

BOARD QUESTION PAPER : JULY 2016

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

1. (A) (a) **Fill in the blanks:** [3]
- i. _____ acid inhibits growth leading to wilting of leaves.
 - ii. The organic compounds having double or triple bond in them are termed as _____.
 - iii. Lymph flows in _____ direction.
- (b) Write the structural formula of the following compound: 'Ethane'. [1]
- (c) Name the mode of reproduction process seen in yeast. [1]
- (B) **Choose the correct alternative and rewrite the following:** [5]
- i. Fermentation is a type of _____.

(A) aerobic respiration	(B) anaerobic respiration
(C) exothermic reaction	(D) none of the above
 - ii. Some acetic acid is treated with solid NaHCO_3 , the resulting solution will be _____.

(A) colourless (B) blue (C) green (D) yellow
 - iii. Ramesh observed a slide of *Amoeba* with elongated nuclei. It would represent _____.

(A) Binary fission	(B) Budding
(C) Multiple fission	(D) None of the above
 - iv. Twenty dry raisins were soaked in 50 ml of water and kept for one hour at 50°C . Which out of the following is the correct observation?

(A) 8 raisins absorbed water	(B) 18 raisins absorbed water
(C) 15 raisins absorbed water	(D) All raisins absorbed water
 - v. Iron is _____.

(A) more reactive than Zn	(B) more reactive than Al
(C) less reactive than Cu	(D) less reactive than Al
2. **Answer the following questions (any five):** [10]
- i. Gold and silver are used to make jewellery. Give reason.
 - ii. Explain the following reaction with balanced chemical equation: Calcium reacts with water.
 - iii. Write any two physical properties of Ethanol.
 - iv. Roots of plants grow away from light. Give scientific reasons.
 - v. In which living, female decides the sex? Give two examples.
 - vi. Give the molecular and structural formulae of Benzene.
3. **Answer the following questions (any five):** [15]
- i. What do you mean by vestigial structures? Name four vestigial organs found in man.
 - ii. State Darwin's theory of evolution.
 - iii. Draw a diagram of longitudinal section of flower and label the following parts:
 - a. Petal
 - b. Ovary
 - c. Anther
 - d. Sepal

- iv. Explain the following terms:
 - a. Reproduction
 - b. Vegetative propagation
 - c. Pollination
- v. Write the names and functions of three parts of human nervous system in which it is divided.
- vi. Geeta dipped a copper coin in a solution of silver nitrate. After some time she saw the silver shine on the coin. Why? Give the balanced chemical equation for the same and name the type of reaction.

4. Answer any one of the following questions:

[5]

- i.
 - a. What is recycling of waste?
 - b. Give one example of Reuse.
 - c. Write the advantages of recycling.
- ii.
 - a. List the organs of Human respiratory system. b. Explain 'Inhalation'.

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