

**Standard 10**

Time: 1.15 Hrs.

**SCIENCE**

Marks: 50

**Section - A****I. Answer all questions:**

- 1) Sensitive whiskers are found in \_\_\_\_  
(Bat, Elephant, Deer, Cat)
- 2) Normal body temperature of man is  
(98.4 – 98.6°F, 96.6 – 96.8°F, 94.4 – 98.6°F, 98.4 – 99.6°F)
- 3) The bicuspid valve of heart is called as  
(tricuspid valve, mitral valve, pulmonary valve, semi lunar valve)
- 4) In monotropa the special type of root which absorbs nourishment is  
(Haustoria, Mycorrhizal root, clinging root, adventitious root)
- 5) The autotrophic nutrition requires  
(CO<sub>2</sub> and water, chlorophyll, sunlight, all the above)
- 6) An element which is an essential constituent of all organic compounds belongs to \_\_\_\_\_ group  
(14th, 15th, 16th, 17th)
- 7) Any metal mixed with mercury is called amalgam. The amalgam used for dental filling is  
(Ag-Sn amalgam, Fe-Sn amalgam, Na-Sn amalgam, Cu-Sn amalgam)
- 8) The modern periodic law was proposed by  
(Moseley, Mendeleev, Dobernier, Newland)
- 9) An electric current through a metallic conductor produces \_\_\_\_\_ around it.  
(heat, light, magnetic field, mechanical force)
- 10) Electromagnetic induction was discovered by  
(Michael Faraday, George Simon Ohm, Oersted, Newton)

**Section - B****II. A] Short answers. B] Answer any ten questions. 10×2=20****11) Fill in the blanks:**

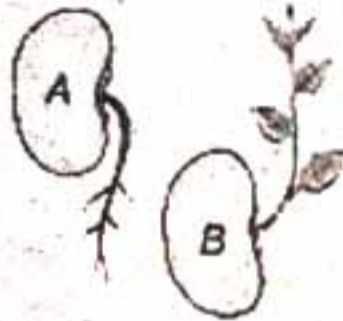
Plasma: Fibrinogen; RBC: \_\_\_\_

WBC: \_\_\_\_\_

12) Match the following:

- |                |   |                              |
|----------------|---|------------------------------|
| a) globulin    | - | Water balance                |
| b) Fibrinogen  | - | Carrier of respiratory gases |
| c) albumin     | - | blood clotting               |
| d) haemoglobin | - | immunity                     |

13)



**Observe the above diagram.**

- a] Mention the type of movements show in fig A and B.  
 b] How does the movement differ from the movement of mimosa?

14) **Pick out the odd one:** The parts of the alimentary canal are (Pharynx, mouth, buccal cavity, pancreas)

15) **Consider the following statements:**

*Assertion:* The leaf is the site for photo synthesis.

*Reason:* Chlorophyll pigments are in the leaf.

- a] A is correct and R is not relevant  
 b] A is correct and R is wrong  
 c] A is wrong and R is correct  
 d] Both A and R are correct

16) **Match the methods of nutrition of special organs with suitable examples:**

Autotrophs	Mycorrhiza	Cuscutta
Parasites	Chlorophyll	Monotropa
Saprophytes	Haustoria	Hibiscus

17) **Based on modifications make the pairs:**

Incisor: tusk of elephant

\_\_\_\_\_ : quills of porcupine

18) *Assertion:* In thermite welding, aluminium powder and  $Fe_2O_3$  are used

*Reason:* Aluminium powder is a strong reducing agent.

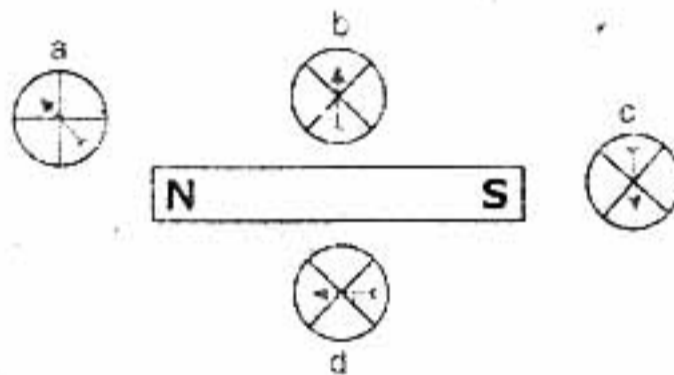
Does the reason satisfy the assertion

19) Can rusting of iron nail occur in distilled water. Justify your answer.

## 20) Match the following:

- Oxide ore - Rock salt  
 Carbonate ore - Galena  
 Halide ore - Bauxite  
 Sulphide ore - Marble

- 21) What is an alloy?  
 22) From the following statement write down that which is applicable to a commutator.  
 a] galvanometer uses commutator for dead beat  
 b] transformer uses commutator to step up voltage  
 c] motor uses commutator to reverse the current  
 23) **Correct the mistakes if any, in the following statements:**  
 a] Magnetic field is a quantity that has magnitude only.  
 b] The magnetic field lines emerge from the south pole and merge at the north pole.  
 24) Which of the compass needle orientations in the following diagram might correctly describe the magnet's field at that point.



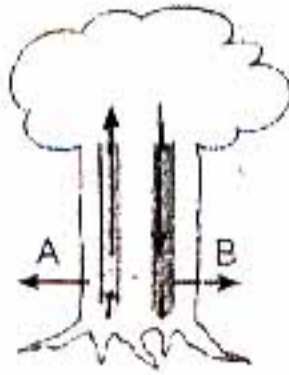
- 25) State Fleming Left hand rule.

### Section - C

- III. i) Answer any four questions by choosing one question from each part.  
 ii) Each question carries five marks.  
 iii) Draw diagram wherever necessary. 4×5=20
- 26) a] By what characters mammals are distinguished from other vertebrates?  
 b] The epidermis of mammals contains  
 a) hair, bristle, quills                      b) hair, nail, claw  
 c) hair, bristle, horn                         d) hair, nail, scale
- 27) a] Why are Kidneys called 'Master Chemists'?  
 b] The zoological name of Dholes.  
 c] Where do they live?

**Part - II**

28)



- a] Draw the figure given below.
- b] Name A and B
- c] What are the materials transported through A?
- d] What are the materials transported through B?
- e] How do the materials in A move upwards to leaves?

29) In touch me not plant the leaves show movements. What type of movement have you observed. Discuss.

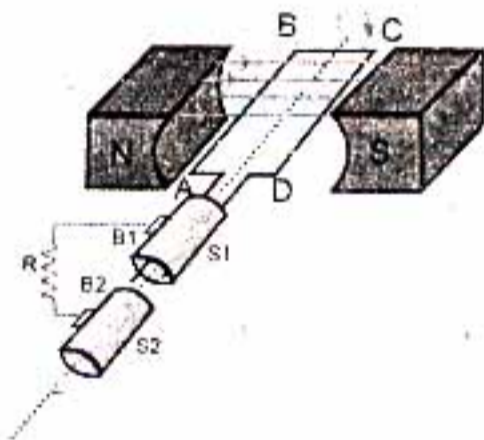
**Part - C**

30) Write the characters of periods in modern periodic table.

- 31) a] What is ore?
- b] What is galvanization?
- c] How many elements are known so far?

**Part - D**

32)



- a] Redraw the above diagram.
  - b] This diagram represents \_\_\_\_\_
  - c] Write the principle of the name of the device denoted by this diagram.
  - d] Label the parts of the diagram.
  - e] How will you find the direction of current in this device?
- 33) a] Define magnetic lines of force.
- b] What are the properties of magnetic lines of force?