To,

The Vice Chancellor, University of Lucknow, Lucknow-226007

Subject: Extension for deadline for admission in M.Sc.( Food Processing and Food Technology)

Sir,

In view of the encouraging response and interest shown through queries by the applicants for M.Sc. (Food Processing and Food Technology) Course, we are seeking your kind approval for the extension of all the deadlines related to the admission to this course including form submission deadline. As discussed with Prof. Kaman Singh Coordinator, M.Sc. (Food Processing and Food Technology) Course, the new deadlines will be as under:

Last date for submission of completed application form with Fee	7 <sup>th</sup> August, 2015 (Friday)
Date of Entrance Test of eligible candidates	12 <sup>th</sup> August, 2015 (Wednesday)
Date of declaration of written result	14th August, 2015 (Friday)
Date of Interview	17 <sup>th</sup> August, 2015 (Monday)
Declaration of Final list of Selected &Wait listed candidates	18 <sup>th</sup> August, 2015 (Tuesday)

Your necessary and kind approval will be duly posted on the University website in the interest of the candidates willing to join this course.

Thanking You.

With warm regards.

(Dr. N. K. Singh)

Co-coordinator

M.Sc. (Food Processing and Food Technology) Course

(Dr. Puneet Misra)

Co-coordinator

# INFORMATION BROCHURE

# M.Sc. (FOOD PROCESSING AND FOOD TECHNOLOGY)

(A Two Year- Four Semester Full Time CBCS Programme)

Under RUSA

**Innovation Centre on Food Processing and Food Technology** 

**ADMISSIONS 2015** 



## **IMPORTANT DATES**

Last date for submission of completed application form with Fee

**Date of Entrance Test of eligible candidates** 

Date of declaration of written result

**Date of Interview** 

: 31<sup>st</sup> July, 2015 (Friday)

: 5<sup>th</sup> August, 2015 (Wednesday)

: 7th August, 2015 (Friday)

: 8<sup>th</sup> & 9<sup>th</sup> August, 2015 (Saturday

& Sunday)

**Declaration of Final list of Selected &Wait listed candidates** 

: 10<sup>th</sup> August, 2015 (Monday)

# For Further Information Contact:

**Prof. Kaman Singh**, Coordinator Food Processing and Food Technology Department of Chemistry University of Lucknow, Lucknow-226 007

E-mail: drkamansingh@yahoo.com

Mobile: +91-9415409189, +91-9450722783, +91-9451949105

## **Admission**

M.Sc. (FOOD PROCESSING AND FOOD TECHNOLOGY)

(Four Semester Full Time CBCS Programme)

**Academic Session: 2015-17** 

### M. SC. in FOOD PROCESSING AND FOOD TECHNOLOGY (FP&FT) COURSE:

M. Sc. Degree Programme in Food Processing and Food Technology is a full time two-year (Choice-Based Credit System (CBCS)- four semester) programme, is highly professional and job oriented for career and opportunities in food and allied industries and R & D organizations.

**NUMBER OF SEATS: 50 seats** 

### **ELIGIBILITY FOR ADMISSION:**

Bachelor's degree in Science/Home science/ Agriculture/ Engineering/ Technology

Candidates possessing three year B.Sc. Degree in any stream\* with a minimum of 50% Marks (for general and OBC candidates) and 45% (for SC/ST candidates). Minimum second class for Agriculture/Horticulture/Engineering/Technology.

\* B.Sc. Home Science / B.Sc. Home Science with Food and Nutrition Specialization/ B.Sc. Human Nutrition/ Applied Nutrition / Nutrition/ Nutrition and Dietetics/Food and Nutrition/Home Science as optional along with Chemistry / Biochemistry / any Science subject as optional and Clinical Nutrition and Dietetics, Food Science and Quality Control

### **ADMISSION CRITERIA:**

The admission shall be done on the basis of combined merit of entrance test, interview and marks scored in Bachelor's degree. The marks obtained in graduation and entrance test each would be given 50% weightage for the preparation of merit. Admission will be based on MERIT followed by reservation rules. There shall be no negative marking. Entrance Test Question paper will consist of multiple choice questions based on Syllabus provided as **Appendix-1**.

