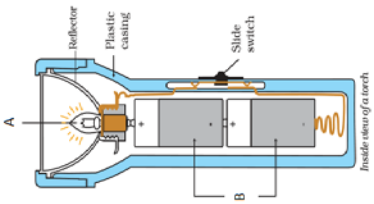


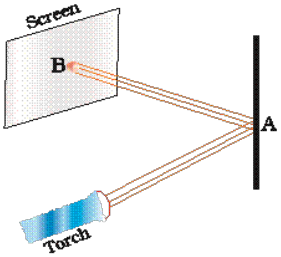
- Teachers' Handbook

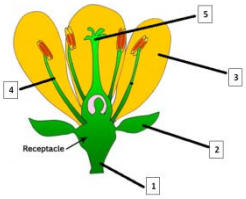
(Based on learning outcomes)

CLASS-VII

SCIENCE





FOREWORD

CLASSES VI TO VIII

SUBJECT – SCIENCE

This document is prepared with a notion to enable the teachers to ascertain learning skills accurately in the subject of science for classes VI to VIII so that the minimum level of learning (MLL) may be attained by the children and their periodic assessment can be done to maintain the record of their progress.

ABOUT THE DOCUMENT

- The document includes Learning Outcomes prepared by NCERT distinctively for classes VI, VII and VIII in Science and learners achievement sheet for the assessment of learners.
- It covers the full syllabus for each class and gives an insight into the progress made in each class by the students.
- The material in the documents can be used as an assessment tool for classes VI to VIII in the subject of science and it is meant both for teachers and the students.
- The document provides the crux of the Learning Outcomes and efforts are made to avoid direct information, definition and description, and instead an opportunity is provided to the children to correlate experience and explore the environment in its surroundings.
- This document reaches the desired Learning Outcomes targeting the competencies through multiple choice and open ended questions to access the learning levels of the students in each class.
- The language in the document is simple for the childrento read and understand and the Progress sheet has been given to record the growth of every student by the teacher.
- In spite of the fact that all efforts are made to give full freedom to the child to explore but there might have been some discrepancies. Therefore, this document should be considered suggestive document and constructive suggestions as per the need can be incorporated.

NOTE: These assessment tools are only suggestive for teachers. The teacher can modify these tools according to the need and level of

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CLASS VII

	The learner —
SCI701	• identifies materials and organisms, such as, animal fibres; types of teeth; mirrors and lenses, on the basis of observable features, i.e., appearance, texture, functions, etc.
SCI702	• differentiates materials and organisms such as, digestion in different organisms; unisexual and bisexual flowers; conductors and insulators of heat; acidic, basic and neutral substances; images formed by mirrors and lenses, etc., on the basis of their properties, structure and function
SCI703	• classifies materials and organisms based on properties/characteristics, e.g., plant and animal fibres; physical and chemical changes
SCI704	• conducts simple investigations to seek answers to queries, e.g., Can extract of coloured flowers be used as acid-base indicator? Do leaves other than green also carry out photosynthesis? Is white light composed of many colours?
SCI705	• relates processes and phenomena with causes, e.g., wind speed with air pressure; crops grown with types of soil; depletion of water table with human activities, etc.
SCI706	• explains processes and phenomena, e.g., processing of animal fibres; modes of transfer of heat; organs and systems in human and plants; heating and magnetic effects of electric current, etc.
SCI707	• writes word equation for chemical reactions, e.g., acid-base reactions**;** corrosion; photosynthesis; respiration, etc.
SCI708	• measures and calculates e.g., temperature; pulse rate; speed of moving objects; time period of a simple pendulum, etc.
SCI709	• draws labelled diagrams/ flow charts e.g., organ systems in human and plants; electric circuits; experimental set ups; life cycle of silk moth, etc.
SCI710	• plots and interprets graphs e.g., distance time graph
SCI711	• constructs models using materials from surroundings and explains their working, e.g., stethoscope; anemometer; electromagnets; Newton's colour disc ,etc.
SCI712	• discusses and appreciates stories of scientific discoveries
SCI713	• applies learning of scientific concepts in day-to-day life, e.g., dealing with acidity; testing and treating soil; taking measures to prevent corrosion; cultivation by vegetative propagation; connecting two or more electric cells in proper order in devices; taking measures during and after disasters; suggesting methods for treatment of polluted water for reuse, etc.
SCI714	• makes efforts to protect environment, e.g., following good practices for sanitation at public places; minimising generation of pollutants; planting trees to avoid soil erosion; sensitising others with the consequences of excessive consumption of natural resources, etc.
SCI715	• exhibits creativity in designing, planning, making use of available resources, etc.
SCI716	• exhibits values of honesty, objectivity, cooperation, freedom from fear and prejudices

Major parameters for evaluation:

PARAMETER	SUB PARAMETER	LEARNING OUTCOME
Identify	------	SCI701
Differentiate/Classify	------	SCI702, SCI703
Explain	Discuss and Appreciate	SCI706,SCI712
Draw/ Measure	Writes word equations/Calculate/Plot and Interpret Graphs	SCI707,SCI708,SCI709,SCI710
Construct/Exhibit/ Conduct	------	SCI704,SCI711,SCI715,SCI716
Application/Relate	Make efforts to protect environment	SCI705,SCI713,SCI714

SAMAPLE FORMAT FOR ASSESMENT

Learner's achievement Sheet

Name of student	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16

SAMPLE FORMAT FOR PROGRESS SHEET

PROGRESS SHEET
Achievement level as per learning outcomes
(Grading: - A/B/C/D)
*(A- not meeting the expected standard,
B- Approaching the expected standard
C- Approached the expected standard
D- Beyond the expected standard)

Sr. No	Name of the Student	Identify	Differentiate / Classify	Explain	Draw/ Measure	Construct /Exhibit/ Conduct	Application /Relate

INDEX

CHAPTER-1

NUTRITION IN PLANTS

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																	
Identify		**Differentiate/ Classify**				**Explain**						**Draw/ Measure**		**Construct/Exhibit/ Conduct**		**Application/ Relate**	
Q1	Q3	Q3	Q4	Q10	Q16	Q5	Q6	Q7	Q10	Q12	Q16	Q9	Q11	Q14	Q15	Q2	Q8	Q13

Learner's achievement Sheet

Name of student	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1.Food is essential for all living organisms. Carbohydrates, proteins, fats, vitamins and minerals are components of food. These components of food are necessary for our body and are called ----------.

a)Nutrition b)Nutrients c)Constituents d)None of these

2.Which of the following statements is/ are correct?

i) All green plants can prepare their own food.
ii) Most animals are autotrophs
iii) Oxygen is liberated during photosynthesis.
iv) Carbon dioxide is not required for photosynthesis.

Choose the correct answer from the options below:

a) i)&(iii) b)(ii)only c) (ii)&(iii) d) (i)&(iv)

3. Plants which synthesise their own food are called----------

a) heterotrophs b)parasite c) autotrophs d)none of these

4. By nature human beings are:

a) insectivores b) carnivores c) omnivores d) herbivores

5 . Photosynthesis is a light dependent

a) autotrophic nutrition b) saprotrophic nutrition

c) parasitic nutrition d) heterotrophic nutrition

6 .Other than light ,which of the following are also essential for Photosynthesis.

a) Carbon dioxide, water, minerals, chlorophyll
b) Carbon dioxide, water, vitamins, chlorophyll
c) Carbon , water, minerals, chlorophyll
d) Carbon ,water, hormones, chlorophyll

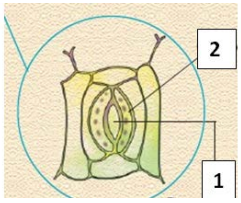
7. Two organisms are good friends & live together. One provides shelter, water& nutrients while the other prepares & provides food. Such an association of organisms is termed as_____

a) saprophyte b) symbiosis c) autotroph d) parasite

8. The pitcher plants is green & carries out photosynthesis. It traps & feeds on insects. Therefore, the mode of nutrition is:

a)autotrophic b) heterotrophic c)both a &b d) none of these

9 . Observe the diagram given below &choose the correct option for labelling.



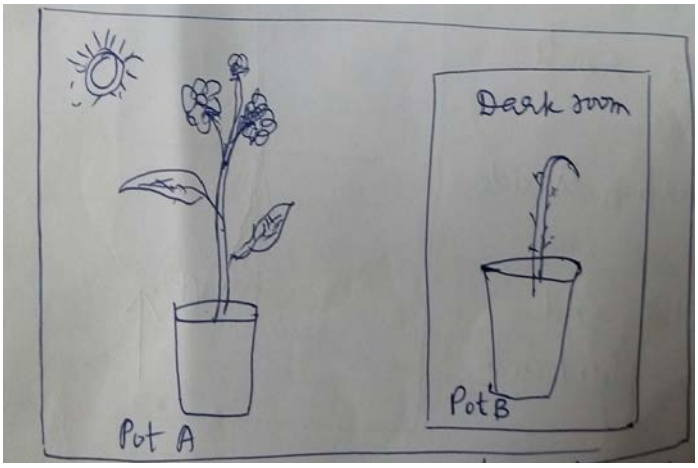
a) 1-stomatal opening, 2-guard cell b)1-guard cell,2-stomatal opening

c) 1- chloroplast,2-guard cell d)1- epidermal cell, 2- chloroplast

10. Select the incorrectly matched statement given in column A with column B

Column A	**column B**
a) tiny pores in leaves	**I stomata**
b) parasitic plants with slender long tubular stem	**II Bread mould**
c) plants feeding on insects	**III Insectivores**
d) a plant food factory	**IV leaf**

11. Anjali planted two plants In pot A & pot B. She placed pot A in open where plenty of sunlight is available & pot B in dark room with negligible amount of sunlight .After a few days, she observed that plant in pot A is growing in size while plant in pot B had died. Choose the reason from given below:



a) Anjali poured more water in pot A.
b) The plant in pot A is stronger.
c) Dark room kills plant's chlorophyll.
d) Plants need light to prepare food

12. Process of conversion of carbon dioxide & water into starch by the green plants & release of oxygen in the presence of sunlight is called

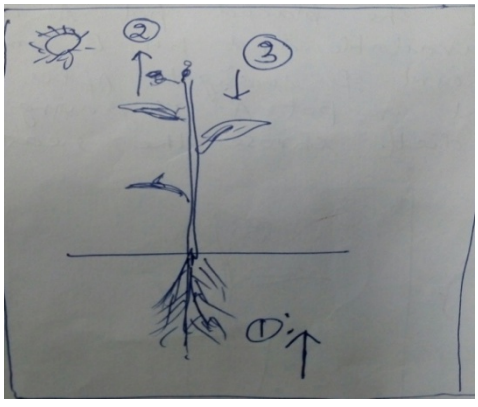
a) Excretion b) digestion c) photosynthesis d) respiration

13. Statement A: All green plants have chlorophyll. Statement B: Without chlorophyll, photosynthesis cannot take place.

From the above statements, Neelam concluded that the dark red colored croton plants in her garden cannot prepare food on its own. But her teacher said it is not correct. The reason being:

a) Croton plants do not have chlorophyll but they can prepare their own food.
b) Croton plants have chlorophyll but it is hidden by dark red colour.
c) Croton plants are green but do not contain chlorophyll.
d) Croton plants are dark red in colour but do not contain chlorophyll.

14 After studying photosynthesis, Anita drew the illustrations of a plant shown below:



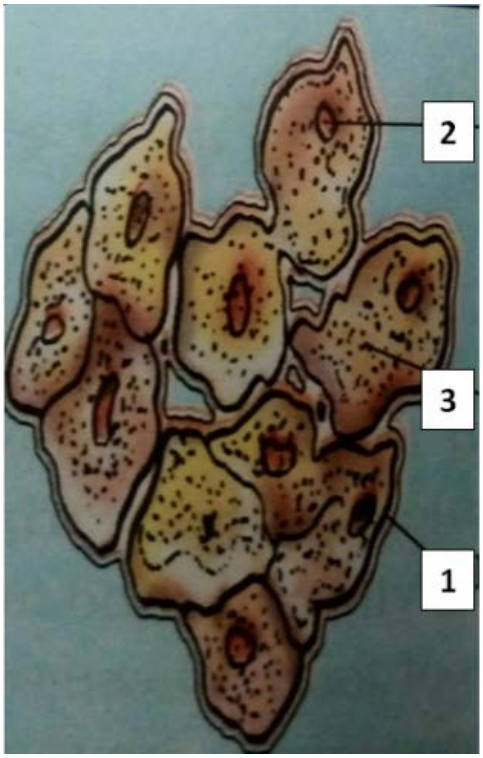
Arrow 2 in the given figure represents

a) Release of oxygen into the atmosphere.
b) Absorption of water & minerals by the roots from the soil.
c) Release of water & minerals by the plant into soil.
d) Absorption of carbon dioxide into the soil.

15 Hari wants to test presence of starch in a leaf. The steps to conduct the test are given below. Choose the step which is not necessary.

a) Boil the leaf first in water & then in alcohol.
b) Wash the bleached leaf.
c) Heat the bleached leaf on a hot flame.
d) Add a few drops of iodine solution to the bleached leaf

16. Cell is the structural and functional unit of life, enclosed by a thin outer boundary called _____1_____. Most cells have centrally located spherical structure called _____2____. The jelly present in the cell is called _____3_____. Observe the diagram of the cell and identify the correct option.



a) 1-Cytoplasm, 2-Cell membrane, 3- Nucleus.
b) 1-Cell membrane, 2- Nucleus, 3- Cytoplasm.
c) 1-Nucleus, 2- Cell membrane, 3- Cytoplasm.
d) 1-Cell membrane, 2- Cytoplasm, 3- Nucleus.

