

SCIENCE-II

Time : 2-Hrs) **QUESTION PAPER : SEPTEMBER 2010** (Max. Marks : 40)

Note : Please See to Question Paper March 2009.

Q. 1 : (A) Rewrite the statements by selecting the correct options. (2)

(i) Electronic configuration of Aluminium is

- (a) (2, 8, 7) (b) (2, 8, 5) (c) (2, 8, 3) (d) (2, 8, 4)

(ii) Bordeaux mixture is prepared from

- (a) copper sulphate and lime (b) ferrous sulphate and lime
(c) calcium sulphate and lime (d) only copper sulphate

(iii) The ultimate source of energy for all the living system is.....

- (a) atom (b) food (c) sun (d) oxygen

(iv) Part of DNA chain which codes information is called

- (a) ATP (b) RNA (c) nucleus (d) gene

(B) Select proper terms from Column 'B' for the items in Column 'A' and rewrite the correct pairs. (2)

Column 'A'	Column 'B'
(i) Night-blindness	(a) Kidney disorder
(ii) Goitre	(b) RBC
(iii) Uraemia	(c) Vitamin A
(iv) Sickle-cell anaemia	(d) Vitamin B
	(e) Iodine

(C) State whether the following statements are TRUE or FALSE : (2)

- (i) Metals have electropositive character.
(ii) Calcium carbonate is known as 'Bleaching powder.'
(iii) A single food can give us all the nutrients.
(iv) Genetically engineered potatoes cannot be cooked.

(D) Find the odd man out. (2)

- (i) Riboflavin, Ascorbic acid, Folic acid, Pyridoxine.
(ii) Lipid nephrosis, Hypothyroidism, Hypercalcemia, Hyperlipidemia.
(iii) Rice, Wheat, Sunflower, Corn.
(iv) Vitamin A, D, B, E

Q. 2 : (A) Give scientific reasons : (Any Two) (4)

- (i) 'Marasmus' children are very susceptible to infections.
(ii) Dried food grains remain unspolled for a long period.
(iii) One should avoid large quantity of fatty substance in daily diet.
(iv) Tobacco chewing and smoking is injurious to health.

(B) Answer the following. (Any Two) (4)

- (i) Name the factors responsible for the following diseases. (a) Common cold (b) Kidney stones
(c) Ringworm (d) Typhus fever.
(ii) State the factors affecting growth of micro-organisms.
(iii) Give the names of nutritional programmes initiated by Government of India.
(iv) Give two points of distinction between 'Blue vitriol' and 'Green vitriol'.

Q. 3 : (A) Explain the following chemical reactions with the help of balanced chemical equations. (Any Two) (4)

- (i) Sodium bicarbonate is heated.
- (ii) Carbon dioxide is passed through lime water for a short time.
- (iii) Iron sulphide is treated with dilute hydrochloric acid.
- (iv) Copper sulphate reacts with ammonium hydroxide.

(B) Answer the following. (Any One) (4)

- (i) What are hydrocarbons? Give its classification.
- (ii) State health hazards created due to environmental pollution.

Q. 4 : (A) Draw neat labelled diagrams of the following. (Any Two) (4)

- (i) Arrangement of apparatus to prepare carbon dioxide gas in the laboratory.
- (ii) Balanced diet food pyramid.
- (iii) Ammonia fountain.
- (iv) Structure of HIV virus.

(B) Answer the following : (Any One) (4)

(i) State the preliminary processes involved in the preparation of food. Explain the different precautions to be taken to prevent food poisoning.

- (ii) Write the chemical name of vitamin K. Give its two sources and two functions.

Q. 5 : (A) Answer the following. (Any Four) (4)

- (i) Give the molecular formula for Freon.
- (ii) Name the substance used for softening of hard water.
- (iii) Name any two fruits rich in vitamin C.
- (iv) What is 'Albinism'?
- (v) Explain the term 'Hypertension'.
- (vi) Give the constituents of gun-powder.

(B) Answer the following. (Any One) (4)

(i) State any four preventive and control measures of Leprosy. (ii) State the important applications of biotechnology in the field of agriculture.