### NORTH-EX PUBLIC SCHOOL (Senior Secondary, Affiliated To CBSE) School Block, Jain Nagar, Sector-38, Rohini, Delhi– 81 HALF YEARLY EXAMINATION (2023-24) SUBJECT – SCIENCE CLASS – VII

TIME- 2 Hrs. 30 mins

M.M.- 60

#### **General Instructions:**

i) The question paper comprises five sections A, B, C, D and E

ii) Section A - question no.1 to 10 carries 01 marks each.

iii) Section B - question no. 11 to 14, carries 2 marks each.

iv) Section C - question no. 15 to 18, carries 3 marks each.v) Section D - question no. 19 to 23, carries 4 marks each.

vi) Section E - question no. 24 and 25 carries 5 marks each.

### SECTION – A

Q1 Saliva help in the digestion of-

A) starch B) sugar C) fat

Q2 Exchange of gases in plants take place through

A) stem B) root C) stomata

Q3 which of the following not related to plants?

A) Xylem B) phloem C) nephron

Q4 Name an organic acid.

Q5 Which is the most fertile zone of soil?

Q6 Which soil has a balanced amount of sand, silt and clay?

Q7 Name one greenhouse gas.

Q8 The heating element are made from?

A) gold B) nichrome C) chromium

Q9 Autotroph is a term used for what?

Q10 Complete the given analogies .

Lichen: symbiosis :: Cuscuta :------

# SECTION – B

Q11 Why do Sundew plants have Sticky hairs on their leaves?

- Q12 Why is blood red in colour?
- Q13 What is the basic difference between weather and climate?
- Q14 Define neutralisation reaction.

## SECTION – C

Q15 Write A for acid B for base and N for neutral

A) Water from ROb) ShampooC) Aerated drinkQ16 Burning of paper is what type of change ? give reason.

- Q17 What are the functions of blood?
- Q18 Draw a food chain.

# SECTION – D

- Q19 How plants and animals are interdependent on each other? Explain.
- Q20 Draw a well labelled diagram of soil profile.
- Q21 What do you mean by soil erosion? What are the various effects of soil erosion?
- Q22 Differentiate between physical and chemical change. Give example also.
- Q23 Draw a flow sheet diagram of circulation of blood.

# SECTION – E

- For question number 24 and 25 read the paragraph given below and answer the given questions
- Q24 Blood transfusion is a process in which the blood from a healthy person is introduced into the body of a needy person. The person who donates blood is called the donor and the one who receives blood is called the recipient. It is important to match the donor's blood with that of the recipient; otherwise clumping of the cells in the recipient's blood takes place that could be fatal. Knowledge of one's blood group is essential during blood transfusion. A blood bank stores and preserves blood from the donors for later use in blood transfusion.Blood groups: In humans, four types of blood groups-A, B, AB and O on the type of the antigen and the antibody present
  - A) What is blood transfusion?
  - B) Which blood group called universal donor?
  - C) Who store and preserved blood from the donor?
  - D) Name all the blood groups present in humans.
- Q25 When a raw vegetable like brinjal or potato is cut and exposed to the air, the colour of the cut surface Give an example of chemical change changes. Potato and brinjal release substance called phenols. Phenols these pieces come in contact with atmospheric oxygen and react to form a new. substance and hence you can see the surface changing to black. Thus, turning of exposed surface of brinjal from its natural colour to black is an example of a chemical change.
  - A) Give an example of chemical change.
  - B) Why cut piece of brinjal and potato change its colour?
  - C) Write the role of phenols.