17. Complete the given equation of photosynthesis from the options given below:-

$$\text{Carbon dioxide} + \text{water} \xrightarrow[\text{Chlorophyll}]{\text{Sunlight}} \_\_\_\_\_ + \_\_\_\_\_.$$

a) Carbon, sunlight
b) Carbohydrate, water
c) Carbohydrate , oxygen
d) Starch , water

Answer Key (Chapter 1)

Q	ans.	Q.	ans.
1	b	13	b
2	a	14	a
3	c	15	c
4	c	16	b
5	a	17	c
6	a		
7	b		
8	c		
9	a		
10	b		
11	d		
12	c		

CHAPTER -2

NUTRITION IN ANIMALS

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																	
Identify	**Differentiate/ Classify**	**Explain**							**Draw/ Measure**			**Construct/Exhibit/ Conduct**	**Application/ Relate**		
Q1	Q 12	Q 3	Q 4	Q 5	Q 6	Q 8	Q 10	Q 13	Q 9	Q 11	Q 19	Q7	Q 2	Q 17	Q 18

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

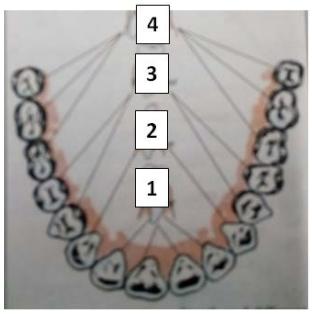
C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. Choose the correct labelling of different types of teeth.



a) 1-incisor, 2 - canine , 3-premolar, 4-molar
b) 1-canine, 2- incisor, 3-premolar, 4-molar
c) 1-incisor, 2- canine, 3-molar, 4-premolar
d) 1-molar, 2- premolar, 3-canine, 4-incisor.

2. Which of the following is not correctly matched.

	COLUMN A		**COLUMN B**
a)	Housefly	1)	Chewing
b)	Eagle	2)	Capturing and swallowing
c)	Infants	3)	Sucking
d)	Mosquito	4)	Sucking

3.The swallowed food moves downwards in the alimentary canal because of .

a) Force provided by muscular tongue
b) Gravitational pull
c) Movement of wall of food pipe
d) Flow of water taken into the food.

1. The acid present in the stomach

a) Protects the lining of stomach.
b) Makes medium alkaline.
c) Kills the bacteria entering along with food and making medium in stomach acidic.
d) None of the above.

5. The enzymes present in saliva convert :

a)Fats into fatty acids & glycerol
b)Starch into simple sugar
c)Proteins into amino acids.
d) Complex sugars into simple sugars.

6. Read the following statement with reference to villi of small intestine

(i)They have very thin walls.
(ii)They have a network of thin and small blood vessels close to the Surface.
(iii)They have small pores through which food can easily pass.
(iv) They are finger-like projections.

Identify those statements which enable the villi to absorb digested food

a) (i),(ii) and (iv) b) (ii),(iii) and (iv) c) (iii) and (iv) d) (i) and (iv).

7. Given below are some food items.

(i) Potato. (ii) Mustard Oil.
(iii) A slice of bread (iv) Glucose solution

Which of the above will give blue –black colour when tested with iodine.

a) (i) and (ii) b) (iii) and (iv)
c) (i) and (iii) d) (iii) and (ii).

8. Grass eating animals (ruminants) quickly swallow the grass and store in part of stomach called rumen. Here the food gets partially digested and is called _____.

a) Cud b) faeces c) Saliva d) Lumps.

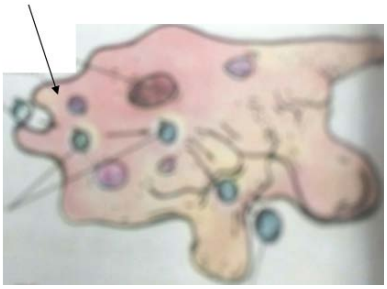
9. Choose the correct order of terms that describe the process of nutrition in ruminants.

a) Swallowing----→partial digestion---→chewing of Cud---→complete digestion.
b) chewing of Cud ----→Swallowing ---→ partial digestion ---→complete digestion.
c) chewing of Cud ----→Swallowing ---→ mixing with digestive juices ---→complete digestion.
d) Swallowing---→chewing & mixing partial digestion →complete digestion.

10. Choose the incorrect statement.

a) Nutrition is a complex process involving (i) ingestion, (ii) digestion (iii) absorption (iv) assimilation (v) egestion.
b) salivary glands ,liver and pancreas are the main digestive glands which secretes digestive juice.
c) Chocolate, sweets, soft drinks are the major culprits of tooth decay.
d) The removal of faeces through anus is called ingestion.

11.Identify the organism and name its false feet, used for movement and capture of food.



a) Amoeba, cilia
b) Amoeba, pseudopodia
c) paramecium, whip
d)None of these.

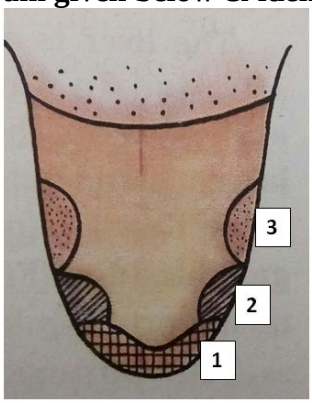
12.Read the passage and select the correct option for its fill ups. _____is a microscopic single celled organism found in pond water .It constantly changes its shapes and position .It has finger like projection called _____or false feet for movement and capture of food.

a)Amoeba, nucleus
b)Paramecium, Vacuobe
c) Amoeba, Pseudopodia
d) None of the above.

13. Read the passage and select the correct option for its fill ups.The____ is a reddish brown gland situated in upper part of the abdomen on the right side .It is the largest gland in the body. It secretes bile juice which is stored in a sac called_____. The bile juice plays important role in digestion of _____.

a)Liver, fats, gallbladder
b)Liver ,gall bladder, fats
c)Liver, fats, gallbladder
d)None of the above.

14. Observe the diagram given below & identify the taste buds on tongue for different tastes



a)1--Sweet	2--- Salty	3---Sour
d)1---Sour	2—Salty	3----Sweet
c) 1--Sweet	2--- Sour	3---Salty
d) 1--Salty	2--- Sour	3---Sweet

15. Select the animal whose milk is easily digested.

a) Cow b) Buffalo c) Goat d) None of the above.

16. The outer portion of the tooth, which is also the hardest substance in human body is called –

a) Crown b) Root c) Enamel d) Pulp

17. Match the following and choose the correct option:-

Column A	**Column B**
1. Incisors	I) Grinding teeth
2. Canines	(II) Cutting teeth
3. Molars	III) Tearing teeth

A) 1-II, 2-I, 3-III
B) 1-I, 2-II, 3-III
C) 1-I, 2-III, 3-II
D) 1-II, 2-III, 3-I

18. Which of the following correctly represents the passage of food in our body?

a) Mouth →Stomach→ $Food\ pipe \rightarrow Small\ intestine.$
b) Mouth → $Food\ Pipe \rightarrow Stomach \rightarrow Small\ intestine.$
c) Mouth →Stomach→ $Small\ intestine \rightarrow Food\ pipe.$
d) Mouth →Small intestine → Food Pipe → Stomach.

Answer Key (Chapter 2)

Q	ans.	Q.	ans.
1	a	13	b
2	a	14	a
3	c	15	c
4	c	16	c
5	b	17	d
6	a	18	b
7	c		
8	a		
9	a		
10	d		
11	b		
12	c		

CHAPTER-3

FIBRE TO FABRIC

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																		
Identify									**Differentiate / Classify**	**Explain**				**Draw/ Measure**	**Construct/ Exhibit/ Conduct**	**Application/ Relate**			
Q 2	Q 4	Q 5	Q 8	Q 10	Q 14	Q 15	Q 16	Q 17	Q 13	Q 6	Q 7	Q 9	Q 12	Q 10	Q17	Q 1	Q 3	Q 11	Q 12

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17

PROGRESS SHEET

Achievement level as per learning outcomes
(Grading: - A/B/C/D)
***(A- not meeting the expected standard,**
B- Approaching the expected standard
C- Approached the expected standard
D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1 Rekha wanted to buy a gift made up of animal fibre obtained without killing the animal. Which of the following would be the right gift for her to buy?

a) Woollen shawl b) Silk scarf

c) Leather Belt d) Leather jacket

2 Wool fibre cannot be obtained from

a) Goat b) Llama c) Alpaca d) Silk Moth

3.Which of the following is not a type of silk?

a) Moth silk b) Mooga silk c) Tassar silk d) Mulberry silk

4. Choose the incorrect pair of matching from the following COLUMNs:

COLUMN-I	**COLUMN –II**
A) Angora goats	Jammu&Kashmir
b) Llama &Alpaca	South America
c) Kashmiri camel	Pashmina shawals
d) Yak wool	Tibet & Ladakh

a)A b) B c) C d)D

5 Match the column I with column II & select the right option

Column I	**Column II**
1 Rampur bushair	I carpet wool
2 Nali	II Brown fleece
3 Bakharwal	III coarse wool
4 Marwari	IV woollen shawls

a) 1- II,2-I, 3- IV, 4- III

b) 1- I,2-II, 3- III, 4- IV

c) 1- II,2-IV, 3- III, 4- I

d) 1- I,2-III, 3- II, 4- IV

6 Choose the correct order of sequence of steps in processing of wool.

a) shearing, scouring, sorting, dyeing, picking out the burrs.
b) shearing, , sorting, scouring, dyeing, picking out the burrs.
c) shearing, scouring, sorting, dyeing, picking out the burrs.
d) None of these.

7 Caterpillar grows in size, first weaves a net to hold itself and then it swings its head from side to side in the form of figure of eight(8). During these movements, the secretions are made up of

a) Fat b) Cellulose c) Starch d) Protein

8 The term sericulture is used for

a) Rearing of silkworm
b) Culture of algae
c) To get silk yarn from silk fibres
d) Spinning of silk fibres

9. The general process that takes place at a sheep shearing shed is

a) Removal of fleece
b) Washing of sheep fibre to remove grease
c) Dyeing hair
d) Rolling of sheep fibre into yarn

10. Larva of silk worm feeds on _____ leaves.

a) Mulberry
b) Peepal
c) Mango
d)None of these.

11.Wool industry is an important means of livelihood for many people in our country, but sorter's job is risky as sometimes they get infected by a bacterium ----------,which causes a fatal disease called sorter's disease.

a) Asthma b) Anthrax c) Pneumonia d) None of the above.

12. A pile of cocoons is used for obtaining silk fibres. The cocoons are kept under the sun or boiled or exposed to steam. The silk fibres separate out. The process of taking out threads from cocoon for making silk is called----------

a) peeling of the silk b) dyeing of the silk c) reeling the silk d) none of these.

13. Complete the correlation:

Silk worm : cocoon:: wool : _____

a) jute of hemp

b) hair of horse

c) fleece of sheep

d) cotton plant

14. The following items are matched from column A to column B.

Column A	**Column B**
(i) Scouring	I Food of silk worm
(ii) Mulberry leaves	II Yields silk fibre
(iii) Sheep	III cleaning sheared skin
(iv) Cocoon	IV Wool yielding animal

Choose the correct option:

a) (i)_III, (ii)_ I, (iii)_IV, (iv)__II
b) (i)_II, (ii)_ I, (iii)_III, (iv)__IV
c) (i)_IV, (ii)_ II, (iii)_I, (iv)__II I
d) (i)_I, (ii)_ III, (iii)_II, (iv)__IV

15. Which of the following countries is the leading producer of silk in the world?

a) India b) Nepal c) China d) Sri lanka

16. The small fluffy fibres are:

a) Bolls b) Burrs c) Reels d) Fabric

17. The soft silk yarn is as strong as compared to ----------

A) polyester b) jute c) cotton d) steel

Answer Key (Chapter 3)

Q	ans.	Q.	ans.
1	a	13	c
2	d	14	a
3	a	15	c
4	c	16	b
5	a	17	d
6	c		
7	d		
8	a		
9	a		
10	a		
11	b		
12	c		

CHAPTER -4

HEAT

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES															
Identify	**Differentiate/ Classify**		**Explain**	**Draw/ Measure**		**Construct/Exhibit/ Conduct**				**Application/ Relate**						
Q 14	Q 7	Q 13	Q 11	Q 8	Q 10	Q 4	Q 5	Q 6	Q 12	Q 9	Q 1	Q 2	Q 3	Q 8	Q 9	Q15

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. An iron pipe would feel cold as compared to a plastic pipe on a winter morning, because the iron pipe

(a) is a better conductor of heat than the plastic pipe.

(b) is shiny while plastic pipe is not shiny.

(c) reflects more heat than plastic pipe.

(d) is a poor conductor of heat than the plastic pipe.

2. A beggar wrapped himself with a few layers of newspaper on a cold winter night. This helped him to keep himself warm because

(a) friction between the layers of newspaper produces heat.

