroplating of copper on an iron spoon, copper is connected to
(a) positive terminal (b) negative terminal (c) both of these (d) None of these
5. Electroplating is based on
(a) heating effect of electricity (b) chemical effect of electricity
(c) physical effect of electricity (d) magnetic effect of electricity
6. An electrolyte is
(a) a metal (b) a liquid that conducts current (c) a non-metal (d) None of these
7. Iron objects can be protected by electroplating them with
(a) Chromium (b) Nickel (c) Zinc (d) All of these
8. When an electric current is passed through water, what is released at the electrodes
(a) Metal (b) oxygen (c) hydrogen (d) both b and c

9. An electric lamp glows due to
 (a) heating effect (b) magnetic effect (c) chemical effect (d) physical effect
10. When electric current is passed through a conducting solution, there is a change of colour of the solution. This indicates
 (a) the chemical effect of current. (b) the heating effect of current.
 (c) the magnetic effect of current. (d) the lightning effect of current

II. NAME THE FOLLOWING:

11. An atom or molecule that has an electrical charge due to the gain or loss of electrons.
 12. The method of coating the surface of a metal with another metal using electricity.
 13. The electrode that is connected to the positive terminal of a cell.
 14. The gas released at the cathode during the electrolysis of water.
 15. Full form of LED

III. FILL IN THE BLANKS:

1. Electroplating of _____ is done on objects like water taps and cycle bells to give them a shiny appearance.
 2. A small amount of a mineral salt present naturally in water makes it _____ of electricity.
 3. In the electrolytic refining of copper, pure copper is made as the _____
 4. The metal released in the electrolysis of a salt solution deposits on _____
 5. The longer lead of an LED is always connected to the _____ terminal of the battery.
 6. If the bulb of an electric tester does not light up at all, the given material is _____

IV. ANSWER THE FOLLOWING:

1. Why does salt solution conduct electricity, whereas sugar solution doesn't?
 2. What are electrodes?

V. Match the following

Column 1	Column
1. Closed path	(a) Good conductor
2. LED	(b) Deflection of compass
3. Carbon rod	(c) Positively charged ion
4. Galvanisation	(d) Poor conductor of electricity
5. Distilled water	(e) Coating with zinc
6. Salt solution	(f) Electrode
7. Cation	(g) Light-emitting diodes
8. Magnetic effect of current	(h) Electric circuit
9. Chromium	(i) Negatively charged ion
10. Anion	(j) Electroplating

VI. The questions 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: Most of the liquids that conduct electricity are solutions of acids, bases and salts.

Reason: Such solutions contain ions that help in conduction.

2.Assertion: Distilled water is not a good conductor of electricity.

Reason: Distilled water does not contain any salts.

3.Assertion :Electric current can cause chemical changes in a solution.

Reason: All liquids are good conductors of electricity.

VII. CASE STUDY

Electrical conductivity is the measure of the ability of a substance to carry an electric current. Metals like copper, aluminum, etc, are good conductors of electricity. Liquids that conduct electricity (electrolytes) are generally solutions of acids, bases, and salts. Their molecules ionize into positively and negatively charged ions. We use an LED and a magnetic compass to test the conductivity of liquids. Some compounds, such as glucose and oil, dissolved in water do not form ions and cannot conduct electricity. Such compounds are called non- electrolytes.

- 1) _____ is not a good conductor of electricity.
a) Vinegar b) Tap water c) mustard oil d) tamarind extract.
- 2) How can we make distilled water conduct electricity?
- 3) Define electrolytes. Give 2 examples.
- 4) Name any two devices that can detect weak current.

L 12 - SOME NATURAL PHENOMENA

I. Choose the correct answer:

1. Two objects with unlike charges will _____
(a) Attract each other (b) Repel each other
(c) Either attract or repel (d) Neither attract nor repel
2. Device used to check the presence of charge in an object is
(a) Lightning conductor (b) Electroscope
(c) seismograph (d) All of these
3. Which is the sure test of charge on a body?
(a)Lightning (b) Combination (c) Repulsion (d) Insulation
4. Interaction of charges is called
(a)Lightning (b) Earthing (c) Electric discharge (d)Earthquake
5. The magnitude of an earthquake is measured in
(a)Kelvin scale (b) Celsius scale (c) Decibel scale (d) Richter scale
6. The process of transfer of charges from a charged object to the earth is called
(a)Lightning (b) Oscillation (c) Earthing (d) Charging
7. The point from where the shock waves of an earthquake originate is called
(a)Epicentre (b) Seismic focus (c) Focal depth (d) Hypocenter
8. The charge acquired by a glass rod when it is rubbed with silk is:
(a)negative (b) both positive and negative
(c) positive (d) None of these
9. Uppermost layer of earth is:
(a) core (b) mantle
(c) crust (d) focus

II. Fill in the blanks with suitable words

1. Lightning is caused by _____.
2. The electricity generated by rubbing two object is _____ electricity.
3. In Richter scale highly destructive Earthquake have magnitude greater than _____
4. _____ is an instrument that records seismic waves.
5. _____ is the sudden shaking and trembling of the earth.
6. Lightning is always followed by _____.
7. _____ is caused due to an earthquake under sea.
8. Transfer of charge to the earth is _____.
9. Richter scale measure _____ of an earthquake.
10. Charges in motion constitute an _____.
11. The two types of charges are _____.
12. _____ can save buildings from destruction due to lightning.

III. Name the following

1. The scale on which the power of an earthquake is expressed.
2. The 3 Layers of the earth.
3. The boundaries of the Earth where an earthquake is more likely to occur.
4. The instrument used to measure seismic waves.
5. Two most devastating earthquakes occurred in India.
6. Shockwaves generated by an Earthquake.
7. The scientist who first established the relationship between lightning and spark.
8. The agency responsible for making quake - proof houses.

