EXTENDED LECTURE OUTLINE

ABM6 311 Grading, Standardization and Quality Management in Agri-food Products (1+1)

Chapter-I: Introduction to grading, Framing of Grade Specifications Grading and Standardization, what is a standard? Elements of Standardizations, Basis of standards, Types of Standards- Fixed standard or predetermined standard, Varying standards, Advantages of standardization, Advantages of grading, Inspection, Labelling, Types of Labelling, Brand label, Grade label, Descriptive label, Informative label.

Chapter-II: General Grading and Marketing Act 1937, Indian Standards Institution (ISI), Aims and objectives, Organizational Structure.

Chapter-III: ISI certification marks scheme, Objectives of the Act, Procedure for obtaining a license to use ISI mark, Advantages of ISI certification marks scheme- To Manufacturers, To Consumers, To Organized Purchasers, Progress of Grading at Producer's Level, Grading for export, Quality, Impact of Grading and Standardization on Market, Criteria for grade standards.

Chapter-IV: Benefits of ISO 9000 quality system, ISO 14000 Quality Management Systems, Benefits of ISO 14000, Hazard Analysis and Critical Control Point (HACCP), Benefits of implementing HACCP/ ISO 22000, Codex Alimentarius Commission and Salient features of Codex Alimentarius.

Chapter-V: Grade designation of kharif jowar and General characteristics of kharif jowar, characteristics of rabi jowar, Rice, Wheat, Maize, Economic use of maize, Classification of maize, Grade designation of Maize and General characteristics of maize, Grading of pulse crops, Grade designation of Pulse crops.

Chapter-VI: Definitions Foreign matter, Other food grains, Non food grains, Damaged grains, Slightly damaged grains, Immature and shriveled grains and Weevilled grains.

Chapter-VII: Grading of commercial crops- Groundnut, Trade names of groundnut, Characteristics of Dry pods, Characteristics of Wet pods, Grade designation of Groundnut crop, Grading of pods, Grading of kernels, tobacco- Important varieties of Bidi tobacco, Cigar and Cheroot, Hookah, Chewing tobacco and Grading of tobacco. Tobacco curing, I. Flue Curing, II. Air curing, III. Fire curing and IV. Sun curing. Chilli- Important varieties of chilli grown in Karnataka, Physical quality characteristics of chilli 1) Colour 2) Size and shape 3) Seed content 4) Pungency 5) Foreign matter 6) Damage and 7) Moisture content, Grade specification of Byadagi Kaddi and Grade specification of Byadagi Dabbi. Jaggery_quality characteristics and grade designation of Jaggery. Kapas (Cotton) - Benefits of kapas grading, Grading factors of kapas to be considered while grading, the following important quality factors are to be taken into consideration while grading: (1) Colour (2) Cleanliness (3) Maturity (4) Strength (5) Feel (6) Staple length (7) Regularity of fibres (8) Moisture (9) Ginning percentage (10) Varietal purity (11) False packing (12) Whether kapas is free from soil and added moisture. Grading of arecanuts, Grading of fruits and fruit products.

Chapter-VIII: Canned and Bottled Fruits and Fruit Products Grading and Marketing Rules 1942, Grade designation of oranges, Grade designation of Alphonse mango, General characteristics, Grading of Tomato Vegetable Oils Grading and Marketing, Ghee and Honey Grading, the main factors of determining the quality of Ghee and Honey.

References:

1. Acharya, S.S. and Agarwal, N.L., 2000, Agricultural Marketing in India.
2. Chakravarty, A. and De, D.S., 1981, Post harvest technology of cereals and pulses, Oxford and IBH, Calcutta.
3. Jambunathan, L.R., 1984, Grading of cotton for quality: A scoring system of instrumental evaluation for Cotton Hybrid-4.
4. Mamoria, C.B., 1976, Agricultural Problems of India, Kitab Mahal, Allahabad.
5. Manual on Grading and Standardization, Directorate of Marketing and Inspection (DMI), Nagpur.
6. Manual on Standards, Bureau of Indian Standards (BIS), New Delhi.
7. Wader, L.K. and C., Murthy, 2003, Textbook of agricultural marketing and cooperation, ICAR, New Delhi.