5 SEM TDC HSCH (CBCS) C 12

2021

(Held in January/February, 2022)

HOME SCIENCE

(Core)

Paper: C-12

(Physical Science)

Full Marks: 53
Pass Marks: 21

Time: 3 hours

The figures in the margin indicate full marks for the questions

- 1. State whether the following statements are
 True or False: 1×5=5
 - (a) Monosaccharide and disaccharide are soluble in water.
 - (b) Amino acids are amphoteric, which means they have acidic and basic tendencies.
 - (c) Natural dyes are dyes or colorants derived from plants, invertebrates or minerals.

- (d) Water heating is not a heat transfer process that uses an energy source to heat water above its initial temperature.
- (e) A conductor is an object or type of material that prevents the flow of charge (electric current) in one or more directions.
- 2. Write on the following (any five):

 $2 \times 5 = 10$

- (a) Effect of cooking on carbohydrate
- (b) Saturated fat and unsaturated fat
- (c) Polysaccharides
- (d) Energy and power
- (e) Electric iron
- (f) Fuse
- 3. Write short notes on the following (any four):

5×4=20

- (a) Harmful effect of radiations
- (b) Properties of natural and synthetic dyes
- (c) Lighting in interiors
- (d) MCB
- (e) Solar energy and its applications
- (f) Fatty acids

4. Write the different types of packaging used in food industry and classification of protein.

4+4=8

Or

What is CFL? Write briefly about the incandescent lamp. Mention any four importances of LED light. 1+3+4=8

5. Define X-rays. Mention any two types of refrigerator. Illustrate various types of lighting. 2+2+6=10

Or

What is Newton's law of motion? Write any two types of force. Draw a reflection diagram. Write any five precautions while using equipments and servicing of equipments used.

1+2+2+5=10