(b) air trapped between the layers of newspaper is a bad conductor of heat.

(c) newspaper is a conductor of heat.

(d) newspaper is at a higher temperature than the temperature of the surrounding.

3. Paheli and Boojho measured their body temperature. Paheli found her temperture to be 98.6 °F and Boojho recorded 37°C. Which of the followng statement is true?

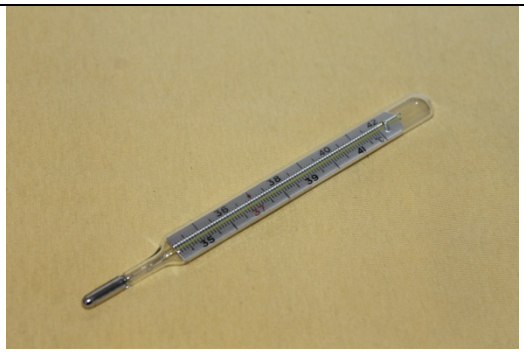
(a) Paheli has a higher body temperature than Boojho.

(b) Paheli has a lower body temperature than Boojho.

(c) Both have normal body temperature.

(d) Both are suffering from fever.

4. Boojho has three thermometers as shown in Figure . He wants to measure the temperature of his body and that of boiling water. Which thermometer (s) should he choose?



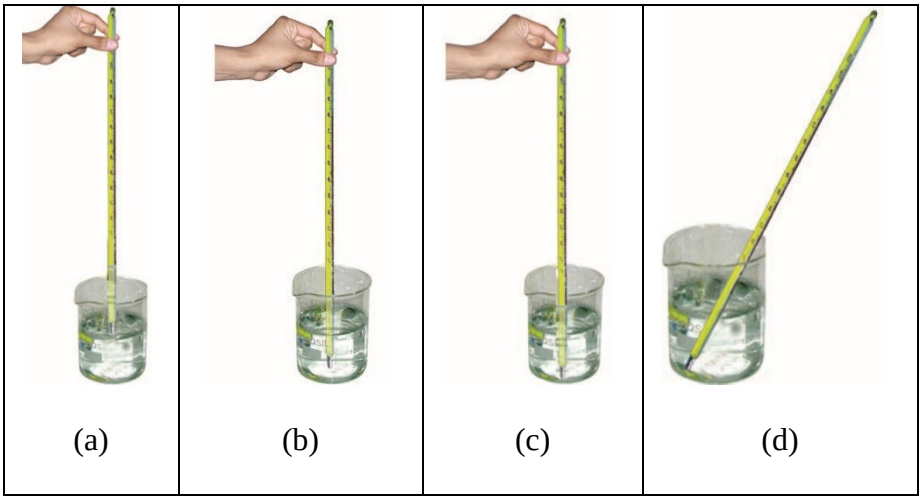
(i)

(ii)

(iii)

(a) Thermometer (i) or (ii) for measuring body temperature and (iii) for measuring the temperature of boiling water.
(b) Thermometer (i) for measuring temperature of both.
(c) Thermometer (ii) for measuring temperature of both.
(d) Thermometer (iii) for measuring temperature of both.

5. Four arrangements to measure temperature of ice in beaker with laboratory thermometer are shown in Figure (a, b, c and d). Which one of them shows the correct arrangement for accurate measurement of temperature?



(a) (b) (c) (d)

6. Figures given below(a–d) shows a student reading a doctor's thermometer. Which of the figure indicates the correct method of reading temperature?

			
(a)	(b)	(c)	(d)

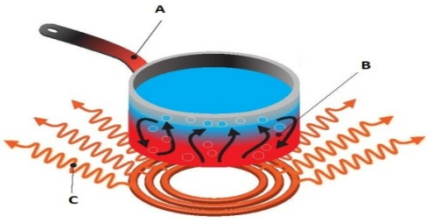
7. Heat can flow from one object to other by three ways. These are conduction, Convection and radiation. Identify these three processes in picture given.

(a) A-Conduction,B-Convection,C-Radiation

(b) A- Convection,B- Conduction,C-Radiation

(c) A- Radiation,B- Conduction,C- Convection

(d) A- Convection,B- Radiation,C- Conduction



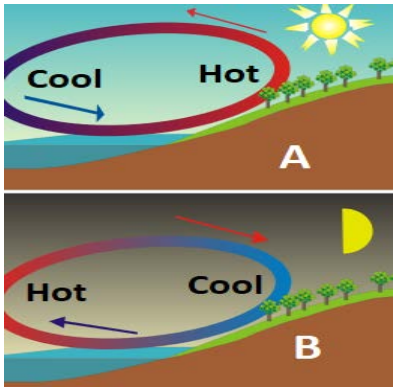
8. The people living in the coastal areas experience interesting phenomena of sea and land breeze. Look at the picture and identify the correct match

(a) A-See Breeze
B-Land Breeze

(b) A- Radiation
B- Conduction

(c) A- Convection
B- Radiation

(d) A-Land Breeze
B-See Breeze



9. Dark- coloured objects absorb radiation better than the light-coloured objects. So in order to be comfortable, which type of clothes should we wear in summers :

(a) clothes of white or light colour.
(b) Black coloured Dress.
(c) colour of cloth does not affect comfort.
(d) None of the above.

10. One litre of water at 20^0 C is mixed with one litre of water at 50^0 C. The temperature of the mixture will be

(a) 70^0 C
(b) more than 50^0 C but less than 70^0C
(c) 10^0C
(d) between 20^0 C and 50^0C

11. Woollen clothes keep us warm in winter as

(a) as they are costly.
(b) as they are poor conductor of heat.
(c) as these are made from natural fibres.
(d) as they cover the whole body.

12. You are provided with two cans of same size. Surface of one is painted with black colour and other with white colour.These cans are filled with water and are kept in sun for about an hour. Water in which of the can would be hot?

(a) Can with Black outer surface (b) White Can
(c) Same temprature in both cans (d) can't say

13. Heat from sun reaches earth by

(a) Convection (b) Conduction
(c) Radiation (d) Telepathy

14.Different types of thermometers are used for different purposes. The thermometer used for giving tempratures in weather reports is known as

(a) Maximum –minimum Thermometer (b) Clinical Thermometer
(b) Laboratory Thermometer (d) All of the above

15. The temperature of normal human being is

(a) 35^0 C (b)42^0 C
(c) 39^0 C (d)37^0C

Answer Key (Chapter 4)

Q	ans.	Q.	ans.
1	a	13	c
2	b	14	a
3	c	15	d
4	a		
5	b		
6	a		
7	a		
8	a		
9	a		
10	d		
11	b		
12	a		

CHAPTER 5

ACIDS BASES AND SALTS

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES															
Identify					**Differentiate/ Classify**		**Explain**			**Draw/ Measure**	**Construct/Exhibit/ Conduct**				**Application/ Relate**	
Q5	Q9	Q10	Q14	Q15	Q4	Q11	Q6	Q7	Q8		Q1	Q3	Q12	Q13	Q2	Q16

Learner's achievement Sheet

Name of student	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1.Curd, Lemon Juice , Orange juice and vinegar taste sour because they contains

(a) Acids (b) Bases
(b) Salt (d) all of these

2. Some of the acids occur naturally. Which of these are not correctly matched

(a) Formic acid- Ant's sting
(b) Lactic acid- Spinach
(c) Tartaric acid- Tamrind
(d) Ascorbic acid- Amala

3.Turmeric is a natural indicator. On adding its paste to acid and base separately, which colours would be observed

(a) Yellow in both acid and base. (b) Yellow in acid and red in base.

(c) Pink in acid and yellow in base. (d) Red in acid and blue in base.

4. Phenolphthalein is a synthetic indicator and its colour in acidic and basic solutions, respectively are

(a) red and blue. (b) blue and red.

(c) pink and colourless. (d) colourless and pink

5.Complete the word equation

Hydrochloric Acid(HCl)+Sodium Hydroxide(NaOH) → …….+ Water(H_2O)

(a) Water(H_2O) (b) Sodium(Na)
(c) Hydrochloric acid(HCl) (d) Sodium Chloride(NaCl)

6. The correct way of making a solution of acid in water is to

(a) add water to acid.

(b) add acid to water.

(c) mix acid and water simultaneously.

(d) add water to acid in a shallow container.

7. Products of a neutralisation reaction are always

(a) an acid and a base. (b) an acid and a salt.

(c) a salt and water. (d) a salt and a base.

8. When the soil is too basic, plants do not grow well in it. To improve its quality what must be added to the soil?

(a) Organic matter (b) Quick lime

(c) Slaked lime (d) Calamine solution

9. When the soil is too acidic, plants do not grow well in it. To improve its quality what must be added to the soil?

(a) Organic matter (b) Quick lime

(c) Sugar Solution (d) Hydrochloric acid

10. 'Litmus', a natural dye is an extract of which of the following?

(a) China rose (Gudhal) (b) Beetroot
(c) Lichen (d) Blue berries (Jamun)

11. Neutralisation reaction is a
(a) physical and reversible change.
(b) physical change that cannot be reversed.
(c) chemical and reversible change.
(d) chemical change that cannot be reversed.

12. A solution changes the colour of turmeric indicator from yellow to red. The solution is

(a) basic (b) acidic
(c) neutral (d) either neutral or acidic

13. Which of the following set of substances contain acids?

(a) Grapes, lime water (b) Vinegar, soap
(c) Curd, milk of magnesia (d) Curd, vinegar

14. On adding phenolphthalein indicator to a colourless solution, no change is observed. What is the nature of this solution?

(a) Basic (b) Either acidic or basic
(c) Either acidic or neutral (d) Either basic or neutral

15. Which of the following is an acid-base indicator?
(a) Vinegar (b) Lime water
(c) Turmeric (d) Baking soda

16. Our stomach contains hydrochloric acid. It helps us to digest food. But too much of acid in stomach causes indigestion.To relieve indigestion,we take an antacid which neutralise the effect of excessive acid. Which of the following is an example of antaid
(a) Milk of Magnesia (b) Skimmed Milk
(c) Lemonade (d) Water

Answer Key (Chapter 5)

Q	ans.	Q.	ans.
1	a	13	d
2	b	14	c
3	b	15	c
4	d	16	a
5	d		
6	b		
7	c		
8	a		
9	b		
10	c		
11	d		
12	a		

Chapter 6

PHYSICAL AND CHEMICAL CHANGES

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES										
Identify	**Differentiate/ Classify**		**Explain**	**Draw/ Measure**	**Construct/Exhibit/ Conduct**		**Application/ Relate**			
Q3	Q1	Q2	Q7	-	Q10	Q8	Q4	Q 5	Q 6	Q 9

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. Which of the following is a physical change?

(a) Rusting of iron (b) Combustion of magnesium ribbon

(c) Burning of candle (d) Melting of wax

2. Which of the following is a chemical change?

(a) Twinkling of stars (b) Cooking of vegetables

(c) Cutting of fruits (d) Boiling of water

3. A chemical change may involve –

(a) change in colour only (b) change in temperature only

(c) evolution of gas only (d) any or all of the above

4. Which of the following is/are true when milk changes into curd?

(i) Its state is changed from liquid to semi solid.

(ii) It changes colour.

(iii) It changes taste.

(iv) The change cannot be reversed.

Choose the correct option from below :

(a) (i) and (ii) are correct (b) (ii) and (iii) are correct

(c) (i), (iii) and (iv) are correct (d) (i) to (iv) are correct

5. A man painted his main gate made up of iron, to (i) prevent it from rusting. (ii) protect it from sun. (iii) make it look beautiful. (iv) make it dust free.
Which of the above statement(s) is/are correct?

(a) (i) and (ii) (b) (ii) and (iii)

(c) only (ii) (d) (i) and (iii)

6. Iron pillar near the Qutub Minar in Delhi is famous for the following facts. Which of these facts is responsible for its long stability?

(a) It is more than 7 metres high.

(b) It weighs about 6000 kg.

(c) It was built more than 1600 years ago.

(d) It has not rusted after such a long period.

7. Galvanisation is a process used to prevent the rusting of which of the following?

(a) Iron (b) Zinc

(c) Aluminium (d) Copper

8. Paheli's mother made concentrated sugar syrup by dissolving sugar in hot water. On cooling, crystals of sugar got separated. This indicates a –

(a) physical change that can be reversed.

(b) chemical change that can be reversed.

(c) physical change that cannot be reversed.

(d) chemical change that cannot be reversed.

9. Which of the following statement is incorrect for a chemical reaction?

(a) Heat may be given out but never absorbed.

(b) Sound may be produced.

(c) A colour change may take place.

(d) A gas may be evolved.

10. Step I:- Two drops of dilute sulphuric acid were added to 1 g of copper sulphate powder and then small amount of hot water was added to dissolve it.

Step II:- On cooling, beautiful blue coloured crystals got separated

Step I and step II are:

(a) physical and chemical changes respectively.

(b) chemical and physical changes respectively.

(c) both physical change.

(d) both chemical change.

