

Central Public School, Sam.  
Mid Term Exam - 2018-19

Class - 7<sup>th</sup>

Sub! - Science

Am - 80

Time: 3hrs.

Section A (Biology - 30 Marks)

1. Choose the correct options  $1 \times 4 = 4$

(i) The lowest layer in understory is formed by

(a) shrubs (b) Herbs (c) Trees (d) Tall grasses

(ii) Which of the following is a decomposer that is not a micro-organism?

(a) Algae (b) Mushroom (c) Fungi (d) Protozoa

(iii) Through which tubes does oxygen from windpipe enters the lungs?

(a) Bronchi (b) Bronchioles (c) Alveoli (d) Trachea

(iv) The digestion of food starts ~~from~~ in

(a) Mouth (b) Stomach (c) Small intestine (d) Liver

2. Fill in the blanks  $1 \times 5 = 5$

(i) Ruminants digest their food in — steps.

(ii) When iodine is added to starch, it becomes — in colour.

(iii) — is the process of chewing food to break it into small pieces.

(iv) — is a unicellular organism that respire anaerobically to yield Alcohol.

(v) The substance present in blood which transport oxygen is —

3. Answer any three question  $2 \times 3 = 6$ .

(i) What happen during cellular respiration?

(ii) How do the nostrils contribute the process of breathing?

(iii) Define : (a) Forest (b) Canopy

(iv) How are scavengers useful to the environment?

4. Answer any ~~three~~ four questions  $3 \times 4 = 12$ .

(i) Explain the term food chain and food web with an example?

(ii) What happens to the air breathed in, once it reaches the lungs?

(iii) How do plants get nitrogen to synthesize proteins?

(iv) What happens to food in stomach.

5. Draw labeled diagram any one  $1 \times 3 = 3$

Human digestive system

or

Human Respiratory system.

Section B (Physics - 25 Marks)

6. Choose the correct options. 1x5 = 5

(i) \_\_\_\_\_ in vehicles gives the distance travelled in km.

(ii) Time period of a pendulum depends on.

(a) Frequency (b) Length of pendulum

(c) Amplitude (d) weight of bob.

(iii) 1 m/s is equivalent to

(a)  $\frac{5}{18}$  km/h (b)  $\frac{18}{5}$  km (c) 1 km/sec (d) None of these.

(iv) What is the ratio of  $^{\circ}\text{C}$  and  $^{\circ}\text{F}$ ?

(a) 9:5 (b) 5:9 (c) 100:212 (d) 1:1

(v)  $0^{\circ}\text{C}$  is the same temperature as

(a)  $0^{\circ}\text{F}$  (b)  $212^{\circ}\text{F}$  (c)  $32^{\circ}\text{F}$  (d)  $100^{\circ}\text{F}$

7. Fill in the blanks 1x5 = 5

(i) A  $10^{\circ}\text{C}$  fall in temperature is equal to

\_\_\_\_\_  $^{\circ}\text{F}$  fall in temperature

(ii) ~~which of the following~~ instrument measure time most accurately.

(iii) \_\_\_\_\_ is the unit of temperature in SI system.

(iv) Most liquid and all gases are \_\_\_\_\_ of heat

(v) Radiant heat falling on a body is partially absorbed and partly \_\_\_\_\_

8. Answer any three question in short  $2 \times 3 = 6$

- (i) what conditions are necessary for transfer of heat from one body to another by conduction?
- (ii) Why does a clinical thermometer have a kink in its stem.
- (iii) Why gases expand more than liquid and solid?
- (iv) Find time period of a pendulum having frequency  $20 \text{ Hz}$ .

9. Answer in detail any three questions  $3 \times 3 = 9$

- (i) Distinguish between uniform and non-uniform motion?
- (ii) At what temperature are the reading on the Celsius and Fahrenheit scale the same?
- (iii) Explain the process of the convection of heat.
- (iv) ~~Explain~~ Draw a labelled diagram of thermos flask.

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Section 'C' (Chemistry 25-Marks)

10. Fill in the blanks 1x5=5

(i) The valency of which of these elements is zero?

(a) Iron (b) Helium (c) Copper (d) Oxygen.

(ii) If the formula of an element is  $X_3$ , its atomicity will be

(a) 1 (b) 2 (c) 3 (d) 0

(iii) Which of the following material form the base of plant fibre?

(a) Protein (b) Cellulose (c) Grass (d) Salt.

(iv) China Rose indicator turns acidic solution into which colour?

(a) Pink (b) Green (c) Yellow (d) No change.

(v) Which of these metal cannot be used to prepare hydrogen by the action of an acid?

(a) Sodium (b) Iron (c) Calcium (d) Copper.

11. Write the chemical formula of ~~the~~ any five 1x5=5.

- (i) Ammonium chloride
- (ii) Calcium hydroxide.
- (iii) Baking soda.
- (iv) Calamine solution
- (v) Nitric Acid.
- (vi) Carbonic acid.

12. Answer ~~the~~ any three questions in short 3x2=6.

(i) Define these terms (a) Acid (b) Soap.

(ii) Define valency. If a compound has formula  $H_2X$ , what is the valency of 'X'?

(iii) Define Atomicity. ~~Give an ex~~ ~~one example~~  
Give one example of each diatomic and tri-atomic.

(iv) Write two difference between element and compound.

14. Answer these questions in detail (any three questions)  $3 \times 3 = 9$ .

(i) What is a chemical equation. Why is it essential to balance an equation?

(ii) Mention the steps in silk production.

(iii) Write three chemical properties of acids?

(iv) What are indicators? Write two type of indicators and change shown in acids and bases.

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