

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 2363

F-4

Your Roll No.....

Unique Paper Code : 2201403

Name of the Course : **B.Tech. Food Technology**

Name of the Paper : Food Quality and Sensory Evaluation

Semester : IV

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt five questions in all.
3. Question No. 1 is compulsory.
4. Attempt all parts of a question together.

1. (a) Answer these briefly : (2×5=10)

- (i) Define texture. Name the receptors involved in texture perception.
- (ii) Enlist taste abnormalities.
- (iii) Dimensions of colour. Expand CIE.
- (iv) An empirical instrument used to measure texture.
- (v) Advanced instrumental techniques used for gustation and olfaction measurement.

(b) Name instruments used to measure the following : (1×5=5)

- (i) Colour of oils
- (ii) Hardness of fats
- (iii) Tenderness of peas
- (iv) Dough elasticity
- (v) Primitive odour measurement technique

P.T.O.

2. Justify the following : **(Any five)** (3×5=15)
- (a) Lovibond tintometer is subtractive colorimetry.
 - (b) Umami taste is imperative in developing Indian snack foods.
 - (c) Taste perception is dependent on salivary secretion.
 - (d) Brabender Amylograph is used in studying starch behaviour.
 - (e) VMQ facilitates in improving bread quality.
 - (f) Papillae are the organs of taste perception.
 - (g) The aroma of a compound is affected by its ring structure
3. Differentiate between the following : **(Any three)** (5×3=15)
- (a) Chemistry of Sweet and Bitter taste
 - (b) Fundamental tests and Imitative tests
 - (c) Natural Colours and Synthetic colours
 - (d) Munsell Colour and Hunter colour.
 - (e) Human nose and E-nose
4. (a) Discuss the importance of colour in food quality evaluation. Enlist methods of odour measurement and describe **any one**. (4+4=8)
- (b) Define odour. Describe briefly the various texture measurement methods used for quality assessment of fruits and vegetables. (7)
5. Write short notes : **(Any 3)** (5×3=15)
- (a) Attributes of Colour
 - (b) Factors affecting taste quality
 - (c) Sniffing
 - (d) Texture of dairy products.
 - (e) Non destructive methods of Food Evaluation
6. Draw diagrams of the following : **(Any 3)** (5×3=15)
- (a) Taste bud
 - (b) Rheological Models
 - (c) Anatomy of Nose
 - (d) Structure of Papillae