Answer Key (Chapter 6)

Q	Ans.
1	d
2	b
3	d
4	c
5	d
6	d
7	a
8	a
9	a
10	b

CHAPTER-7

WEATHER, CLIMATE AND ADAPTATION OF ANIMALS TO CLIMATE

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																
Identify						**Differentiate/ Classify**		**Explain**					**Draw/ Measure**	**Construct/ Exhibit/ Conduct**	**Application/ Relate**		
Q 1	Q 2	Q 3	Q 8	Q 9	Q 12	Q 11	Q 13	Q5	Q 7	Q 10	Q 15	Q 16	---	----	Q 4	Q 6	Q 14

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate / Classify	Explain	Draw/ Measure	Construct /Exhibit /Conduct	Application /Relate

MCQs

1 The maximum and minimum temperature displayed daily in the weather bulletin refer to the –

(a) highest day temperature and lowest night temperature of the day.

(b) highest day temperature and highest night temperature of the month.

(c) temperature recorded at 12 noon and at mid night (00.00 hrs).

(d) average highest temperature of day and average lowest temperature of night.

2 Out of the given definitions, which is the most appropriate definition of climate?

(a) Changes in weather conditions in a year.
(b) Average weather pattern of many years.
(c) Change in weather pattern in a few years.
(d) Weather conditions during summer.

3 Which of the following briefly describes the desert climate?

(a) Hot and humid
(b) Dry and humid
(c) Hot and dry
(d) Hot and wet

4 Rano went to a wildlife sanctuary where she saw dense vegetation of trees, shrubs, herbs and also a variety of animals like monkeys, birds, elephants, snakes, frogs, etc. The most likely location of this sanctuary is in the –

(a) temperate region (b) tropical region

(c) polar region (d) coastal region

5 Given below are some adaptive features of animals:

(i) Layer of fat under the skin

(ii) Long, curved and sharp claws

(iii) Slippery body

(iv) Thick white fur

Which of them are the adaptive features of a polar bear?

(a) (i) only (b) (i) and (ii) only

(c) (i), (ii) and (iii) only (d) (i), (ii), and (iv) only

6 Which of the following statement is incorrect for penguins?

(a) They huddle together

(b) They cannot swim

(c) They have webbed feet

(d) They have streamlined body

7 Read the following environmental conditions of tropical rain forests.

(i) Hot and humid climate

(ii) Unequal lengths of day and night

(iii) Abundant rain fall

(iv) Abundant light and moisture

Identify the conditions from the above list that are responsible for the presence of large number of plants and animals in tropical rain forests.

(a) (i) and (ii) (b) (i) and (iii)

(c) (i), (iii) and (iv) (d) (ii) and (iv)

8 The coldest region on earth is the –

(a) polar region (b) tropical region

(c) temperate region (d) coastal region

9 Choose the odd one from the following options:

(a) Thick layer of fat under the skin
(b) White fur
(c) Long grasping tail
(d) Wide and large feet with sharp claws

10 "A fish dies when taken out of water whereas a wall lizard will die if kept under water." Mention the term used to describe such abilities that allow fish and lizard to survive in their respective habitats

a) Climate b) Adaptation
c) Weather d) humidity

11. Frog is an example of an animal that can live both in water and on land and thus belongs to special group. The name of such group is

a)Reptiles b) Amphibians
c) Mammals d) Pisces

12 The average weather pattern taken over a long time is called the climate of the place. About how many years are taken into consideration?

a)10 years b)50 years
c)80 years d)25 years

13 The day-to-day condition of the atmosphere at a place with respect to the temperature, humidity, rainfall, wind-speed, etc., is called the _____ at that place.

a) climate b) weather
c) season d) adaptation

14 A carnivore with stripes on its body moves very fast while catching its prey. It is likely to be found in

(a) polar regions (b) oceans

(c) deserts (d) tropical rainforests

15 Which features adapt polar bears to live in extremely cold climate?

(a) A white fur, fat below skin, keen sense of smell.

(b) Thin skin, large eyes, a white fur.

(c) A long tail, strong claws, white large paws.

(d) White body, paws for swimming, gills for respiration.

16 Which option best describes a tropical region?

(a) hot and humid

(b) moderate temperature, heavy rainfall

(c) cold and humid

(d) hot and dry

Answer Key (Chapter 7)

Q	ans.	Q.	ans.
1	a	13	b
2	b	14	d
3	c	15	a
4	b	16	a
5	d		
6	b		
7	c		
8	a		
9	c		
10	b		
11	b		
12	d		

Chapter No 8

WINDS, STORMS AND CYCLONES

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																			
Identify						**Differentiate/ Classify**		**Explain**			**Draw/ Measure**	**Construct/ Exhibit/ Conduct**		**Application/ Relate**					
Q9	Q13	Q14	Q17	Q20	Q15	Q10	Q19	Q11	Q16	Q18	--	Q6	Q15	Q1	Q2	Q3	Q5	Q7	Q8	Q12

Learner's achievement Sheet

Name of student	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. A fire alarm usually detects smoke in case of fire. Where such an alarm should be placed in a room?

(a) Near the door

(b) On the floor

(c) On any wall

(d) On the ceiling

2. Following are precautions one must take in case a storm is accompanied by lightning.

(i) Do not take shelter under a tree.

(ii) Do not take shelter under an umbrella with a metallic end.

(iii) Do not take shelter in open garages, storage sheds, etc.

(iv) Do not take shelter in a bus in the open.

Which one of these is not correct?

(a) (i) (b) (ii)

(c) (iii) (d) (iv)

3. Which of the following place is most likely to be affected by a cyclone?

(a) Mumbai (b) Puri

(c) Goa (d) Porbandar

4. To expel hot air out of the kitchen, 'A' has an exhaust fan fitted on the window of her kitchen and 'B' has a similar exhaust fan fitted on the wall near the ceiling of her kitchen. Which of the exhaust fan will expel the hot air more effectively?

a) exhaust fan of A b) location does not matter
c) exhaust fan of B d) None of these

5. Near the earth's surface ..... air rises up whereas..... air comes down to take its place. The best option to fill the blanks is:

a) Cold air, Hot air b) Hot air, Cold air

c) Cold air, Hot air d) Rainy air, cold air

6. We all know that Air expands on heating and _____on cooling.

a) expands
b) no change
c) contracts
d) none of these

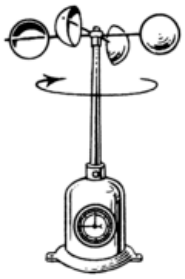
7. Holes are made in hanging banners and hoardings because:-

a) Holes let the air pass through and thus protect banners and hoardings.
b) They look more attractive
c) Holes protect banners from rain.
d) None of the above.

8. We know that a cyclone may affect a city situated near the sea. Which one of the following place is unlikely to be affected by a cyclone?

(a) Chennai
(b) Amritsar
(c) Mangaluru (Mangalore)
(d) Puri

9 .The instrument shown below is called an anemometer.



For what purpose is it used?

a) to measure quantity of rain
b) to measure blood pressure
c) to measure temperature
d) to measure direction of air

10. Different instruments are used to measure different quantities. See carefully the quantities shown below and instrument to measure them.

Column I	**Column II**
(i) Atmospheric pressure	P) Thermometer
(ii) Temperature	Q) Barometer
iii) Direction of air	R) Raingauge
iv) Amount of rainfall	S) Anemometer

What will be the proper match?

	(i)	(ii)	(iii)	(iv)
a)	P	Q	R	S
b)	R	Q	P	S
c)	S	R	P	Q
d)	Q	P	S	R

11. Read the statements carefully. Which of the statement(s) given below is/are correct?

(i) In winter the winds flow from the land to the ocean.
(ii) In summer the winds flow from the land towards the ocean.
(iii) A cyclone is formed by a very high-pressure system with very high-speed winds revolving around it.
(iv) The coastline of India is not vulnerable to cyclones.

a) only (i) is correct
b) (iii) and (iv) are correct
c) only (ii) is correct
d) all are correct

12. _____ helps us announce an alert for cyclone.

a) Satellite
b) Star
c) Sun
d) Moon

13. A dark funnel shaped cloud that reaches from the sky to the ground is called a _____

a) Hurricane
b) Typhoon
c) Tornado
d) Thunderstorm

14. Warm air is _____than cold air

a) Heavier
b) lighter
c) no difference in weight
d) very much lighter

15. The change in shape of a hot tin can when pored with cold water on it is due to the

a) pressure inside the can is less than that outside
b) pressure inside the can is more than that outside
c) pressure outside the can is same as that inside
d) Pressure inside the can is equal to the atmospheric pressure

16. When wind speed increases, air pressures _____

a) Increases
b) Decreases
c) Remains constant
d) None of these

17. What is the name given to the wind blowing from sea to land?

a) Thunderstorm
b) Sea breeze
c) Land breeze
d) Cyclone

18. With increase in temperature , atmospheric pressure ---------

a) Increases
b) Decreases
c)Remains constant
d) Can decrease or increase

19. Equator is a region of --------- pressure while poles are a region of -------- pressure.

a)High,Low
b)Low,High
c)Low,Low
d)High,High

20. The centre of a cyclone is called its ----------.

a)Head b)Eye

c)Focus d)None of these

Answer Key (Chapter 8)

Q	ans.	Q.	ans.
1	d	13	c
2	d	14	b
3	b	15	a
4	c	16	b
5	b	17	b
6	c	18	b
7	a	19	b
8	b	20	b
9	d		
10	d		
11	a		
12	a		

CHAPTER-9

SOIL

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																
Identify			**Differentiate/ Classify**		**Explain**							**Draw/ Measure**	**Construct/Exhibit /Conduct**	**Application/ Relate**			
Q7	Q14	Q15	Q 2	Q10	Q3	Q4	Q5	Q6	Q11	Q12	Q13	--	Q9	Q1	Q8	Q16	Q17

Learner's achievement Sheet

Name of student	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. Read the following statements with reference to soil.

(i) Weathering is a very fast process of soil formation.
(ii) Percolation of water is faster in sandy soils.
(iii) Loamy soil contains only sand and clay.
(iv) Top soil contains the maximum amount of humus.

Choose the correct statements from the above.

a) (ii) and (iv) b) (i) and (iii)
c) (ii) and (iii) d) (i) and (ii)

2. Soil has particles of different sizes. Correct order of the words given below in increasing order of their particle size.

Rock, Clay, Sand, Gravel, Silt

a) Clay <Gravel < Rock < Sand < Silt b)Sand < Rock < Gravel < Silt < Clay
c) Sand < Silt < Clay< Rock < Gravel d) Clay < Silt < Sand < Gravel < Rock

3. The process of movement of water into deeper layers of Soil

a) Weathering b) Erosion
c) Soil pollution d) Percolation

4. Removal of top soil during heavy rains or strong winds.

a) Weathering b) Erosion
c) Soil pollution d) Percolation

5. Accumulation of wastes in the soil generated by human activity which alter the features of Soil

a) Weathering b) Erosion
c) Soil pollution d) Percolation

6. The process of breakdown of rocks by the action of wind, water, sunlight

a) Weathering b) Erosion
c) Soil pollution d) Percolation

7. Soil conservation measures are mainly aimed to protect which of the following?

a) Plants b) Top soil
c) Sub soil d) Soil organisms

8. The microorganisms present in the soil require moisture (water) and nutrients for growth and survival. Choose from the options below the habitat (place) where the soil has plenty of water and nutrients.

a) Desert b) Forest
c) Open field d) Cricket ground

9. In addition to the rock particles, the soil contains

a) air and water
b) water and plants
c) minerals, organic matter, air and water
d) water, air and plants

10 . The water holding capacity is the highest in

a) sandy soil
b) clayey soil
c) loamy soil
d) mixture of sand and loam

11. We know that soil is of different types depending on its properties. Which of these is not a property of Clayey Soil?

a) It has much smaller particles
b) It can hold good amount of water
c) It is fertile
d) Air content is high

12 . We know that soil is of different types depending on its properties. Which of these is not a property of Loamy Soil?

a) It has only smaller particles
b) Air can get trapped between its particles
c) It is fertile
d) It can hold water

13. Percolation rate of water is the least in _____?

a) sandy soil
b) clayey soil
c) loamy soil
d) None of these

14. Toys, pots, and statues are made up of which soil type?

a) sandy soil
b) clayey soil
c) loamy soil
d) None of these

15. The rotting dead matter in the soil is called _____.

a) Humus
b) Protein
c) Fungus
d) None of these

16. The type of soil suitable for growing paddy is _____

a) sandy soil
b) clayey soil
c) loamy soil
d) None of these

17. A farmer adds quick lime to acidic soil so that soil becomes

a) more acidic
b) basic
c) neutral
d) no effect

Answer Key (Chapter 9)

Q	Ans.	Q.	Ans.
1	a	13	b
2	d	14	b
3	d	15	a
4	b	16	b
5	c	17	c
6	a		
7	b		
8	b		
9	c		
10	b		
11	d		
12	a		

Chapter No 10

Respiration in Organisms

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																			
Identify						**Differentiate/ Classify**			**Explain**			**Draw/ Measure**			**Construct/ Exhibit/ Conduct**		**Application/ Relate**		
Q 1	**Q 6**	**Q 7**	**Q 8**	**Q 19**	**Q 20**	**Q 9**	**Q 12**	**Q 14**	**Q 2**	**Q 3**	**Q 4**	**Q 10**	**Q 12**	**Q 16**	**Q 11**	**Q 18**	**Q 5**	**Q 15**	**Q 17**

Learner's achievement Sheet

Name of student	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1.Rohan went to the stadium with his father to watch the football match. He observed that all the players were breathing very fast after their match. Then he asked his father," why were players breathing so fast after match?'' His father replied that this was because of an essential life process. Select life process involved in breathing?

a)Nutrition b)Transportation

c)Excretion d)Respiration

2. Akansha asked her teacher why they get muscle cramps after doing the heavy exercise? Her teacher replied this happened due to production of a certain acid. Which acid is this?

a) Acetic acid b)Hydrochloric acid c)Lactic acid d) Sulphuric acid

3.Choose the correct word equation which occurs during aerobic respiration?

a)Glucose + Oxygen----→Carbon dioxide +water + energy

b)Glucose + Carbon dioxide ---→alcohol+energy

c)Glucose + Oxygen-----→Acetic acid+Water .

d)None of the above.

