Student Name					
Date		Grade	IX	Roll No.	
Subject	Science	Marks	80	Teacher's Sign	

Sample Paper S A 1 [2020-21]

GENERAL INSTRUCTION:

The question paper contains 5   sections
Section A : One marks questions
Section B : Two marks questions
Section C : Three marks questions
Section D : Five marks questions
Section E : Practical based skills ,two marks question

SECTION A :

1 Ribosomes are associated with the synthesis of:
   a) Proteins
   b) Vitamins
   c) Carbohydrates
   d) Fats
2 Which of these types of cells is most likely to divide?
   a) Epidermis
   b) Parenchyma
   c) Meristem
   d) Xylem

SECTION B :

3 What is a mixture? What are its various types?

4 An object has moved through a distance. Can it have zero displacement?
   If yes support your answer with an example

5 Which of the following is true for displacement?
   (a) It cannot be zero.
   (b) Its magnitude is greater than the distance travelled by the object.

SECTION C :

6 An athlete completes one round of a circular track of diameter 200 m in 40 s.
   What will be the distance covered and the displacement at the end of 2 minutes 20 s?

7 Differentiate between homo generous and heterogeneous mixtures with examples

8 What are isotopes? Name the isotopes of hydrogen and draw the structure of their atoms?

9 a) What is tyndall effect? Which kinds of solution show it?

b) . The maximum number of electrons in L shell is ____.

10 What do you mean by acceleration due to gravity? Give example.

11 Give three features of cardiac muscles ?   .

12 What are the differences between the mass of an object and its weight?

13 a) Define Valency? Find the Valency of oxygen and Aluminum.

b) What is meant by a Pure substance?

14 What is the difference blood and lymph.
15   Draw and identify different elements of phloem.

SECTION D :

16 Name types of simple tissues and explain any one of them.

17 Calculate the molecular masses of $H_2, O_2, Cl_2, CO_2, CH_4, C_2H_6, C_2H_4, NH_3, CH_3OH, HNO_3$.

18 a)   Name types of simple tissues found in plants.
b) Differentiate between voluntary and involuntary muscles cells.

OR

How does an amoeba obtain its food ? Draw and label the diagram.

19 Joseph jogs from one end A to the other end B of a straight 300 m road in
inutes 30 seconds and then turns around and jogs 100 m back to point C in
another 1 minute. What are Joseph's average speeds and velocities in jogging,
(a) from A to B and (B) from A to C?

20 How does the force of gravitation between two objects change when the distance between
them is reduced to half ?

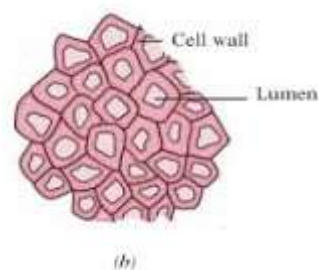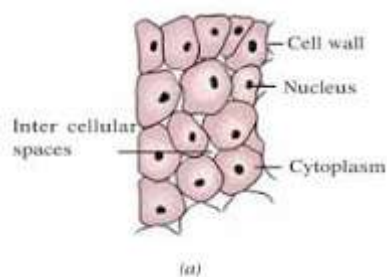**21** a) Which organelle is known as the kitchen of the plant? Why ?
b) What would happen to the life of a cell if there was no Golgi apparatus?

SECTION E
22 A mixture of sand, powdered glass and common salt is dissolved in water and then
filtered. Name the substance left on filter paper. Name the substance in the filtrate.

23 Mention the two precautions to determine the boiling point of water in laboratory

24 Observe the following the following diagrams identify the tissue and write one function of each.
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25 Write the steps you would use for making tea. Use the words solution, solvent, solute, dissolve, soluble, insoluble, filtrate, and residue.

26 When a horse pulls a cart, according to the third law of motion, the cart also pulls the horse in opposite direction with equal force. Why does the horse-cart system move at all then?

27 Two cars run on a straight road with different uniform accelerations for 15 minutes. Thus their v – t graphs have different slopes. Which car will travel more distance?