



BOARD QUESTION PAPER : JULY 2017

SCIENCE AND TECHNOLOGY

Time: 2 Hours**Total Marks: 40****Note:**

- i. Draw well-labelled diagrams wherever necessary.
- ii. All questions are compulsory.
- iii. Students should write the answers of questions in sequence.

SECTION B

- Q.1. (A) Answer the following sub-questions:** [5]
- (a) Fill in the blanks and rewrite the completed statements:** [2]
- i. _____ artery takes the blood to the lungs for oxygenation.
 - ii. Covalent compounds are generally soluble in _____ solvents.
- (b) State whether the following statements are true or false:** [2]
- i. Dominant character masks the recessive character.
 - ii. E-waste cannot be recycled.
- (c) Name the following:** [1]
An alloy of copper and zinc.
- (B) Rewrite the following statements by selecting the correct options:** [5]
- i. For photosynthesis _____ substance is not essential.
(A) Carbon dioxide (B) Chlorophyll
(C) Light (D) Oxygen
 - ii. When Hydra becomes matured, _____ takes place in it.
(A) Budding (B) Regeneration
(C) Fragmentation (D) Binary fission
 - iii. A solution of $Al_2(SO_4)_3$ in water is _____.
(A) Green (B) Colourless
(C) Blue (D) Pink
 - iv. During respiration _____ gas is given out.
(A) Oxygen (B) Hydrogen
(C) Carbon dioxide (D) Nitrogen
 - v. The formula of ethanoic acid is _____.
(A) $HCOOH$ (B) C_2H_5COOH
(C) CH_3COOH (D) None of the above
- Q.2. Attempt any five of the following:** [10]
- i. Draw a neat labelled diagram of a neuron.
 - ii. State two functions of MPCB for prevention of water pollution.
 - iii. Differentiate between: Detergents and Soaps.
 - iv. How can we save electrical energy in day to day life?
 - v. Give scientific reasons:
Consuming iodized salt in day to day diet is essential.
 - vi. What is a chromosome? How many pairs of autosomes are present in human beings?

**Q.3. Attempt any five of the following:****[15]**

- i. An element X on reacting with oxygen forms an oxide X_2O . This oxide dissolves in water and turns red litmus blue. State whether element X is a metal or a non-metal. Explain with a proper example.
- ii. Why does menstruation occur?
- iii. Define functional group and complete the following table:

Sr. No.	Functional group	Compound	Formula
a.	_____	_____	C_2H_5OH
b.	_____	_____	CH_3CHO

- iv. Name one metal each occurring as:
 - a. A sulphide
 - b. A carbonate
 - c. An oxide
- v. What is a reflex action? Explain it with two examples.
- vi. Why are family planning measures needed in our country?

Q.4. Attempt any one of the following:**[5]**

- i. Explain the human excretory system with the help of a suitable diagram.
- ii. How is sex determined in the human being? Explain with the help of a diagram.