4. Breathing is a process that .

i) Provides oxygen to the body.

ii) Breaks down food to release energy

iii) Helps the body to get rid of Carbon dioxide.

iv) Provides water to the cell.

Which of the above gives the correct combination of function of breathing?

a) i and ii b) ii and iii

c) i and iii d) ii and iv

5. Various activities performed by our body are mentioned under Column I and the rate of breathing under column II

COLUMN I	COLUMN II
A Reading	1.12 to 20 breaths
B cycling	2. 15 to 18 breaths
C Sleeping	3.18 to 25 breaths
D after running fast 100 m	4.20 to 30 breaths

Select the correctly matched option.

	A	B	C	D
a	2	3	1	4
b	4	1	2	3
c	3	2	1	4
d	1	2	3	4

6.Geeta knows that we take 21% oxygen and 0.04% carbon dioxide during inhalation but she did not know about the percentage of oxygen and carbon dioxide in exhaled air. Help her by indicating correct option

a)oxygen 16.4% Carbon dioxide 2 % b)oxygen 11.5%Carbon dioxide 11.5 %
c)oxygen 5.5%Carbon dioxide 16.5 d)oxygen 16.4% Carbon dioxide 4.4%

7.Anita is an excellent teacher she always uses a particular model of science as a teaching aid during her class session , when she showed a model which explained the mechanism of breathing, Yuvraj student of class VII asked her what is the volume of our lungs. what is she likely going to answer.

a)4000-6000 cm^3 b)3000-4000 cm^3
c)5800 cm^3 d)7000-8000 cm^3

8.Rohan wants to know how much air a person can hold in the lungs .Suggest him right option.

a)3-4 litres b)1-2 litres c) 4-6 litres d)0-5 litres

9. Match the right option of given information in column I and column II.

	Lliving organism		Breathing organs
A	Lizards	1	Gills
B	Cockroach	2	Lungs
C	Earthworm	3	Spiracles
D	Fish	4	Skin

	A	B	C	D
a	4	3	2	1
b	2	3	4	1
c	1	2	3	4
d	4	3	2	1

10. Our lungs are present in the chest cavity which are surrounded by

a) Skull b) Jaw c)Ribs d) femur

11. During Exhalation the size of our chest cavity becomes_____

a) increased b) decreased c)Both d)None of these.

12. Which parts of plant are involved in breathing

a) Roots, Stem & leaves b) Fruit, Flower
c) Bark, branches & leaves d)All of the above

13.Which one is the right path of breathing process.

a) Nostril---→Nasal cavity--→Trachea--→Lungs
b) Trachea---→Nasal cavity--→Nostril --→Lungs
c) Both a &b
d) Only b

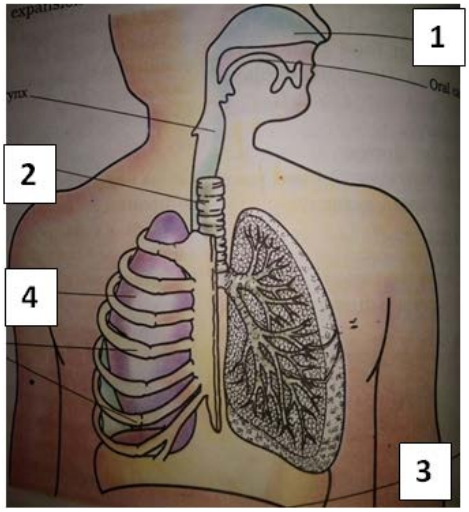
14. Write the word equation of anaerobic respiration which takes places during heavy exercise.

a) Glucose------→Alcohol + energy.
b) Glucose------→Lactic acid + energy.
c) Glucose------→Carbon dioxide + Water + energy.
d) All of the above.

15. Which unicellular organisms used to make wine & beer.

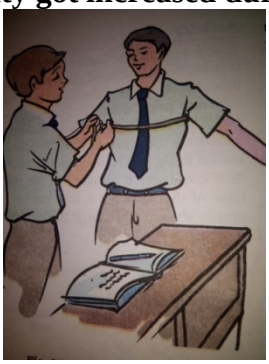
a) Amoeba b) Yeasts c) Bacteria d)None of the above

16. Human respiratory system is shown in given picture its some parts are labelled by codes identify those parts



a)1 Pharynx 2 Trachea 3 lungs 4 diaphragm
b)1 Ribs 2 lungs 3 diaphragm 4 Nostril
c)1 Nasal cavity 2Trachea 3 diaphragm 4 Lungs
d)1 Lungs 2 diaphragm 3 Trachea 4 Ribs

17. Rohan measure the chest cavity of his friend with the help of inch tape, he noticed that the size of chest cavity got increased during



a) Inhalation b)Exhalation c)Standing d)Seating

18. Miss Anita performed an activity during her period in class VII, she took a test tube and pour a transparent liquid in it, She exhaled air through straw in the test tube. All the students were surprised to see white colour appeared in the test tube. According to you, which liquid she had poured in the test tube

a) Fresh Water b) Salty Water c) Lime Water d)Hard Water

19. How many pairs of ribs are there in human body

a) 6 pairs b) 12 pairs c) 8 pairs d)24 pairs

20. Ribs are connected with two different bones in front and back side. Select that pair of two bones

a) chest-bone and collar-bone b)chest-bone &Vertebrae

c) diaphragm and chest-bone d) Vertebrae & diaphragm

Answer Key (Chapter 10)

Q	Ans.	Q.	Ans.
1	d	11	b
2	c	12	a
3	a	13	a
4	c	14	b
5	a	15	b
6	d	16	c
7	a	17	a
8	c	18	c
9	b	19	b
10	c	20	b

Chapter No. 11

TRANSPORTATION IN ANIMAL AND PLANTS

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																				
Identify					**Differentiate/ Classify**		**Explain**						**Draw/ Measure**		**Construct/ Exhibit / Conduct**		**Application/Relate**			
Q 3	**Q 6**	**Q 8**	**Q 10**	**Q 13**	**Q 5**	**Q 17**	**Q 1**	**Q 4**	**Q 11**	**Q 16**	**Q 19**	**Q 20**	**Q 9**	**Q 12**	**Q 9**	**Q 11**	**Q 2**	**Q 7**	**Q 14**	**Q 15**	**Q 18**

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. Our body contains a red coloured fluid which flows in the blood vessels. What is its function in our body?

a. It transports digested food from the small intestine to all parts of the body.
b. It carries oxygen from lungs to the each cell of the body through heart.
c. It also transports waste for removal from the body.
d. All of the above

2. Gaurav visited a doctor during his illness. He observed that the doctor was trying to locate something in his wrist. He asked the doctor what was he finding? The doctor replied that he was checking his pulse rate but Gaurav did not know about the pulse rate. Explain him by choosing correct option given below:-

a. The number of heart beats per minute is called pulse rate
b. The number of breaths per minute is called pulse rate
c. Both a and b
d. Only b

3.Main blood groups are:

a. A^+& A^-, B^+& B^-, O^+&O^-, AB^+& AB^-
b. B^+&BO, A^+&AO, O^-&AB, AB^+
c. Only A^+,B^+, O^+, &AB^+
d. Only A^+ B^- O^- & AB^-

4. Raveena fell down while playing a game. Her knee got injured. Blood was coming out from the cut then she observed that bleeding had stopped after some time. Geeta (Raveena's friend) noticed the incident and got curious. She asked her teacher, how was it possible? According to your view what may be the actual reason?

a. The blood clot is formed by RBCs
b. The blood clot is formed by WBCs
c. Platelets formed a clot
d. All of the above

4. In our home we see that fresh water pipes and drainage pipes are separately fixed. The same thing happens inside our body. Oxygen rich blood and carbon dioxide mix blood flows in different blood vessels, The name of blood vessels are given in column 1 and type of blood in column II, group them in correct order

	Column I	Column II
A	Artery	1 Carries oxygen rich blood (from lungs to heart)
B	Vein	2 Carries carbon dioxide mix blood
C	Pulmonary artery	3 Transports oxygen rich blood
D	Pulmonary vein	4 Transports carbon dioxide mix blood from heart to lungs

	A	B	C	D
a	1	2	3	4
b	3	2	1	4
c	4	1	2	3
d	3	2	4	1

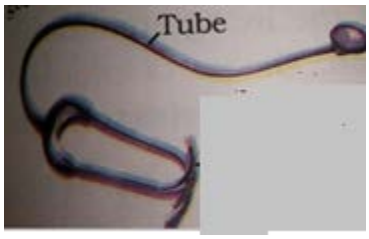
6. The _____ connects arteries to the veins.

a. Lymph
b. Nodes
c. capillaries
d. None of thses

7. Mohit visited the hospital with his grandfather for ECG(electrocardiogram). But they were unaware in which department will it be carried out. Suddenly he saw a board of a specialised doctor. According to you, to which department the doctor belongs?

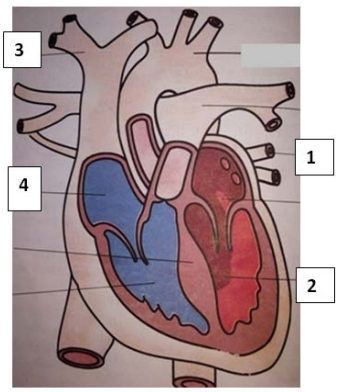
a. ENT Department
b. Cardiology Department
c. Dental clinic
d. General surgery Department

8. Which instrument is shown in the figure?



a. Thermometer
b. Anemometer
c. Stethoscope
d. Sand clock

9. Our heart supplies pure blood to all parts of the body and impure blood to the lungs for purification. Some of the parts of heart are not labelled in given figure but they are coded with 1, 2, 3 and 4. Choose the right labelling



a. 1.Pulmonary vein , 2.left ventricle , 3.vena cava, 4.right Atrium
b. 1. Pulmonary vein, 2. RightVentricle, 3. Arota,4.left atrium
c. 1. Vena cava, 2.Right ventricle3.pulmonary vein4. Right atrium
d. None of above

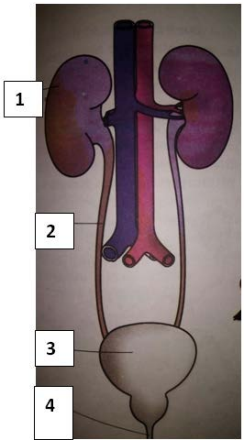
10. Who discovered the circulation of blood in our body?

a. Robert Hooke
b. Robert Brown
c. Raman
d. William Harvey

11 Ms. Sneha , a science teacher was telling about various systems present in our body, she explained that each system performs a specific function e.g. the digestive system helps to digest food, the respiratory system produces energy from food, the circulatory system helps to circulate blood in whole body. Then she asked the students which system is responsible for removal of liquid toxic waste

a. reproductive system
b. excretory system
c. Skeletal system
d. none of them

12. In the given figure, match the codes (1,2,3,4) with the right labelling.



a. 1. Kidney, 2. Ureter, 3. Urinary bladder, 4. Urethra
b. 1. Ureter, 2. Kidney, 3. urinary opening 4.urethra
c. 1. Urinary bladder, 2.ureter, 3.urethra, 4.kidney
d. 1. Urinary opening, 2.kidney, 3.ureter, 4.urethra

13. An adult human being normally passes about 1to1.8 litre of urine in 24 hours. The main components of urine are

a. 95% water and 5% uric acid
b. 95% urea and 5% water
c. 95 % water, 2.5% uric acid and 2.5% urea
d. 95% water,2.5% urea and 2.5% other salts

14. We know that our digestive system helps to remove solid waste, the excretory system removes liquid waste. Which part of the body performs the similar function? Choose the correct option.

a. Skin → sweat
b. Lungs → Carbondioxide
c. Both a &b
d. None of these

15. Some animals like birds, lizards and snakes excrete a semi solid, white coloured compound. What is the name of that compound?

a. Urea
b. Uric acid
c. Sweat
d. Urine

16. Which part of plants absorb water and Minerals from the soil

a. Stem
b. Leaves
c. Roots
d. Fruit

17. Name the vascular tissue which transports food from leaves to all parts of plant

a) Xylem
b) Phloem
c) Root hair
d) veins

18. We have nostrils for breathing and skin for sweat. Is there any similar opening in the plant through which they carry out breathing and transpiration?

a. Stomata
b. Flower
c. Bud
d. Branch

19. Plants are living 'God' because they produce life surviving Oxygen gas and prepare food for all living beings. Do they produce any kind of waste? If yes, then select the right group of waste produced by plants, from given option.

a. Fruit, oxygen, flower, seeds
b. Carbon dioxide, bud, leaves, rasin
c. Flower, gum, yellow leaves and oxygen
d. Bark, gum ,yellow leaves and latex