#### **VENUE:**

For Entrance Test: Department of Chemistry, University of Lucknow, Lucknow.

### **TIME DURATION:**

Entrance Test: Two hours (120 Minutes).

IMPORTANT INFORMATION: M.Sc. (FOOD PROCESSING AND FOOD TECHNOLOGY) PROGRAMME:

**Duration of the Course:** Full time two-year of four semester Choice-Based Credit System (CBCS) programme. The degree of M.Sc. in Food Processing and Food Technology of the University of Lucknow, Lucknow shall be

conferred to those candidates to pursue the prescribed course of study for four semesters and passes the examinations successfully as prescribed under the relevant ordinances.

**Application form** of M.Sc. in Food Processing and Food Technology admission is available on the website of University of Lucknow, Lucknow: www.lkouniv.ac.in from 16<sup>th</sup> July, 2015 or can receive it from the Coordinator (Prof. Kaman Singh), Food Processing and Food Technology, Department of Chemistry, University of Lucknow, Lucknow-226 007 by hand. The Admission Form is free.

**Application Fees** for 2 year M.Sc. in Food Processing and Food Technology admission, Rs. 800/- for Gen/OBC Candidates and Rs. 400/- for SC/ST Candidates. Application fees must be submitted through demand draft in favour of "Finance Officer, University of Lucknow", Lucknow. Application fee is NON – REFUNDABLE.

**Application form** must be send to The Coordinator (Prof. Kaman Singh), Food Processing and Food Technology, Department of Chemistry, University of Lucknow, Lucknow-226 007 by Speed Post only alongwith demand draft, Self Attested Xerox copies of certificates/Mark Sheets and Two Self addressed Envelops size (27x12cm) duly stamped with Rs.39/- each. No application form shall be accepted by hand.

Last date to receive duly filled M.Sc. (Food Processing and Food Technology) admission application form by the Coordinator, Food Processing and Food Technology, Department of Chemistry, University of Lucknow, is 31<sup>st</sup> July, 2015 (Friday).

**Reservation for the candidates** as per existing reservation rules of the Government of Uttar Pradesh and University of Lucknow for admission to various courses, will be applicable. Candidates claiming reservation under specific category are required to provide attested documents as proof in support of their claims

Entrance Test: Eligible candidates are required to appear for the entrance test to be held at Department of Chemistry, University of Lucknow on 5<sup>th</sup> August, 2015 (Wednesday). No TA/ DA are admissible for students to appear for this test. Duration of test will be 2 hrs (10:00 am to 12:00 noon).

**FEES of the Course**: Total fee per semester is Rs. 35,000/- (Rupees Thirty Five Thousand only per Semester)

# INSTRUCTIONS FOR FILLING UP TWO YEAR-FOUR SEMESTER M.Sc. (FOOD PROCESSING AND FOOD TECHNOLOGY) PROGRAMME) APPLICATION FORM - 2015:

- 1. The Application form will be available only at the website http://www.lkouniv.ac.in from **16**<sup>th</sup> **July, 2015** from where it can be downloaded.
- 2. The Application form must be filled in Capital letters by the candidate in his/her own handwriting.
- 3. Incomplete Application form will be subjected to rejection. The candidate would have then no claim.
- 4. The Candidate has to submit self attested Xerox copy of relevant Certificates/ Mark sheets along with application.

