

Std.VII Section : _____

Subject : Science

Marks : 80

Date : _____

Term - I

Name : _____ Roll No. _____

Time : 3 Hrs.

General Instructions

Read the following instructions very carefully and strictly follow them:

- (i) This question paper comprises 39 questions. All questions are compulsory.
- (ii) This question paper is divided into five sections- A, B, C, D and E.
- (iii) Section A- Q. No. 1 to 20 are multiple choice questions. Each question carries 1 mark.
- (iv) Section B- Q. No. 21 to 26 are very short answer type questions. Each question carries 2 marks. Answer to these questions should be in the range of 30 to 50 words.
- (v) Section C- Q. No. 27 to 33 are short answer type questions. Each question carries 3 marks. Answer to these questions should be in the range of 50 to 80 words.
- (vi) Section D- Q. No. 34 to 36 are long answer type questions. Each question carries 5 marks. Answer to these questions should be in the range of 80 to 120 words.
- (vii) Section E-Q.No. 37 to 39 are of 3 source-based/ case-based units of assessment carrying 4 marks each with sub-parts.
- (viii) There is no overall choice. However, an internal choice has been provided in some sections. Only one of the alternatives has to be attempted in such questions.

Section - A (1 Mark each)

- Q.1 : Finger like projections in amoeba are called
a) vacuoles b) pseudopodia c) villi d) cilia
- Q.2 : The length of the small intestine in adult human beings is about
a) 1.5 metre b) 2.5 metre c) 4.5 metre d) 7.5 metre
- Q.3 : _____ are the pointed teeth present in our mouth.
a) canine b) premolar c) incisors d) molar
- Q.4 : Which among the following is a reproductive part of a plant?
a) Leaf b) flower c) stem d) root
- Q.5 : Which among the following is a process of fusion of the male and female gametes?
a) fertilisation b) reproduction c) pollination d) seed formation
- Q.6 : What is the filtering unit in the human excretory system?
a) nephron b) neuron c) nephridia d) kidney
- Q.7 : By which one of these the water is transported in a plants?
a) xylem b) phloem c) stomata d) root hair
- Q.8: The normal temperature of a healthy person is 37°C on _____.
a) Kelvin scale b) Roemer scale c) Fahrenheit scale d) Celsius scale
- Q.9 : The device used for measuring temperature is/an _____.

- a) Tachometer b) odometer c) thermometer d) Barometre

Q.10: The substance which can turn blue litmus to red is _____.

- a) Lemon juice b) milk of magnesia c) baking soda d) calamine solution

Q.11: If you experience discomfort from the indigestion caused by overeating, the one which helps to alleviate is -----.

- a) vinegar b) lemon juice c) baking soda d) caustic soda

Q.12: Which one is not an organic acid?

- a) Formic acid b) acetic acid c) Citric acid d) carbonic acid

Q.13: Which of the following are sour in a taste?

(i) Common salt (ii) curd (iii) sugar (iv) tamarind

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

Q.14: We can prevent rusting of Iron by coating it with a layer of

A. Zinc B. Sodium C. Chromium D. Carbon

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

Q.15: Which of the following is a mineral acid?

- a) carbonic acid b) acetic acid c) citric acid d) oxalic acid

Q.16: Which one contains lactic acid?

- a) Lemons b) Unripe grapes c) Ant's and Bee sting d) Sour milk

Q.17: Assertion : Heterotrophic nutrition is the process in which an Organism uses inorganic substances to make its food.

Reason: Green plants make their food by using carbon dioxide, water, and minerals in the presence of sunlight.

- a) Both A and R are true and R is the correct explanation of the assertion.
b) Both A and R are true but R is not the correct explanation of the assertion.
c) A is true but R is false
d) A is false but R is true.

Q.18: Assertion : Water is an essential factor in the process of photosynthesis.

Reason: The rate of photosynthesis decreases if the availability of water decreases.

- a) Both A and R are true and R is the correct explanation of the assertion.
b) Both A and R are true but R is not the correct explanation of the assertion.
c) A is true but R is false
d) A is false but R is true.

Q.19: Assertion: Red blood cells have a disc shaped structure and they are red due to the presence of haemoglobin.

Reason : These cells help in the clotting of blood at the site of injury, thus blocking the flow of blood and preventing blood loss.

- a) Both A and R are true and R is the correct explanation of the assertion.
b) Both A and R are true but R is not the correct explanation of the assertion.
c) A is true but R is false
d) A is false but R is true.

Q.20: Assertion : Bricks are used to build houses.

Reason : Bricks allow heat from the outside to enter the house.

- a) Both A and R are true and R is the correct explanation of the assertion.
- b) Both A and R are true but R is not the correct explanation of the assertion.
- c) A is true but R is false
- d) A is false but R is true.

Section B (2 Marks each)

Q.21 A) Match the columns.

Column A

- 1. WBC
- 2. Blood platelets
- 3. Nephron
- 4. Osmosis

Column B

- a. Pumping organ
- b. Filtration of blood
- c. Blood clotting
- d. Protects the body from infection
- e. Semi-permeable membrane

OR

Q.21 B) Give one word for the following.

- a. The process by which water is lost from the plants.
- b. Special tube through which food is transported in the plants.