20. Why plants absorb a large quantity of water from the soil and then give it off by transpiration ?

a. To create suction pull
b. To remove extra (excess) water from the plant body
c. To keep themselves cool
d. all of above

Answer Key (Chapter 11)

Q	Ans.	Q.	Ans.
1	d	11	b
2	a	12	a
3	a	13	d
4	c	14	c
5	d	15	b
6	c	16	c
7	b	17	b
8	c	18	a
9	a	19	d
10	d	20	d

Chapter No. 12

REPRODUCTION IN PLANTS

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																				
Identify				**Differentiate/ Classify**			**Explain**						**Draw/ Measure**						**Construct/ Exhibit/ Conduct**	**Application /Relate**		
Q 7	**Q 13**	**Q 15**	**Q 18**	**Q 2**	Q 16	**Q 20**	**Q 3**	**Q 4**	**Q 8**	**Q 11**	**Q 12**	**Q 19**	**Q 5**	**Q 6**	**Q 7**	**Q 8**	**Q 9**	**Q 10**	---	**Q 1**	**Q 14**	**Q 17**

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. Sneha always observes that most of the fruits we eat have seed/ seeds inside them. When we discard these seeds they germinate and form new plant.But she has never seen the seeds of sugarcane ,potato, rose and bryophyllum, she is confused about how these plants reproduced? Explain her by choosing right statement

a. These plants reproduce through their vegetative parts like roots , stem, leaves and buds

b. These plants reproduce sexually

c. these plants reproduce asexually

d. both (a) and (c)

2. List of some plants are given in column 1 and their vegetative parts in column II.Match them in correct order.

Column I	Column II
A Sugarcane	**1.leaf**
B Yeast	**2.Spore**
C Fern	**3.Stem**
D Bryophyllum	**4.Bud**

	A	B	C	D
a	1	2	3	4
b	4	3	2	1
c	3	4	2	1
d	3	2	1	4

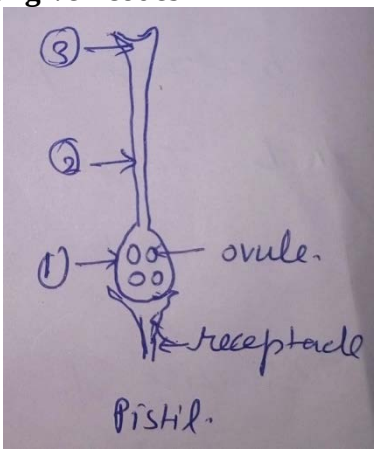
3. Name the type of mode of reproduction in Yeast

a. Spore formation
b. Budding
c. Cutting
d. Fragmentation

4. Where are spores formed in fungus?

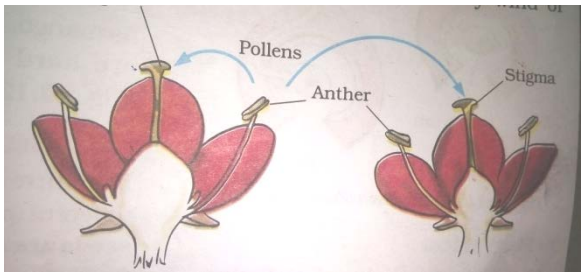
a. Fruit
b. Sporangium
c. Bud
d. Root

5. A female reproductive part of a flower is shown in given figure. Labeling is done by using codes, choose the right name of given codes



a. 1.Stigma, 2.ovary,3. style
b. 1.Ovary,2. stigma,3. style
c. 1. ovary,2. style,3. stigma
d. 1. style,2. Stigma,3. Ovary

6. What do you observe in the given picture?

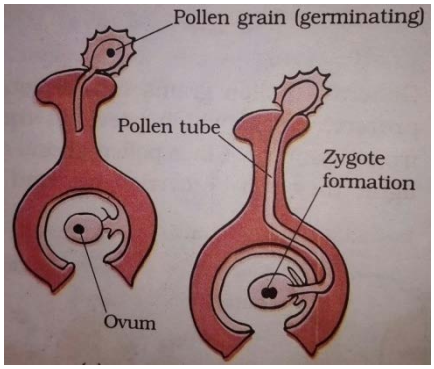


a. Pollen grains of one flower land on the stigma of other flower
b. figure shows cross pollination
c. both a and b
d. none of them

7. Which part of the flower produces male gametes

a. Ovary
b. Petals
c. Sepal
d. Anther

8. Name the process which is taking place in the shown figure

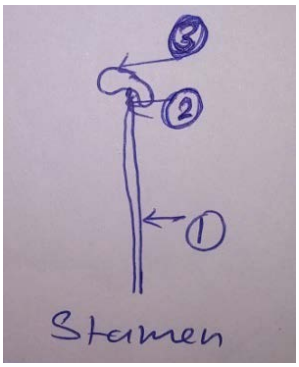


a. Germination
b. Fertilization
c. Pollination
d. Fragmentation

9. In flowering plants male and female gametes fuse to form a single cell. What is the name of that cell?

a. Seed
b. Ovule
c. Zygote
d. Embryo

10. Male reproductive part of plant is shown in given figure. Its labelling is done by code 1, 2 and 3. Tick the write names of these codes



a. 1.filament,2. Connective tissues, 3. anther

b. 1.Anther, 2. filament,3. connective tissue

c. 1. connective tissue, 2. anther, 3.filament

d. 1.anther,2 .connective tissue, 3 . filament

11. There is a beautiful pond near Manjeet's house. One day she noticed that the pond was covered up with a green algae within a week. By which method of reproduction did the algae spreads so rapidly?

a. budding
b. spore formation
c. fragmentation
d. Fission

12. Which of the following statements is/are true for sexual reproduction in plants

1. Plants are always produced from seeds
2. Two plants or both reproductive parts of flower are always essential for sexual reproduction
3. Fertilization occurs only after pollination
4. Only Insects are agent of pollination

a. 1,2 &3
b. 1& 4
c. 3 & 4
d. 2 & 4

13. Fungus, Moss and fern reproduce by a common mode (type) of asexual reproduction. What is the name of that mode (type)?

a. Budding
b. cutting
c. fragmentation
d. spore formation

14. How seed dispersal is beneficial for plants?

a. It prevents competition between the plants and their own seedlings for sunlight, water and Minerals
b. It also enables the plants to invade new habitats for wider distribution
c. both (a) and (b)
d. none of them

15. Seeds of plants are given in column 1 and their means of dispersal are in column II. Group them in correct order

	Column I	**Column II**
A	**Seeds of drum sticks**	**1.Seeds dispersed by animals**
B	**Seeds of coconut**	**2.Seeds dispersed by wind**
C	**Seeds of xanthium**	**3.Seeds dispersed by water**
D	**Seeds of cereals/pulses**	**4.Seeds dispersed by human being**

	A	B	C	D
a	4	3	2	1
b	1	4	3	2
c	2	3	1	4
d	2	3	4	1

16. Which part of flower gets converted into seed after fertilization?

a. Pollen grains
b. Ovule
c. Ovary
d. Anther

17.Name the part of flower which is converted into fruit after fertilization?

a. Style
b. Stigma
c. Ovary
d. Stamen

18. Name the spore forming body in fern

a. Sporangium
b. Sori
c. Bud
d. Ovary

19. Fertilized egg cell is called zygote. What is the next developmental stage of zygote?

a. Seed
b. embryo
c. fruit
d. Egg/gamete

20. The flower which contains either the pistil or the stamen is called

a. bisexual
b. Asexual
c. Unisexual
d. sexual

Answer Key (Chapter 12)

Q	Ans.	Q.	Ans.
1	d	11	c
2	c	12	a
3	b	13	d
4	b	14	c
5	c	15	c
6	c	16	b
7	d	17	c
8	b	18	b
9	c	19	b
10	a	20	c

Chapter No 13

MOTION AND TIME

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																
Identify				**Differentiate/ Classify**		**Explain**		**Draw/ Measure**				**Construct/ Exhibit/ Conduct**	**Application/Relate**			
Q 1	**Q 8**	**Q 9**	**Q 15**	**Q 3**	**Q 6**	**Q 2**	**Q 14**	**Q 10**	**Q 11**	**Q 12**	**Q 13**	**Q 5**	**Q 4**	**Q 7**	**Q 1**	**Q 16**

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. **A motion could be along a straight line, it could be circular or periodic. Which of the following examples of motion is not correctly matched with given type of motion?**

Examples of Motion	**Type of Motion**
a) soldiers in a march past	Along a straight line
b) Hands of an athlete in a race	Periodic
c) Motion of the earth around the sun	Along a straight line
d) Bullock cart moving on a straight road	Along a straight line

2. The most convenient way to find out which of the two or more objects is moving faster is

a) To compare the distances moved by them in different time
b) To compare the distances moved by them in unit time
c) To compare the distances moved by them(irrespective of the time taken)
d) None of the above

3. If the speed of an object moving along a straight line keeps changing, its motion is said to be_____ . On the other hand, an object moving along a straight line with a constant speed is said to be in_____.

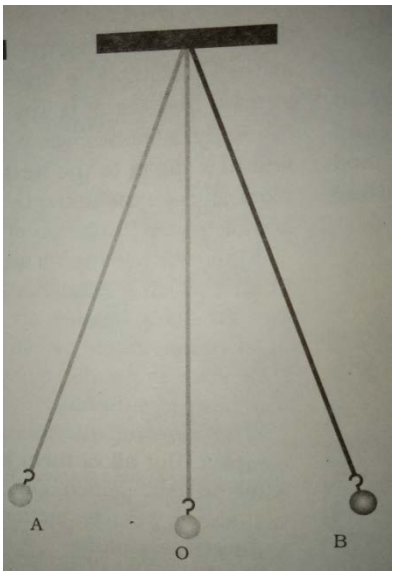
a) Uniform motion, Non- uniform motion
b) Non-uniform motion, Uniform motion
c) Uniform motion, Uniform motion
d) Non-uniform motion, Non- uniform motion

4. Our ancestors had noticed that many events in nature repeat themselves after definite interval of time. One of the following statements is not true observation noticed by them

a) The time between one sunrise and the next was called a day.
b) The sun rises everyday in the morning
c) A month was measured from one new moon to the next
d) None of the above.

5. The to and fro motion of a simple pendulum is an example of a periodic or an oscillatory motion. The pendulum is said to have completed one oscillation when its bob

a) Starting from its mean position O, moves to extreme A, to extreme B and back to O.
b) Moves from one extreme position A to the other extreme position B
c) Moves from one extreme position A to the other extreme position B and then to mean position O.
d) None of the above.



6. The time taken by the pendulum to complete _____ oscillation/s is called its _____

a) Two, time period
b) One, time Period
c) Ten, speed
d) One, average speed

7. Galileo Galilie(A.D. 1564-1642) a famous scientist noticed that a lamp suspended from the ceiling with a chain was moving slowly from one side to the other. He found that a pendulum of a given length takes always the same time to complete one oscillation. This observation led to the development of

a) Cars
b) Rockets
c) Quartz clocks
d) Pendulum clocks

8. The basic unit of time is a second. Its symbol is s. what would be the basic unit of speed?(Speed is distance/time)

a) Metre/second
b) Metre/minute
c) Kilometre/hour
d) Kilometer/second

9. The symbols of all units of measurement e.g. distance, time, electricity etc. are written in a specific way. Which of the following is the correct way to write units of distance?

a) 50 Kms
b) 50 Km
c) 8 cms
d) 8 cmts

10. The distance between two stations is 300 km. A train takes 6 hours to cover this distance. The speed of the train is

a) 55 Km/h
b) 50 Km/h
c) 45 Km/h

d) 40 Km/h

11. Which of the following relations is correct?

a) Speed= Distance X Time

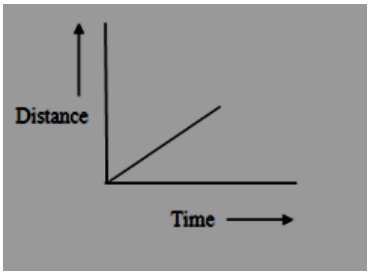
b) Speed= $\frac{\text{Distance}}{\text{Time}}$

c) Speed= $\frac{1}{\text{Distance X Time}}$

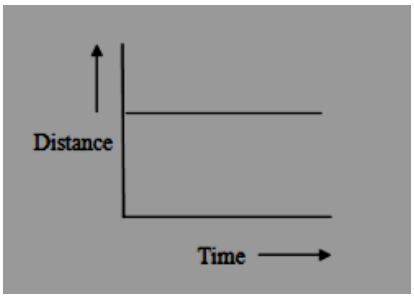
d) None of the above

12. Which of the following graphs shows your school bus moving with speed which is not constant?

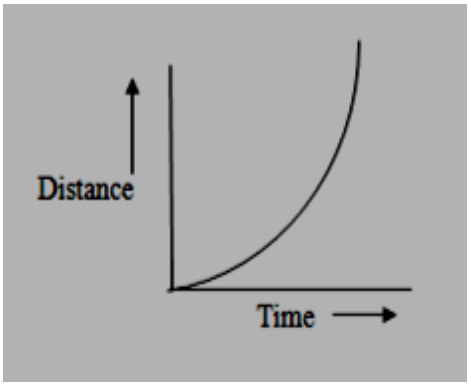
a)



