

SCIENCE - II

Time : 2 Hrs.)

Question Paper : March 2009

(Max. Marks : 40)

Note : See to Question Paper March 2008.

Q. 1 : (A) Select the proper alternative from those given at the end of each incomplete statement and rewrite complete statement. (2)

(i) Bauxite is an ore of

- (a) Iron (b) Copper (c) Aluminium (d) Sulphur

(ii) For setting fractured bones is used.

- (a) Calcium carbonate (b) Ferrous sulphate
(c) Bleaching powder (d) Plaster of Paris

(iii) are added as an adulterant to black pepper.

- (a) Argemone seeds (b) Papaya seeds
(c) Dyes (d) Black sandstones

(iv) Fern 'Pteris Vittata' absorbs from the soil.

- (a) Selenium (b) Copper (c) Iron (d) Arsenic

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

Group 'A'	Group 'B'
(i) Ringworm	(a) Insulin
(ii) Diabetes	(b) Severe growth retardation
(iii) Neutropenia	(c) Haemoglobin
(iv) Marasmus	(d) Fungus infection
	(e) Copper deficiency

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

- (i) Hydrogen sulphide gas turns lime water milky.
- (ii) Calcium carbonate is used in the preparation of tooth-paste.
- (iii) A calorie is a unit of measurement of heat.
- (iv) Bromoxynil is used as a germicide.

(D) Find out and write the odd one out. (2)

- (i) Starch, Glucose, Fructose, Calcium (ii) Dental Fluorosis, Diabetes, Cancer, Coronary Heart Disease (C.H.D.) (iii) Bananas, lemon, Apple, Grapes (iv) Headache, Delayed healing of wound, Fever, Cough.

Q. 2. (A) Give scientific reasons (any two). (4)

- (i) Obesity is dangerous to health.
- (ii) Low temperature also prevents self-spoilage of foods.
- (iii) Generally, adults suffer from Osteomalacia.
- (iv) It is necessary to control human population.

(B) Answer the following (any two). (4)

- (i) Give any two points to distinguish between 'open chain compounds' and 'closed chain compounds.'
- (ii) Write any four methods of food preservation.
- (iii) State the disorders caused due to deficiency of Iodine.
- (iv) Define health education. Write any two of its main objectives.

Q. 3. (A) Explain the following chemical reactions with the help of balanced chemical equations (any two). (4)

- (i) Copper sulphate solution reacts with sodium hydroxide.
- (ii) Ammonia is treated with hydrochloric acid.
- (iii) Magnesium is treated with dilute hydrochloric acid.
- (iv) Polymerisation of ethylene.

(B) Answer any one of the following. (4)

- (i) Explain, how is tobacco injurious to our health.
- (ii) Write the molecular formulae of each of the following and state any two uses of both.
 - (a) Sodium carbonate
 - (b) Ferrous sulphate.

Q. 4. (A) Draw well labelled and neat diagrams of any two of the following. (4)

- (i) Kipp's apparatus (No reaction)
- (ii) Structure of HIV virus
- (iii) Balanced diet food pyramid
- (iv) Dropouts of food pipeline

(B) Answer the following (any one). (4)

- (1) What is balanced diet? State the functions of the following food groups in the diet.
 - (i) Cereals
 - (ii) Milk and milk products
 - (iii) Fruits and vegetables.
- (2) State the functions of water in human body.

Q. 5. (A) Answer any four of the following. (4)

- (1) Write the molecular formula of methane.
- (2) Name the substances used in the purification of water by decantation of suspended particles.
- (3) Write the dietary fibre sources of carbohydrates.
- (4) Define disease. (5) Explain 'dental fluorosis.' (6) Define Allotropy.

(B) Answer the following (any one). (4)

- (i) Write short notes on (any two).
 - (a) Causes of Cancer
 - (b) Stages of Malaria
 - (c) Symptoms of Hepatitis A.
- (2) State the components of DNA molecule and draw its diagrammatic representation.