

SUBJECT : INTEGRATED SCIENCE

Time : 2½ hours

MM : 80

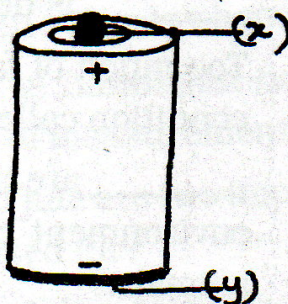
General Instructions :

- (i) All questions are compulsory.
- (ii) Mention correct question number and part for each answer.
- (iii) Attempt the questions in the same sequence as given in question paper.

PART-A

Q1. Answer the following in one sentence each : (1x15=15)

- (a) A survey found that people living in the mountains have swollen glands in their neck. Which mineral would be missing in their diet?
- (b) I am an indigestible fibrous material present in food. What am I?
- (c) Complete the given analogy :
Butter : fats :: Pulses : _____
- (d) Define unit.
- (e) The captain of a football team is measuring the height of his team members. The measurement of one player is written as 1.9. Which unit of measurement should be used to complete the measurement?
- (f) Both the seeds and leaves of this plant are edible. Name the plant.
- (g) Given below is a diagram of an electric cell. Copy the diagram and label the parts (x) and (y).



- (h) Spinning of yarn on large scale is done with spinning machine while the manual spinning is done with hand operated devices A and B. Identify A and B.
- (i) We often see in our house or in our neighbourhood some plants which have long but weak stem and crawl on the ground. What are these plants known as? Give one example of such a plant.
- (j) The length of a line is 2.37 cm. Convert it into mm.
- (k) What is common among the following :
beet root, radish, carrot, turnip
- (l) Radhika added ice-cubes to a tumbler and observed some water droplets on the outer surface of the glass. Name the process which is responsible for the formation of these water droplets.
- (m) Name the following :
(i) a cereal used in making kheer _____
(ii) an animal product used to make omlettes _____
- (n) Carrots help in improving our eye sight. Give reason.
- (o) Select the ingredients which are neither extracted from plants nor from animals but are important for making dishes :
spices, salt, oil, ghee, water

Q2. Fill in the blanks : (1x5=5)

- (a) A diet which contains all the nutrients in right proportion is called a _____.
- (b) Fibres made from chemical substances are called _____.
- (c) _____ is done on looms.
- (d) Too much of fat deposition in our body leads to a condition called _____.
- (e) _____ are the organisms which help to keep the environment clean by consuming dead bodies of animals.

Q3. Give one technical term for : (1x5=5)

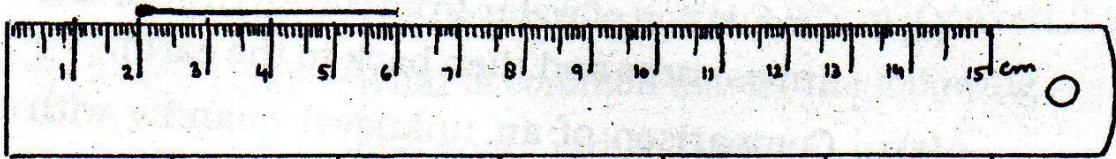
- (a) Small sized plants which have green and soft stem.
- (b) A thinner strand of thread used to make a fabric.
- (c) A device which either completes the circuit or breaks it.
- (d) Circulation of water from the earth's surface to the atmosphere and then back to the earth.
- (e) Comparison of an unknown quantity with some known quantity of the same kind.