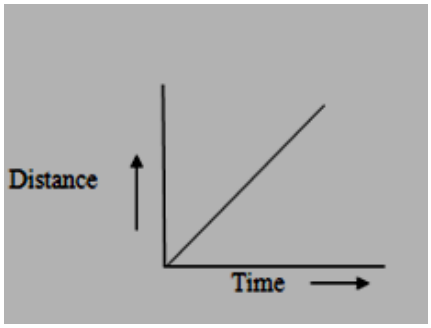
b)



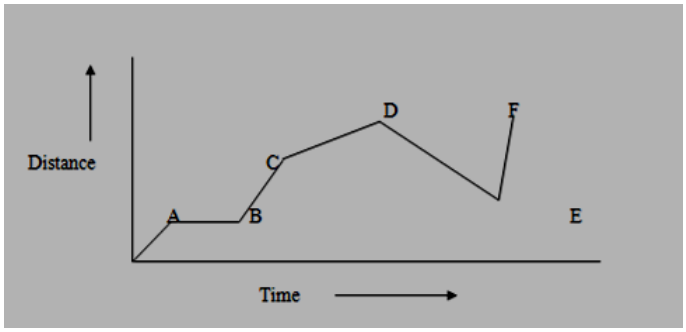
c)



d)



13. Look at the graph and select the option in which car remains stationary.



a) AB
b) BC
c) DE
d) EF

14. Find the statement from the following which is not true.

a) A simple pendulum is allowed to swing under the influence of gravity
b) Events that repeat at regular interval of time are examples of uniform motion
c) All objects move with a constant speed
d) None of the above

15. Which of the following in Column I is not correctly matched with Column II

Column I	**Column II**
a) SI unit of time is	second
b) Time period of the pendulum Depends upon the	length and the gravitational force
c) Uniform motion in a distance time Graph is depicted by	a straight line parallel to the time (x) axis
d) All the objects move with	constant speed

16. The fastest speed that some animals can attain is given below

Name of the Animal	Speed in Km/hr
Falcon	300
Cheetah	100
Squirrel	20
Rabbit	60

If we arrange the distance travelled by these animals in 3 hours in ascending order, then the correct option is

a) Squirrel, Rabbit, Cheetah, Falcon
b) Falcon, Cheetah, Rabbit, Squirrel
c) Cheetah, Falcon, Rabbit, Squirrel
d) Squirrel, Rabbit, Falcon, Cheetah

Answer Key (Chapter 13)

Q	Ans.	Q.	Ans.
1	c	11	b
2	b	12	c
3	b	13	a
4	d	14	c
5	a	15	c
6	b	16	a
7	d		
8	a		
9	b		
10	b		

Chapter 14

ELECTRIC CURRENT AND ITS EFFECTS

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES														
Identify			**Differentiate / Classify**		**Explain**		**Draw/ Measure**	**Construct/ Exhibit/ Conduct**			**Application/Relate**			
Q 1	**Q 6**	**Q 9**	**Q4**	**Q 15**	**Q 7**	**Q 14**	**Q 3**	**Q 5**	**Q 9**	**Q 10**	**Q 2**	**Q 8**	**Q 11**	**Q 12**	**Q 13**

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

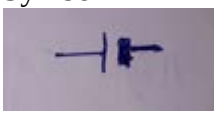
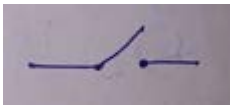
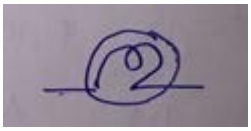
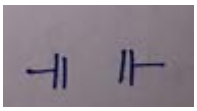
C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. **Some common electric components can be represented by symbols. One of the following electric components symbol does not correlate. Find it from the table.**

S. no.	Electrical component	Symbol
a)	Electric cell	
b)	Switch in ‘off ’ position	
c)	Electric Bulb	
d)	Battery	

2. **We use different cells either in combination or independently in different equipmentslike TV remote controls, toys, torches etc which of the following arrangement of cells is called a battery.**

a) The positive terminal of one cell is connected to the positive terminal of other cell and so on

b) The positive terminal of one cell is connected to the negative terminal of the next cell and so on

c) Connect all positive terminals and Negative terminals of all cells

d) None of the above

3. **Find the correct option for following electric circuit diagrams**

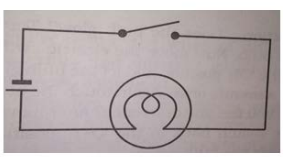


Figure 1

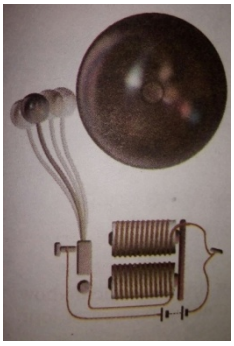
Figure 2

a) Figure 1 Closed circuit and Figure 2 – open circuit
b) Figure 1 Closed circuit and Figure 2- closed circuit
c) Figure 1 Open circuit and Figure 2- closed circuit
d) None of the above

4. **Which of the following turns off automatically when current in circuit exceeds the safe limit?**

a) Electromagnet b) Coil c) MCB d) CFLs

5. **Which part of the electric bell strikes the gong?**



a) Electromagnet b) Hammer

c) Iron Strip d) Contact Screw

6. **Which of the following statement is not true?**

a) Hans Christian Oersted was the first person who noticed the deflection of compass needle every time the current was passed through a nearby wire.
b) When electric current passes through a wire, it behaves like a magnet
c) An electric current cannot be used to make magnets.
d) All of the above

7. **Paheli knows that electric fuses are inserted in all electrical circuits to prevent accidents by overheating or short circuit. Paheli wants to use a wire to make electric fuse. What should be the characteristics of the wire?**

a) Wire should not melt quickly and it should not break when large electric currents are passed through it.

b) Wire should be of high tensile strength and should be insulated from its ends.

c) Wire should be made from special material so that it melts quickly and breaks when large currents are passed through it.

d) None of the above

8. **Paheli has read many reports in newspapers about fires caused by short circuits and overloads. She wants to explore the reasons for excessive currents in electrical circuits. The following is not the correct reason for excessive currents in the electrical circuits**

a) Direct touching of wires
b) Connection of many devices to a single socket.
c) Use of substandard equipments like wires,devices or sockets
d) None of the above

9.These days MCBs are increasingly being used in place of fuses. These are switches which automatically turn off when current in a circuit exceeds the safe limit what is the correct name of MCB

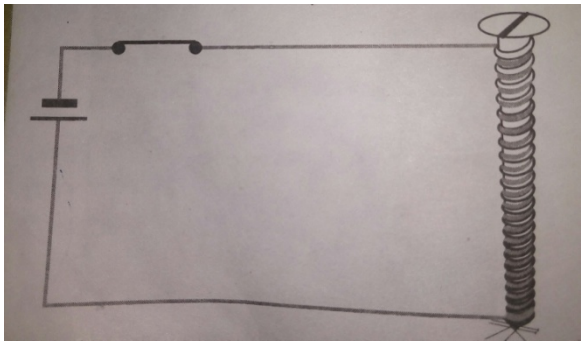
a) Maximum current breaker

b) Minimum current breaker

c) Miniature circuit box

d) Miniature circuit breaker

10.Identify the device from the given picture.



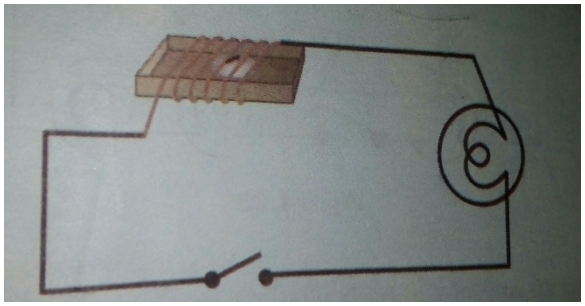
a) A Magnet

b) An electromagnet

c) An electric bell

d) None of the above

11.Will the compass needle show deflection when the switch in the circuit is closed.



a) Yes, compass needle will show deflection.

b) No, compass needle will not show the deflection

c) Can't Say

d) None of the above.

12. A fuse wire _____ and _____ when the circuit is overloaded.

a) melts, doesn't break

b) doesn't melt, doesn't break

c) melts, breaks

d) None of the above

13.A compass needle points in the _____ direction.

a) North
b) South –west
c) West
d) North –south

14. An electromagnet is made up of a _____ of _____ wire wound around a soft iron rod

a) coil, strong

b) coil, weak

c) coil, insulated

d) All of the above

15.Which of the following is not correctly matched from Column I to Column II

	Column I	**Column II**
a)	CFL	Compact Florescent Lamps
b)	LED	Light emitting diode
c)	MCB	Miniature Circuit Breaker
d)	None of the above	

Answer Key (Chapter 14)

Q	Ans.	Q.	Ans.
1	d	11	a
2	b	12	c
3	c	13	d
4	c	14	c
5	b	15	d
6	c		
7	c		
8	d		
9	d		
10	b		

Chapter No 15

LIGHT

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																
Identify		**Differentiate/ Classify**				**Explain**		**Draw/ Measure**		**Construct/ Exhibit/ Conduct**			**Application/Relate**			
Q 3	**Q 10**	**Q 1**	**Q9**	**Q 15**	**Q 16**	**Q 12**	**Q 13**	**Q 2**	**Q 5**	**Q 6**	**Q 7**	**Q 12**	**Q 4**	**Q 8**	**Q 11**	**Q 14**

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. The Image formed by a plane mirror is

a. virtual, behind the mirror and enlarged
b. virtual, behind the mirror and of the same size as the object
c. real at the surface of the mirror and enlarged
d. Real, behind the mirror and of the same size as the object

2. Angle of incidence is equal to the angle of reflection

a. Always
b. Sometimes
c. under special conditions
d. Never

3. Night birds have-----cones than rods in their eyes

a. More
b. few
c. One billion
d. Ten million

4. When we see in dim light,the pupil of our eye changes its size, it becomes

a. narrow
b. wider
c. No change occurs
d. none of the above

5. A person is 1m in front of a plane mirror. He seems to be ------ metre away from his image

a. 1metre
b. 3 metre
c. 4 metre
d. 2 metre

6. How many images of a candle will be formed if it is placed between two parallel plane mirrors separated by 40 cm?

a. 30
b. 50
c. 1000
d. Infinite

7. Periscope is a device which is used to see the objects which are not visible to us directly. Which of the following statements is not true for it ?

a. Periscopes are used in submarines
b. Periscopes are used in tanks
c. Periscopes are used in aeroplanes
d. These are used by the soldiers in bunkers to see things outside

8. We have seen that in the side mirror of a scooter or a car, the images of all the objects appear---------- than the objects themselves. The---------- mirror is used as side mirror in the vehicles.

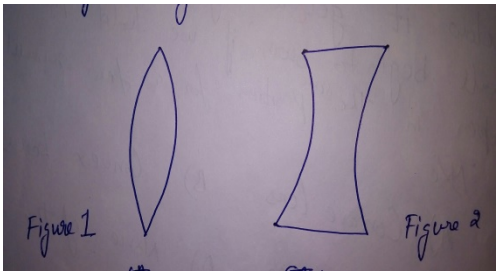
a. Larger, concave mirror
b. smaller, concave mirror

c. larger, convex mirror
d. smaller, convex mirror

9. Lenses are mainly of two types. If we touch first kind of lens we may feel them to be thicker in the middle than at the edges and these lenses are called---------- while lenses of other kind are thinner in the middle than at the edges. These are known as ___ respectively

a. Convex lens, concave lens
b. concave lens, convex lens
c. convex lens, convex lens
d. concave lens, concave lens

10. Identify the type of lens from the given figure



a. Figure 1 is a concave lens while Figure 2 is a convex lens
b. Figure 1 is a convex lens while Figure 2 is a concave lens
c. Figure 1 is a convex lens and figure 2 is also a convex lens
d. Both Figure 1 and figure 2 are concave lenses

11. In _____mirror the image formed is enlarged, if we use it in its magnification area and these types of mirrors are used by dentists and by us at home while doing makeup. These Mirrors are specifically

a. convex mirror
b. concave mirror
c. convex mirror or concave mirror
d. none of the above

12. Take a------- lens and put it in the path of sunrays and adjust the distance of the lens so that a paper below it gets a bright spot. The paper will begin to burn(if we hold the lens and paper in the same position for a few minutes)

a. concave lens
b. convex lens
c. both lenses
d. none of the above

13. The images formed by a concave lens are

a. virtual, inverted and smaller in size than the object
b. virtual ,erect and smaller in size than the object
c. Real, erect and larger in size than the object
d. Real ,erect and smaller in size than the object

14. Newton's disc when rotated freely in the day light appears to be

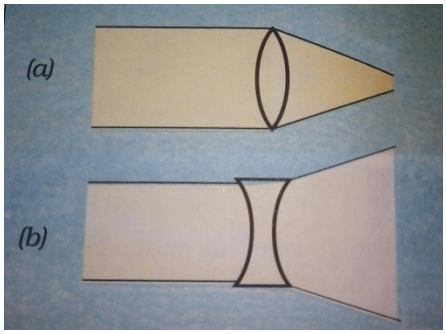
a. Greenish
b. Blackish
c. Whitish

d. Reddish

15. An image which cannot be obtained on a screen is called

a. Real image
b. Virtual image
c. Real or virtual image
d. None of the above

16. A_____ lens Converges (bends inward) the light generally falling on it .on the other hand a_____lensdiverges(bends outward)the light.



