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S. No. of Question Paper : 5749

Unique Paper Code : 2202031101

Name of the Paper : Fundamentals of Food Technology

Name of the Course : B.Sc. (H) Food Technology

Semester : I

Duration : 3 Hours

Maximum Marks : 90

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt five questions in all.

Question No. 1 is compulsory.

Attempt all parts of the question together.

1. Name these : 10×1=10

- (i) A thin layer which separates the bran from the endosperm.
- (ii) The membrane responsible for holding the egg yolk in the centre.
- (iii) An antioxidant used to extend shelf life of fats and oils.
- (iv) A process used to solidify vegetable oils.
- (v) A toxic constituent present in pulses responsible for paralysis of lower limbs.
- (vi) A nutrient necessary for eggshell formation.

P.T.O.

(vii) An organic acid commonly present in grapes.

(viii) A toxic constituent which impedes digestion and absorption of amino acids.

(ix) A chemical responsible for fishy odour in fish.

(x) An antinutritional factor present in egg.

2. Comment on the following statements (any 4) :

4×5=20

(a) Parboiled rice is nutritionally superior.

(b) Germination improves digestibility and availability of nutrients.

(c) Strong wheat is required for bread making.

(d) Maillard browning is a sugar amine reaction.

(e) Dextrins reduce the thickening power of starches.

3. Draw a neatly labelled diagram only :

4×5=20

(i) Structure of a wheat grain.

(ii) Flow chart of milk processing.

(iii) Structure of egg.

(iv) Structure of pulse grain.

4. (a) Define carcass. Discuss the post-mortem changes that occur in meat. 10

(b) Briefly describe the post-harvest changes in fruits and vegetables. 10

5. (a) Which are the toxic constituents of pulses ? Suggest appropriate methods of prevention. 5+5
- (b) Elaborate the classes of meat. What are the characteristics of fresh fish ? 10
6. Differentiate the following : 4×5=20
- (i) Climacteric *vs* non-Climacteric fruits
 - (ii) Homogenization *vs* Pasteurization
 - (iii) Horticultural maturity *vs* Physiological maturity
 - (iv) Alkali refining *vs* Steam refining of oils.

