

Roll No.

Exam Code : J-19

Subject Code—0676

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

(Batch 2011 Onwards)

WHEAT GRAIN STRUCTURE, QUALITY
AND MILLING

PGDBST-01

Time : 3 Hours

Maximum Marks : 70

Section A

Note : Attempt any *Seven* questions. **7×5=35**

1. Elaborate the structure and composition of wheat grain.
2. Give a brief account of the origin of wheat.
3. Define wheat quality. Classify wheat species and indicate their importance.

4. Explain basis of wheat variety hardness/softness. How grain hardness can be determined ?
5. Ash content is considered an index of flour quality. Justify the statement.
6. Explain major functions of tempering. Differentiate between tempering and conditioning of wheat.
7. What do you understand by the term extraction rate ? How it influences the composition of wheat flour ?
8. How automation of milling machinery helps in improving milling operation ?
9. Why wheat is milled into flour and other milled products ?
10. Why durum wheat is preferred for pasta products ?

Section B

Note : Attempt all the questions.

11. Explain the significance of protein quality and quality in bakery products.

Or

What is the importance of alpha-amylase in bakery products ? How we measure the activity/conc. of alpha-analyse in wheat gain and flour ?

12

12. Discuss factors affecting grain size.

Or

Discuss the structure and composition of wheat grain.

12

13. Which are the millings by products ? Discuss utilization of milling by products.

Or

Describe general procedure of wheat milling.

11