Department of Food Technology Rajiv Gandhi University Rono Hills, Doimukh, 791 112 Email: hod.foodtech@rgu.ac.in



खाद्य प्रौद्योगिकी विभा राजीव गाँधी विश्वविद्यालय रोनो हिल्स ,दोईमुख, 791 112

संदर्भ.संख्या/Ref.No:-RGU/FT/OPEN ELECTIVE/2023

दिनांक/Dated: 02.08.2024

सूचना/NOTICE

It is for the information of all the students of 3rd semester from all the Departments/Centers of RGU (except Department of Food Technology) that the Department of Food Technology is offering Food Safety and Quality as Open Elective Paper code (FT-304) under CBCS for the session 2024-25. The copy of the syllabus is provided at the end of the notice. The selection of the students will be First come first serve basis.

Interested students are hereby request to submit their application form (Enclosed) to the Office of the Dept. of Food Technology on or before **August 9**, **2024**. Provisionally selected candidates list for the course will be uploaded on **August 12**, **2024** on RGU website/Dept. Notice board.

Classes will commence from August 14, 2024.

(Dr. Deependra Rajoriya/ दीपेंद्र राजोरिया) Head i/c / विभागाध्यक्ष

Copy to:

- 1. The Joint Registrar (Aca. & Con.), RGU for kind information please.
- 2. The System Analyst, VSAT, RGU with a request to upload in the University website.
- 3. All the Head of Departments for kind information and necessary action please.
- 4. Office copy.

(Dr. Deependra Rajoriya/ दीपेंद्र राजोरिया) Head i/c / विभागाध्यक्ष

> विभागाध्यक्ष, खाद्य तकनीकी विभाग रा.गाँ.वि . अरूणाचल प्रदेश HoD, Food Technology RGU, Arunachal Pracesh

FOOD SAFETY AND QUALITY

COURSE CODE FT-304

CREDITS (3+0)

Objectives:

- 1. To illustrate the importance of food safety, food quality, food laws and regulations in Food industry.
- 2. To describe the food quality management systems.
- 3. To explain the nationals and international food laws and regulations.
- 4. To exemplify different food adulterants.

UNIT-I

Importance of food safety and regulations; Sampling and specifications of raw materials; Application of food standards and their specification for foods, food products, additives, preservatives, colouring agents, emulsifying and stabilizing agents and antioxidants; Definition of food quality and safety, Wet chemistry Methods/ techniques for the assessment of quality and safety of different foods; Non-destructive and rapid techniques for assessing food quality and safety including spectroscopy, sensors and colour/imaging techniques. Grading and marketing of standards and specifications of finished products; various methods/ techniques for the assessment of quality of different foods; Grading and marketing of standards and specifications of finished products; Various National and International standards; Agencies involved in enforcement of food laws and regulations; Food and nutritional labelling. Food adulteration: Types of adulterants, Common adulterants for foods like milk and milk products, honey, wheat flours, edible oils, cereals, condiments (whole and ground) pulses, coffee, tea, confectionery, baking powder, non-alcoholic beverages, vinegar, besan and curry powder

UNIT-II

Concepts of quality management: Objectives, importance and functions of quality control; Quality management systems in India; Quality assurance, Total Quality Management; GMP/GHP; GLP, GAP, HACCP; Sanitary and hygienic practices. NABL accreditation and NABL accredited Laboratories in India Euro GAP

UNIT-III

Regulatory Approaches to Food safety-present scenario, food safety and standards Act, 2006, Food Licensing & Registration System (FLRS). The Food Safety and Standards Regulations 2011: Licensing and Registration of Food businesses, Sampling procedures and plans. Food product standards and Food Additives, Prohibition and Restriction on sales, contaminants, toxins and residues, Laboratory and analysis, sampling.

UNIT-IV

Food categorization System, Product/ Ingredient Approval, Export & Import Laws and Regulations, FTDR Act, 1992 and Foreign Trade Policy, Food Import Clearance System (FICS). Introduction to OIE and IPPC, other International Food Standards (e.g. European

Commission , USFDA etc) WTO: Introduction to WTO agreement: SPS and Agreement, Export and Import Laws and regulation.

UNIT-V

Codex Alimentations Commission (CAC), CAC Implications on trade in light of SPS and TBT, Other International Standards Bodies. Food Commodity Geographical identification bar coding, Certification of organic labelling procedures, bar coding, food label design.

Books recommended:

- 1. Resources at FSSAI Website.
- 2. Early R. 1995. Guide to Quality Management Systems for Food Industries. Blackie Academia.
- 3. Export and Import Policy of GOI.
- 4. Jha S N (2015). Rapid Detection of Food Adulterants and Contaminants: Theory and Practice. Elsevier, USA (ISBN 9780124200845)
- 5. Jha S. N. (editor) (2010). Non-destructive Evaluation of Food Quality: Theory and Practice. Springer Verlag GmbH Berlin Heidelberg, Germany, ISBN 978-3-642-15795-0, doi 10.1007/978-3-642-15796-7
- 6. Lawless, H. T. and Heymann, H. (2013). Sensory Evaluation of Food: Principles and Practices: Springer, New Delhi.
- 7. Schmidt, R. H. and Rodrick, G. E. (2003). Food Safety Handbook: John Wiley, New Jersey.
- 8. Rees, N. and Watson, D. (2000). *International Standards for Food Safety*: Aspen, America.
- 9. Ho, S. K. M. (1999). Operations and Quality Management: ITP, London.

Learning outcomes:

After the completion of the course, the students will be able to:

- 1. Understand various areas of Food Safety & Quality Assurance.
- 2. Grasp knowledge of the quality assessments of food products.
- 3. Comprehend food quality managements systems.
- 4. Apprehend the Indian and International food laws.
- 5. Conceive the concept of adulteration in food products.



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Application form for Registration for Open Elective Courses

- 1. Name of the Student:
- 2. Name of the the Department/Institute:
- 3. Department Roll No .:
- 4. Semester
- 5. Last Semester Marks (SGPA):
- 6. RGU Registration No.:
- 7. Department/Institute offering Open Elective Course:
- 8. Open Elective Course with Code:
- 9. WhatsApp No.:
- 10. E mail ID:
- 11. ABC ID:

Signature of Student Advisor

Signature of the Student

Signature of Head of the Department with Seal

Accepted/Not Accepted

Signature of Head of the Department/Institute with Seal Offering the Open Elective Course

Copy to:

- 1. To be submitted to the Head, Parent Department.
- 2. To department where students is applying for Open Elective Course.