PART-B

Q4. Answer briefly : (2x10=20)

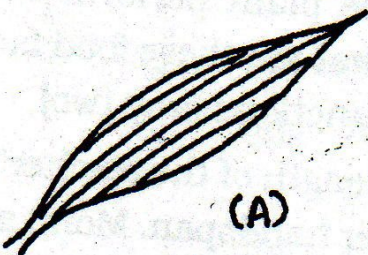
- (a) Name the edible part of the following vegetables :
 - (i) potato
 - (ii) cabbage
 - (iii) chilli
 - (iv) sweet potato
- (b) Why is it important to drink water even when it does not give energy?
- (c) How are cotton fibres converted into cotton yarn?
- (d) Classify the following as conductors and insulators.
rubber, wood, copper wire, human body
- (e) The food factories of the plant perform two very important functions. What are these food factories known as? State their functions (any two).
- (f) Ria was measuring the length of the teacher's table in her classroom with her handspan. Mohit advised her to use a metre scale instead of handspan.
 - (i) Which value is shown by Mohit?
 - (ii) Why is handspan not considered a reliable unit of measurement?
- (g) Cotton and jute are two important plant fibres. What are they used for?
- (h) X is caused due to heavy rainfall. Identify X and write its any two effects.

- (i) Differentiate between herbivores and carnivores giving examples.
- (j) Given below is a figure showing measurement of a needle using a ruler.
 - (i) What is the length of the needle?
 - (ii) What precautions should be kept in mind while using a metre scale? (any two)



Q5. Answer the following : (3x5=15)

- (a) Food is the basic substance essential for our living. State its importance for the living organisms.
- (b) Name the type of motion shown by the following :
 - (i) a stone thrown up in the air
 - (ii) motion of a bee
 - (iii) hands of a clock
 - (iv) motion of a pendulum
 - (v) Mullet fired from a gun
- (c) The diagrams given below represent two different types of venation



(A)



(B)

- (i) Identify the type of venation shown in leaf A and leaf B and give one example of each type.
- (ii) What is the type of root system present in plant having leaf A and in the plant having leaf B?
- (d) A farmer wants to obtain jute fibres from jute stem. Explain the various steps he should take in order

to obtain jute fibres.

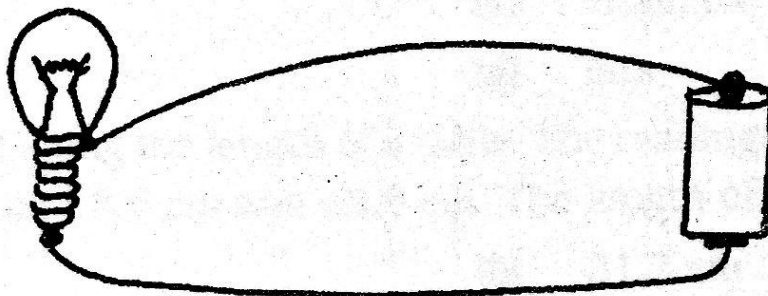
- (e) Define rain water harvesting. Explain two ways by which you can conserve rain water.

Q6. Draw neat and well-labelled diagrams of : (4+3+3)

- (i) Parts of a flower
- (ii) Water Cycle
- (iii) Inside View of a Torch

Q7. Answer the following questions : (5x2=10)

- (a) (i) Identify and define the type of circuit given below.



- (ii) Copy the diagram in your answer sheet and mark the direction of flow of current in the below circuit.

- (iii) Write any two uses of electricity.

(b) Complete the table given below :

Vitamin/Mineral	Deficiency disease/ disorder	Symptoms
(i) Iron	_____	_____
(ii) _____	Loss of vision	_____
(iii) _____	bone and tooth decay	_____
(iv) _____	_____	bleeding gums
(v) Vitamin B ₁	_____	_____

SUBJECT : SCIENCE (MULTIPLE CHOICE QUESTIONS)

Time : 30 minutes

MM : 15

General Instructions :

- i) Attempt all the questions.**
- ii) There are 15 multiple choice questions in total. Only one of the options in every question is correct. Put a (✓) against the correct option.**
- iii) Each question carries 1 mark.**
- iv) Do not use white fluid on these sheets.**
- v) Use only pen to mark the answers.**

Q1. Renu puts a food sample on a piece of paper and crushes it. The paper becomes translucent. Which nutrient is the food rich in?