IV. Answer the following

1. A charged body loses its charge if we touch it with our hand. Why?
2. Sometimes, a crackling sound is heard while taking off a sweater during winter. Give reason.
3. Houses in Seismic zones are made up of mud and timber. Give reason.

V. The questions below consist 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: We can use wired telephone at the time of lightning.

Reason: Lightning can strike telephone cords.

2.Assertion: Earthquakes tend to occur at the boundaries of earth's plates.

Reason: It is not possible to predict the occurrence of an earthquake.

3.Assertion: A charged balloon repels another charged balloon.

Reason: Similar charges repel each other.

VI. CASE STUDY

The outermost layer of the earth is fragmented. Each fragment is called a plate. . These plates float over the hot magma below and therefore in relative motion to each other. Sometimes these plates collide or slide over each other. The boundaries of the plates are the zones where earthquakes are most likely to occur. In India most threatened areas are Kashmir, western and central Himalayas, Raan of Kutch

etc. The intensity of the earthquake is measured by a scale ranging between 0 to 9. This scale is not linear. On this scale, an earthquake with a magnitude 6 has 1000 times more destructive energy than an earthquake of magnitude 4.

1. What are the possible reasons for an earthquake to occur ?
2. Name the weak zones in India.
3. Earthquakes can cause _____, and _____.
4. What is seismograph?

L- 13: LIGHT

I. Fill in the blanks :

1. The ray of light that strikes any surface is called _____.
2. The size of the pupil becomes _____ when you see in bright light.
3. _____ is the part of eye which gives it its distinctive colour.
4. Day light birds have _____ cones than rods in their eyes.
5. When two mirrors are kept parallel to each other the number of images is _____.
6. Beautiful patterns are formed in a kaleidoscope because of _____.
7. The splitting of white light into its constituent colours is called _____.
8. The distance of the object and the _____ is always same from the plane mirror.
9. _____ regulates and controls the amount of light entering the eye .
10. _____ is a light sensitive screen in the eye.
11. _____ carries impulses from the eyes to the brain.
12. _____ is a device which works on the reflection of reflected light.
13. _____ the point inside the human eye where no vision is possible.
14. The most comfortable distance at which one can read with a normal eye is approximately _____.
15. Droplets of water split sunlight to form a spectrum known as _____.
16. In a Kaleidoscope, the mirrors make an angle of _____ with each other.
17. A person 2m In front of a plane mirror seems to be _____ m away from his image.
18. The impression of an image persists in the retina for about _____ of a second.

II. Multiple Choice Questions:

1. Which part of the eye converges light rays to form the image
a) Cornea b) Retina c) Eye lens d) Pupil
2. The angle of incidence is equal to the angle of reflection
a) Always b). Sometimes c) Under special conditions d) Never
3. Image formed by a plane mirror is:
a) virtual, behind the mirror and enlarged.
b) Virtual, behind the mirror and diminished.
c) Virtual, behind the mirror and of the same size as the object.
d) real at the surface of the mirror and enlarged.
- 4 The perpendicular drawn to the reflecting surface at the point of incidence is called
a) Normal b) Incident ray c) Reflected ray d) None of these
- 5 The angle between the incident ray and the normal
a) angle of incidence b) reflected ray
c) angle of reflection d) point of incidence
6. The reflection of light from a smooth surface is called:
a) diffused reflection b) dispersion c) regular reflection d) spectrum
7. If two plane mirrors are inclined at an angle of 120° , number of images formed will be :
a) 7 b) 1 c) 2 d) 5
8. The angle between the incident ray and reflected ray is 100° . What is the value of angle of incidence?
a) 100° b) 90° c) 50 d) 45°

III. Match the following:

Column A	Column B
i. Cornea	a. Sensitive to dim light
ii. Cloudy lens	b. Sensitive to bright light
iii. Rods	c. Multiple reflection
iv. Pupil	d. Diffused reflection
v. Cones	e. Front part of the eye
vi. Blind spot	f. Bouncing back of light
vii. Reflection	g. No sensory cells
viii. Rainbow	h. Small opening in the iris
ix. Kaleidoscope	i. Cataract
x. Rough surface	j. Dispersion of light

IV. State whether the following statements are true/false. If false, correct the statements.

1. Laser torch can injure eye lens.
2. Normal makes 60° angle with the reflecting surface.
3. Ciliary muscles change the shape of the lens in the eye.
4. The type of lens present in our eyes is concave lens.
5. The objects which shine in the light of other objects are called luminous objects..
6. Cones are sensitive to dark light.

V. 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:** Images are formed by diffused reflection.
Reason: Diffused reflection is due to irregularities in the reflecting surface.
2. **Assertion:** Owl cannot see during the day.
Reason:Owl has only a few cones on its retina.
3. **Assertion:** Images by a plane mirror cannot be obtained on a screen.
Reason: In a plane mirror reflected rays appear to meet at a point.

VI. CASE STUDY

Light reflected from all surfaces. An object reflects light that falls on it. This reflected light, when received by our eyes, enables us to see things .Regular reflection takes place when light is incident on smooth, polished and regular surfaces and irregular reflection takes place from rough surfaces Reflected light can be reflected again if incident on another mirror. The periscope makes use of two plane mirrors .Reflection from the two mirrors enables us to see objects which are not visible directly A plane mirror forms only a single image of an object. Mirrors placed at an angle to one another, forms a number of images due to multiple reflection.

- 1) Irregular reflection is also known as _____.
- 2) Write 2 uses of periscope.
- 3) _____reflection takes place when a beam of light strikes a tree.
- 4) What is the use of irregular reflection?
