

Budha Dal Public School Patiala (21 Sept. 2015)

UNIT - I
Class-VII
Sub: G. Science

Marks: 90

Time: 3 hrs.

General Instructions:

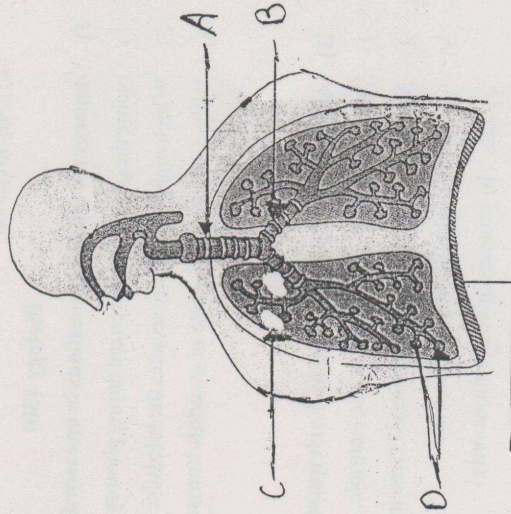
1. All questions are compulsory.
2. Draw neat and well labelled diagrams wherever required.
3. Marks to each questions are mentioned against it.

Physics (30)

- 1) Name the mode of heat transfer which does not require any medium. (1)
- 2) What is the 'eye' of cyclone? (1)
- 3) Name one appliance which works on the heating effect of current. (1)
- 4) When negative terminals of two cells are connected together, then the combination of cells is known as _____. (1)
- 5) Write two conditions which are necessary for the conduction of heat to take place. (2)
- 6) Draw a well labelled diagram of clinical thermometer. Mention its range also. (2)
- 7) Draw a circuit diagram consisting of a battery of 3 cells, a closed switch, a resistance and an electric bulb. (2)
- 8) Mention two factors on which the amount of heat produced in a conductor depend. (2)
- 9) What are the causes of short circuiting? (2)
- 10) Write an activity to show that air expands on heating. Draw diagram also. (3)

IV) Answer the following questions:

- 1) Name four chambers of the stomach in ruminants. (2)
 - 2) Give any 3 causes of tooth decay. (3)
- V) a) How are lungs protected in the thoracic cavity? (1)
- b) Label the following diagram. (4)



The Human Respiratory System

Q12. Draw a well labelled diagram of rainwater harvesting. (3)

Q13. Define the following: (5)

- a) Afforestation
- b) Rusting
- c) Scavengers
- d) Chlorination
- e) Drip irrigation

Biology (30)

I Answer the following questions in one word: (3×1=3)

- 1) Name the gas which is given out during photosynthesis.
- 2) Which organ of the body secretes the bile juice?
- 3) What is the breathing rate of an adult human-being during heavy exercise?

II Answer the following questions. Each question carries 2 marks.

- 1) What is parasitic nutrition? Give one example.
- 2) What do you mean by photosynthesis? Give its equation also.
- 3) What is the action of intestinal juice on:
a) fats b) proteins (give equations only)
- 4) What happens to the ribs and the diaphragm during exhalation?(4×2=8)

III Answer the following questions. Each question carries 3 marks.

- 1) Differentiate between breathing and cellular respiration. (Write any 3 points)
- 2) Write any 3 functions of tongue.
- 3) What do you mean by symbiosis? Explain giving one example.(3×3=9)

11) Give reasons for the following: (2×2=4)

- a) We wear woollen clothes in winter.
- b) Roofs of the huts blow off during thunder storm.

12) List the precautions (2 each) to be observed in the following: (2×2=4)

- a) While reading a clinical thermometer.
- b) During lightning.

13) What is an electromagnet? Write its two uses. Also write the two ways to increase its strength. (1+2+2=5)

Chemistry (30)

Q1. At what distance are Manholes provided from each other? (1)

Q2. Which substance is produced from resin or gum of pine trees? (1)

Q3. What is the minimum amount of water per person per day recommended by United Nations? (1)

Q4. How can you say that melting of ice is a physical change? (2)

Q5. Why are forests called green lungs? (2)

Q6. Write any two methods by which we can minimise wastage of water at home? (2)

Q7. Why chemicals like paints should not be thrown down the drains? (2)

Q8. How is biogas produced in digester tank? (2)

Q9. Write three characteristics of a chemical change? (3)

Q10. How can we maintain sanitation at public places? (3)

Q11. What is galvanisation? Write its two uses. (3)