- | | |
|-------------------|--------------|
| (a) carbohydrates | (b) vitamins |
| (c) proteins | (d) fats |

Q2. A metre scale was kept along the length of a table. The readings of the metre scale at two ends of the table are 13.6 cm and 45.8 cm. The length of the table is -

- | | |
|-------------|-------------|
| (a) 32.2 cm | (b) 31.2 cm |
| (c) 34.2 cm | (d) 30.2 cm |

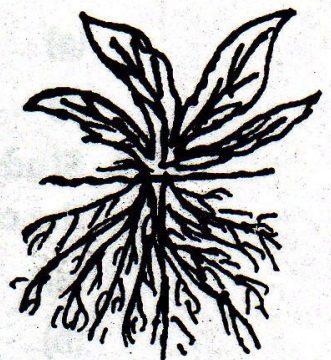
Q3. Soumya prepared a weaving sample using different coloured yarns. How many sets of yarns she would have used?

- | | |
|-----------|----------|
| (a) one | (b) two |
| (c) three | (d) four |

Q4. Which of the following statements hold true for the root system shown in the given figure?

- (i) It is a fibrous root system.
- (ii) It is a tap root system.
- (iii) Examples of this type of root system are rose and tulsi.
- (iv) It is a shoot system.

- | | |
|-------------------|---------------|
| (a) (i) and (ii) | (b) Only (i) |
| (c) (ii) and (iv) | (d) Only (ii) |



Q5. Seema took some moong seeds and soaked them overnight in water. Next day, after draining out the water, she wrapped the seeds in a wet cloth. After one day she observed small white structures growing out of the seeds. These small white structures are called -

- | | |
|-------------|---------------|
| (a) leaf | (b) stem |
| (c) sprouts | (d) cotyledon |

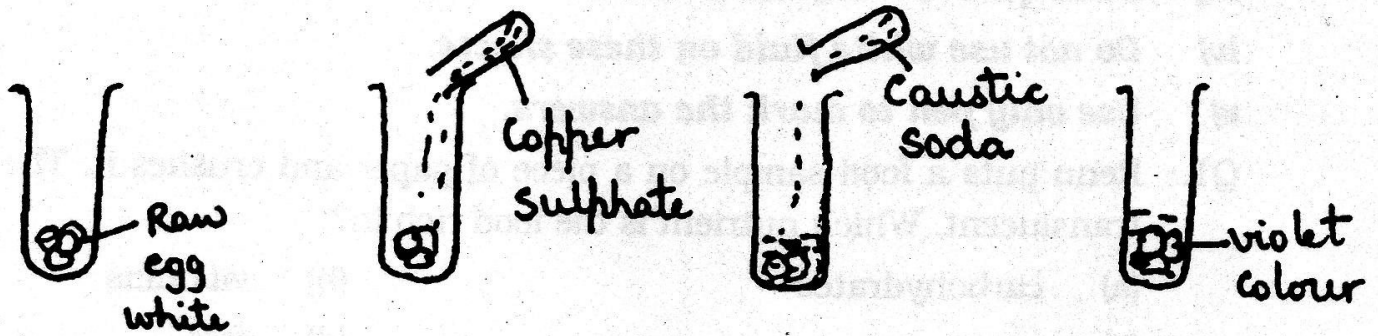
Q6. Rohan measured an object using a metre scale and got the following readings

- (i) 10 cm (ii) 10 m
(iii) 10 km (iv) 10 mm

Which of the above is the standard measurement?

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

Q7. Observe the given experimental figures carefully. What does this experiment prove?



