

JUN 2006

Subject Code—4326

P.G.D.B.S.T. EXAMINATION

(New Scheme)

June, 2006

PGDBST-01

**WHEAT GRAIN STRUCTURE, QUALITY AND
MILLING**

Time : 3 Hours

Maximum Marks : 100

Note : Attempt any *Five* questions. All questions carry equal marks.

1. Define the terms :

- (a) Wheat Quality
- (b) Protein Quality
- (c) Amylolytic Activity
- (d) Flour Extraction Rate.

2. Discuss the major differences among wheat species ? Discuss physical grain characteristics that influence wheat quality.

P.T.O.

3. What is the importance of moisture, fat and ash content of wheat grain with respect to storage and processing ?
4. Describe general procedure of wheat milling. Explain major functions of tempering. Differentiate between tempering and conditioning of wheat.
5. Which are the milling by-products ? Give a brief account of milling by-products.
6. Discuss the advantages of air classification technique in wheat milling. Explain the advantages of automation of milling machinery in improving milling operation. What precautions should be taken prior to and during experimental milling ?
7. Explain the importance of alpha-amylase in bakery products. Define procedure to measure the activity of alpha-amylase in wheat grain and flour.

8. Explain the basis of wheat variety hardness/softness. Define the procedure for estimation of grain hardness.