a. Concave lens, convex lens
b. Concave lens, concave lens
c. Convex lens, concave lens
d. None of the above

Answer Key (Chapter 15)

Q	Ans.	Q.	Ans.
1	b	11	b
2	a	12	b
3	b	13	b
4	b	14	c
5	d	15	b
6	d	16	c
7	c		
8	d		
9	a		
10	b		

Chapter No 16

WATER : A PRECIOUS RESOURCE

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																
Identify		**Differentiate/ Classify**			**Explain**				**Draw/ Measure**	**Construct/ Exhibit/ Conduct**		**Application/Relate**				
Q 2	**Q 4**	**Q 3**	**Q 10**	**Q 12**	**Q 6**	**Q 11**	**Q 15**	**Q 16**	**Q 17**	**Q 8**	**Q 17**	**Q 1**	**Q 5**	**Q 7**	**Q 9**	**Q 13**	**Q 14**

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. **According to the recommendation of United Nations, minimum 50 litres or three buckets of water per person should be provided. According to this which of the following activities does not show water shortage**

a) Taps running dry b) long queues for getting water
c) Marches and poster for demand of water
d) A family gets three buckets of water per day for each

2. **Seas and oceans are full of water on earth. However a very small percentage of water is available for us. This percentage is roughly**

a) 0.006% b) 0.06% c)0.6% d) 6%

3. **Which of the following is a way to use water economically?**

a) construction of ponds b) rain water harvesting
c) Drip irrigation d) construction of wells

4. **World water day is celebrated every year to attract the attention of everybody towards the importance of conserving water .On which day is it celebrated?**

a) 22 March b) 14 November c) 2 October d) 25 December

5. **'Every drop counts' is a slogan related to**

a) counting of drops of any liquid
b) counting of rain water
c) Importance of water
d) Importance of counting

6. **A man was digging the ground near the waterbody and he found a moist soil. As he kept digging deeper and deeper, he reached a level where all the spaces between the particles of soil and gap between rocks were filled with water .The upper limit of this layer is called**

a) Ground water b) Water Table c)Rain Water d)Well Water

7. **Rain Water seeps through the soil and fills the empty space and cracks deep below the ground .Which of the following inhibits the seepage of rain water into ground?**

a) Playground b) Cemented floor c) Grassland d)Forest

8. **A technique of watering plants by making use of narrow tubing which supply water directly at the base of plant is called**

a) Water harvesting b)Water cycle
c) Drip irrigation d) Water table

9. **India is a vast country and rainfall is not same everywhere. Some regions have excessive rains while some have very little rainfall. Excessive rain causes**

a)Droughts b)Floods
c) Storm d) shortage of water

10. At some places the ground water is stored between layers of hard rocks below the water table .This is known as

a) Infiltration
b) Canal
c) Aquifer
d) Well

11. A large number of people draw water from wells, tube wells or hand pumps. From where do these sources get water?

a) Water cycle
b) Oceans
c) Groundwater
d) Rivers

12. The continuous cycling of water among its three forms keep the total amount of water on earth constant .Three forms of water are solid,liquid and gas.Which of the following is not liquid form of water?

1)Snow 2) Lakewater 3) River water 4)Water vapour 5)Ice

Choose the correct combination from the options below

a) (1) and (2)
b) (1),(4) and(5)
c) (4) only
d) (2) and (3)

13. What is the source of water in atmosphere around you , that makes your eatables moist?

a) Ground water
b) Lakes
c) Water vapour
d) Ponds

14. Three forms of water available in nature are snow, water and water vapours. Three forms of water at home are

a) Ice, water vapour, smoke
b) Ice, water, steam
c) Snow, water and ice
d) None of above

15. In the case study of Bhujpur in Kutch area of Gujarat, what did villagers and NGOs decide to recharge the ground water?

a) To make dams
b) To make bawris
c) To harvest rain water
d) To make wells

16. Water table may be down if the water is not sufficiently replenished .This may happen due to increase in

a) population increase
b) industries
c) agricultural activities
d) all of these

17. Water from dirty ponds, sewages evaporates and become clouds in the sky then rain as pure water into lakes and ponds. This process of water cycle is a:

a) non renewable source
b) renewable source
c)ground water source
d) none of above

Answer Key (Chapter 16)

Q	Ans.	Q.	Ans.
1	d	11	c
2	a	12	b
3	c	13	c
4	a	14	b
5	c	15	c
6	b	16	d
7	b	17	b
8	c		
9	b		
10	c		

Chapter No 17

FOREST : OUR LIFE LINE

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																		
Identify				**Differentiate/ Classify**		**Explain**					**Draw/ Measure**			**Construct/ Exhibit/ Conduct**	**Application/Relate**			
Q 1	**Q 4**	**Q 6**	**Q 10**	**Q 5**	**Q 8**	**Q 1**	**Q 9**	**Q 12**	**Q 13**	**Q 15**	**Q 3**	**Q 8**	**Q 16**	**Q 18**	**Q 2**	**Q 7**	**Q 11**	**Q 14**	**Q 17**

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. As soon as students enter the forest for a visit, teacher raised his hand and signalled them to keep quite because

a. they want to catch some birds
b. noise could disturb the animals living in the forest
c. by noise animals can attack them
d. they want to hunt the animals

2. Forests provide food and shelter for many animals and plants. So forests are an example of

a. playground
b. habitat
c. Circus
d. Zoo
e.

3. Branchy part of a tree above the stem is known as

a. Stems
b. Branch
c. Crown
d. Leaves

4. During the visit to a forest teacher asked the children to look up and observe how branches of all tall trees are making a roof over other plants in the forest. This roof is called

a. Forest top
b. Canopy
c. Lowest layer
d. Crown

5. Organisms which feed on plants often get eaten by other organisms and this cycle goes on. This cycle is called

a. Water cycle
b. Photosynthesis
c. Food chain
d. Saprotrophs

6. Choose the correct sequence of food chain

a.frog->eagle->insects-> snake
b. grass-> insects-> frog ->snake-> Eagle
c.Eagle-> grass-> insect-> frog
d. grass-> snake-> insects ->eagle

7. Green Lungs of earth maintain the balance of Oxygen and Carbon dioxide in the atmosphere. These are

a. Green colour of plants
b. Forests
c. kitchen garden
d. greenhouse gases

8. Strongest stem in plants is found in

a. Creeper

b. Climber
c. Trees
d. Shrub

9. Bablu observed that there was no noise pollution in a forest though lots of heavy vehicles were passing from nearby roads why?

a. vehicles were moving slowly
b. forest absorbs the noise
c. very less vehicles were moving
d. none of above

10. Forests provide us many things like wood, gum, paper etc which of the following is not provided by forest?

a. Paper
b. Thermocol
c. Matchsticks
d. Plywood

11. Activities of man responsible for the destruction of forests are

a. construction of roads
b. construction of buildings
c. increase demand of wood
d. all of these

12. Deforestation will endanger our life and environment if forests disappear then

a. amount of carbon dioxide in air will increase
b. increase of earth's temperature
c. animals will not get food and shelter
d. all of above

13. Mushroom and other microorganisms feed upon the dead plants and animals tissues and convert them into a dark coloured substance called

a. humus
b. black soil
c. Seedlings
d. Nutrients

14. Forests acts as a natural absorber of rainwater and allow it to seep down in the ground. It help to maintain water table throughout year and help in controlling

a. soil erosion
b. floods
c. filtration of groundwater
d. all of above

15. Paheli saw Peepal sapling on the side wall in her school. Can you help her to understand how this would have happened?

a. People grow Peepal on walls
b. Excreta of birds fall on buildings carrying seeds and grow when conditions favour
c. Holi plants are grown in walls
d. Gardeners grow Peepal on walls

16. People say nothing goes waste in a forest as nutrients are cycled by

a. Interrelationship of water ,animal and air
b. interrelationship of plants,soil and decomposers in a forest
c. interrelationship of carbon dioxide(CO_2), Oxygen(O_2) and water (H_2O)
d. None of the above

17. In the recent years, there have been increasing incidences of floods in the plains of Northern India because

a. there has been an increase in annual rainfall
b. the rate of silting of dams has gone up
c. there has been increased deforestation in the catchment area
d. Increased areas of river land is being cultivated

18. Deforestation has an alarming effect on

a. increase in grazing area
b. weed control
c. soil erosion
d. sunlight

Answer Key (Chapter 17)

Q	Ans.	Q.	Ans.
1	b	11	d
2	b	12	d
3	c	13	a
4	b	14	d
5	c	15	b
6	b	16	b
7	b	17	c
8	c	18	c
9	b		
10	b		

Chapter No 18

WASTE WATER STORY

Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																	
Identify					**Differentiate/ Classify**			**Explain**				**Draw/ Measure**	**Construct/ Exhibit/ Conduct**		**Application/Relate**			
Q 1	**Q 10**	**Q 12**	**Q 13**	**Q 16**	**Q 2**	**Q 6**	**Q 14**	**Q 3**	**Q 5**	**Q 15**	**Q 18**	**Q 8**	**Q 8**	**Q 17**	**Q 4**	**Q 7**	**Q 9**	**Q 11**

Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18

PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

***(A- not meeting the expected standard,**

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No.	Name of the Student	Identify	Differentiate/ Classify	Explain	Draw/Measure	Construct/Exhibit/Conduct	Application /Relate

MCQs

1. Water rich in lather, mixed with oil, black- brown water from sinks-showers , toilets and laundries is dirty. It is called

a) Potable water b) Waste water c) Water for life d)Toilet water.

2. A transport system made up of a network of big & small pipes that carry sewage from the point of being produced to the point of disposal is known as:

a) Contaminates b) Sewerage

c) Excretory system d) Mechanical system

3. We know that sewage is a complex mixture containing suspended solids, organic and inorganic impurities, disease causing bacteria and other microbes and nutrients etc.

Choose the inorganic impurities from the following.

a Human faeces and animal waste

b Oil and urea(Urine)

c Nitrates, phosphates, metal

d Fruit and Vegetable waste

4. Water polluted by various human activities causes a number of water borne disease . Which of the following is not a water borne disease?

a) Cholera b) Typhoid c) Asthma c) Dysentery.

5. A very large number of people defecate in the open. It may cause water pollution and soil pollution .Both the surface water and ground water get polluted by this. Now this polluted ground water becomes the source for

a) Springs rivers b) Wells, tube wells and hand pumps

c) Both a and b d) None of the above

6. In our rural area there is no sewerage for disposal of sewage. Name an alternative arrangement for sewerage disposal where there is no sewerage system.

a) Septic tanks b) composting pits c) Both a and b d)None.

7. We should not throw used tea leaves, chemicals and cooking oil into the sink because

a) They may block the drain pipes.

b) They can harden and block the pipes.

c) They may kill microbes that help purify water.

d) All of the above.

8. Which of the following are the products of waste water treatment?

a) Biogas b) Sludge c) Both a and b d) Aerator.

9. It has been suggested to plant trees all along the sewage pond. These trees absorb all surplus waste water rapidly and release pure water vapour into the atmosphere which among the following trees have been suggested to plant along the sewage?

a)Mango tree b) Neem tree c) Eucalyptus tree d) Peepal tree

10. Open drain system is breeding space for which the following

a) Flies b) Mosquitoes

c) Disease causing organisms d) All of the above .

11. For drainage pipes in building the test applied before putting them to use is

a) Water test

b) Smoke test

c) Straightness test

d) All of the above

12. The gas which cause explosion in sewers is

a) Carbon oxide b) Methane

c) Carbon monoxide d) Ammonia

13. How sewage is disposed off in an aeroplane?

a) Flushing your waste out into atmosphere.

b) Flushes waste water into an onboard sewage tank

c) Ground crew disposes of sewage after the plane land

d) b and c.

14. In a design of a toilet human excreta is treated by earth worms, it is a low water –use toilet for safe processing where human waste is completely converted to vermicakes which among the following is this:

a) Onsite sewage b) Vermi-processing toilet

c) Chemical toilet d) Composting pits

15. In waste water treatment plant, the waste water is allowed to settle in a large tank. Then, solids like faeces settle at the bottom and are removed with scraper. This is the sludge. What happens to it?

a) It is thrown into the fields

b) Sludge is transferred to a tank for decomposition.

c) Biogas is produced

d) b and c.

16. Generally when we open fresh water tap, we get milky water for a few seconds, then it becomes clear because a chemical is used to disinfect the water. Identify the chemical among the following

a) Chlorine b) Washing soda c) Silvia d) Coal

17. In filtration plant water is filtered using layers of .

a) Sand and Clay

b) Clay and fine gravel

c) Sand and fine gravel

d) Sand, fine gravel and pebbles.

18. Minamata disease of brain is water pollution related disease, which result from

a) Release of human organic waste into drinking water

b) Release of industrial waste mercury into fishing water

c) Oil spills into sea

d) Release of fertilizers into drinking water

Answer Key (Chapter 18)

Q	Ans.	Q.	Ans.
1	b	11	b
2	b	12	b
3	c	13	d
4	c	14	b
5	b	15	d
6	c	16	a
7	d	17	d
8	c	18	b
9	c		
10	d		