- (a) raw egg white contains proteins
(b) raw egg white contains fats
(c) raw egg white contains iodine
(d) raw egg white contains carbohydrates

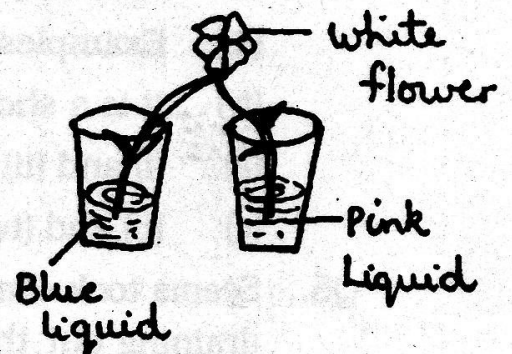
Q8. If P represents the fibre, Q represents the yarn and R represents the fabric then what is the correct sequence to obtain a fabric?

- (a) $P \rightarrow R \rightarrow Q$ (b) $Q \rightarrow R \rightarrow P$
(c) $P \rightarrow Q \rightarrow R$ (d) $R \rightarrow P \rightarrow Q$

Q9. Mehak wants to test the food nutrient present in potato. Which of the following solutions should she use?

- (a) caustic soda (b) copper sulphate
(c) both caustic soda and copper sulphate (d) iodine solution

Q10. Study the experiment shown alongside and select the correct option regarding the observation.

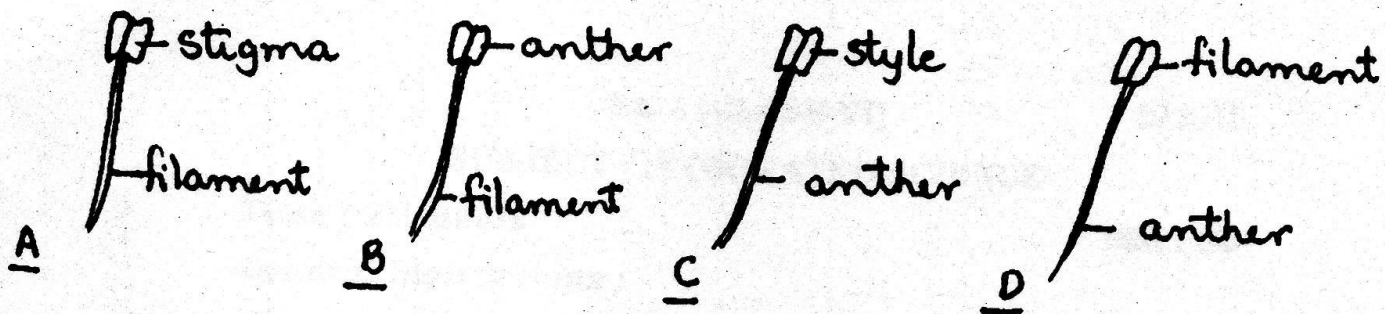


- (a) the flower will remain white
(b) the flower will turn blue
(c) the flower will turn pink
(d) one half of the flower will turn pink and the other half will turn blue

Q11. Which function of the stem is demonstrated in the above activity?

- (a) respiration (b) absorption
(c) fixation (d) conduction

Q12. A teacher asked her four students A, B, C and D to label the diagram given below. Who among the following has correctly labelled the diagram.



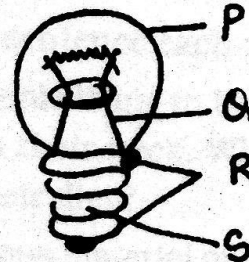
- (a) A (b) B
(c) C (d) D

Q13. Which part of the flower is represented by the diagrams given above (Refer to Q12)

- (a) petal (b) sepal
(c) stamen (d) pistil

Q14. Which part of the bulb is an insulator?

- (a) P
(b) Q
(c) R
(d) S



Q15. "Do not handle electric wires with your bare hands. Wear rubber gloves", said Mr. Nagpal. Which of the following is not true about what Mr. Nagpal commented?

- (a) You will get a shock if you handle naked wires.
(b) Rubber is an insulator.
(c) Electricity cannot flow through rubber.
(d) Rubber is a conductor.