

Time : 03 hrs.

MM-100

1. Read all the questions carefully.
 2. Draw diagrams where necessary.
-

Q1. Answer in one sentence:

1x10=10

- a) Which property of silk makes it so attractive?
- b) Complete the equation :
 $\text{CuSO}_4 + \text{Fe} \rightarrow$
- c) Is a physical change reversible or irreversible change?
- d) What causes irritation and swelling after a bee sting?
- e) What are ruminants?
- f) Name one method by which soil nutrients replenished.
- g) Give one example of organic acid.
- h) Which property of metal is used in the measurement of temperature?
- i) State one ill-effect of drought.
- j) Give one example of synthesis reaction.

Q2. Solve the following:

2x3=6

- a) -60°C to $^{\circ}\text{F}$ b) 40°F to $^{\circ}\text{C}$ c) 100°C to $^{\circ}\text{F}$

Q3. Write chemical formula of the following names:

1x4=4

- a) Blue vitriol c) Common salt
b) Sulphuric acid d) Milk of magnesia

Q4. Differentiate the following giving two points. (any four)

2x4=8

- a) Clinical and laboratory thermometer.
- b) Natural and synthetic fibre.
- c) Land breeze and sea breeze.
- d) Partial and total parasites.
- e) Mineral acid and organic acid.

Q5. Answer the following question:

3x5=15

- a) What will happen when baking soda is added to vinegar? Write equation of the reaction.
- b) What are villi and where they are located? What is the function of villi?
- c) What is the function of following teeth:
(i) Incisors (ii) canines (iii) molars
- d) What are indicators? Write its two properties.
- e) Mention any three problems faced by the workers associated with wool and silk industry.

Q6. Give reason of any four statements:

2x4=8

- a) Pickles and jams are not stored in metal jars.
- b) Frying pans are made of metal and the handle of frying pan is made up of plastic or wood.
- c) Burning of wood and cutting of wood into small pieces are considered as two different types of changes.
- d) Digital thermometer is preferred over mercury thermometer.
- e) Yellow curry stain on a white shirt turns red when it is washed with soap.

Q7. Answer the following:

5x5=25

- a) Describe briefly, how wool is obtained from sheep and processed to make woollen yarn.
- b) i) What is rusting of iron. Write equation to represent the process of rusting.
ii) Give three methods of preventing rusting of iron.
- c) Give description of the process of synthesis of food in green plants. What is the role of chlorophyll in photosynthesis?
- d) Three solutions A, B and C having p^H 3, 7 and 9.8 respectively. Now,
(i) What is neutralization reaction? Which above two solutions will give neutralization reaction?
(ii) What will be the effect of blue litmus paper on solution A and B?
- e) (i) Write one application each of conduction, convection and radiation.
(ii) How does a thermos flask keep drinks hot and cold for a longer time period?

- Q8. i) When is World Water Day celebrated and why is it celebrated? 2
- ii) What is the effect of water scarcity on plants? 1
- iii) What is rain water harvesting? Write its two advantages. 3
- iv) What is drip irrigation? How is it beneficial to farmers? 2

Q9. Two different species of plants X and Y live together as if they are the parts of the same plant Z. The plant X is an autotroph whereas plant Y is a saprophyte. The plant Y holds the X in its mat of web-like hyphae and supplies water and minerals to cells of plant X. The plant X makes food by photosynthesis and shares it with plant Y.

- a) What could plants i) X ii) Y iii) Z 3
- b) Which of the two plants X or Y, is green in colour? 1
- c) Which type of relationship is shown by plant X and Y? 1
- d) Give another example of this type of relationship. 1
- e) What do you mean by saprophyte? 2

- Q10. i) Draw a labelled diagram of the human digestive system. (5+3)
- ii) Name and write functions of the gland associated with human digestive system.