Q.22: Plants don't use all the water available to them from the soil. Much of it is given off by transpiration. Why do they then take in so much of water from the soil?

Q.23 A) Determine 68°F into Celsius scale.

OR

- Q.23 B) a. What is the temperature range of clinical thermometer?
b. What is the range of laboratory thermometer?

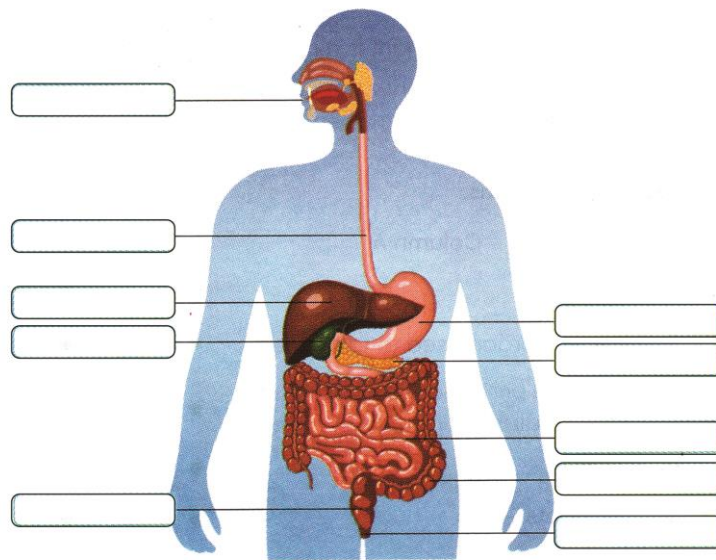
Q.24: Why does a thermos flask has vacuum between its walls and is shiny inside and has a narrow neck to pour liquid?

Q.25: Why calamine lotion is applied on bee stings?

Q.26: Compare between physical and chemical change.

Section C (3 Marks)

Q.27: Observe the given diagram and write down any one function of each organ like mouth, oesophagus and stomach.



Q.28: How does the cuscuta plant derive it's nutrition?

Q.29: What are the advantages of vegetative propagation?

Q.30: Explain in detail the different components of blood.

Q.31: Differentiate between clinical thermometer and laboratory thermometer.

Q.32 A) Compare between acids and bases.

OR

Q.32 B) Give any three uses of acids.

Q.33: Observe the given picture and answer the following question.

1. Identify the process due to which this brown deposit is formed on Iron objects.
2. Which type of change is it?
3. Write chemical reaction involved in the above process.



Section D (5 Marks each)

Q.34 A) Write two examples of each of the following.

- | | | |
|-------------------------|----------|----------|
| a) Insectivorous plants | 1) _____ | 2) _____ |
| b) Modes of nutrition | 1) _____ | 2) _____ |
| c) Autotrophs | 1) _____ | 2) _____ |
| d) Parasitic plants | 1) _____ | 2) _____ |
| e) Symbiotic plants | 1) _____ | 2) _____ |

OR

Q.34 B) What are Symbiotic plants? Explain the symbiotic relationship with the help of examples.

Q.35 A) Draw a well labelled diagram of parts of a flower.

OR

Q.35 B) Explain the male and female reproductive organs of the flower.

Q.36 A) With the help of a labelled diagram, describe the excretory system of human beings.

OR

Q.36 B) Describe the structure of the heart and its primary function.

Section - E (4 Marks each)

Q.37: Animals like cows and buffaloes are called ruminants. They quickly swallow grass and store it in a part of the stomach called the rumen. In the rumen, the food gets partially digested and is called cud. Later, the cud returns to the mouth in small lumps and the animal chews it slowly. This process is called rumination. Ruminants have a large sac-like structure between the small and large intestine called the caecum, where cellulose is digested with the help of bacteria.

(a) What is cud and where is it stored? (1)

(b) Define the process of rumination. (1)

(c) What is the role of the caecum in ruminants? (2)

OR

(c) How is the digestion process in ruminants different from humans?

Q.38: Read the following extract carefully and answer the questions given below it. Aman noticed that the kitchen sink pipe was blocked. His mother poured a solution of baking soda and vinegar into the pipe. After some time, bubbles appeared, and the blockage cleared. Aman asked his mother why this happened, and she explained that the two substances reacted to release a gas.

(a) What type of reaction happens when baking soda and vinegar are mixed? (1)

A. Neutralization reaction

B. Precipitation reaction

C. Decomposition reaction

D. Combustion reaction

(b) Vinegar contains which acid? (1)

A. Acetic acid

B. Citric acid

C. Tartaric acid

D. Formic acid

(c) What is an indicator? Name any two natural indicators and their colour changes in acids and bases. (2)

OR

(c) Define acids and bases.

Q.39: Read the following extract and answer the questions given below it.

When a strip of magnesium ribbon is ignited, it burns with a bright white flame and forms a white powder called magnesium oxide. This powder is a new substance formed as a result of the reaction between magnesium and oxygen from the air. The change is permanent and cannot be reversed.

(a) What is the name of the white powder formed when magnesium burns? (1)

(b) Is burning of magnesium a physical or chemical change? (1)

(c) Write the names of the substances involved in the reaction. (2)

OR

(c) Why is the burning of magnesium considered an irreversible change?