- 5. If the candidate fails to get admit card for M.Sc. (Food Processing and Food Technology) entrance test on or before 3<sup>rd</sup> August-2015, then candidate can approach to Department of Chemistry, University of Lucknow, to get duplicate Admit Card on 4<sup>th</sup> August-2015 between 10.00am to 4.00pm. Candidate has to bring two photographs and the Xerox copy of the application form.
- 6. The existing reservation rules of the University shall apply in admitting the students for M.Sc. (Food Processing and Food Technology) programme.
- 7. All legal matters shall be subject to Lucknow Jurisdiction only.
- 8. The Semester fees must be submitted by the candidate at the time of counseling itself (**10**<sup>th</sup> **August**, **2015 (Monday)**) failing with, admission will be given to next candidate in order of merit.
- 9. The candidate claiming reservation must submit the e-Caste Certificate and e-Income Certificate of father, otherwise candidate will not get reservation benefits.
- 10. Candidate must submit any one of the following document for proof of address:
  - a. Election Commission Photo ID Card.
  - b. Aadhaar Letter Card.
  - c. Water bill/ Telephone bill (Land line or Post paid mobile bill)/ Electricity bill( at least two bill required- One Bill should be of the last year and the other bill of the current year).
  - d. One year statement( with transactions)/ passbook of running bank account( Public Sector Banks Only).
- 11. Candidate must write Name and address with phone number on back side of the demand draft.
- 12. (a). Application form must be submitted by Speed Post only along-with demand draft of Rs 800/-for General/OBC Candidate and Rs 400/-for SC/ST Candidate in favour of "Finance Officer, University of Lucknow, Lucknow" payable at Lucknow, No application form shall be accepted by hand.
  - (b). Self Attested Xerox copies of certificates/Mark Sheets and Two Self addressed Envelops size (27x12cm) duly stamped with Rs.39/- must be submitted along with application form.
- 13. In any circumstances application fees in the form of bank draft is not refundable.
- 14. Candidate are required to make sure that all relevant documents, Certificates/ application fee bank draft have been enclosed with application form, otherwise it is not possible to enclosed any type of documents/Certificates after submission of application form. In such circumstances, application form may be rejected.
- 15. For any enquiry regarding admission, candidate may contact The Coordinator (Prof. Kaman Singh), Food Processing and Food Technology, Department of Chemistry, University of Lucknow, Lucknow-226 007 on Mobile No: 9415409189, 9450722783(Prof. S. Sen Sarma), 9451949105 (Dr. N. K. Singh).

### **ADDRESS OF CORRESPONDANCE:**

The Coordinator, (Prof. Kaman Singh)
Innovation Centre on Food Processing and Food Technology
Department of Chemistry
University of Lucknow

Lucknow-226 007

E-mail: <u>drkamansingh@yahoo.com</u>

Mobile: +91-9415409189, +91-9450722783, +91-9451949105

## **APPLICATION FORM**



# M.Sc. (FOOD PROCESSING AND FOOD TECHNOLOGY) ADMISSION TEST-2015

(Two Year-Four Semester Full Time CBCS Post Graduation Programme)

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF LUCKNOW, LUCKNOW

For office use only							
Application Receipt No:			Roll No.				
(The following fields are to be filled by the candidate in his own handwriting for admission to Two Year-Four Semester Full Time M.Sc. (FOOD PROCESSING AND FOOD TECHNOLOGY) PROGRAMME)							
1. Name of Applicant (N	/lr./Ms.)	•••••		•••••		Doots	
2. Mother's Name & Oc	cupation					Paste Recent	
	•					Passport size	
						Photograph facing	
3. Father's Name & Occ	•				,	the camera	
4. Annual Income (per					(5	elf-Attested)	
•	,						
5. Applicant's Date of B	irth						
6. Local Address		••••••					
	•••••						
Pin Code							
7. Father's Permanent	7. Father's Permanent Address *						
Pin Code		IVIODIIE INO		E-IVIAII			
8. Educational Qualifica	tion						
Examination Passed	Board	Year	Subjects Offered	l	Marks	% of Mark	
					Obtained	(Aggregate)	
High School/Equivalent.							
Intermediate/Equivalent							
meermediate, Equivalent							
Graduation/Equivalent							

9. Category of Applicant*:					
Vertical Reservation					
General	ОВС		SC/ST		
Horizontal Reservation					
UE C	т 🗌	PH			
EA F	F 🗌	SPC	ORT	N.C.C.	
Note: In case proper documentary evidence in support of claim under item 9 above is not enclosed, the candidate shall be treated under General category. Any remaining seats after the exhausting of reservation would be made available to the candidates of General category.					
10. Gender: Male	Female				
11. Application Fee, Rs 800/- for General/OBC Candidate and Rs. 400/- for SC/ST Candidate in favour of "Finance Officer, University of Lucknow, Lucknow" payable at Lucknow.  Bank Draft details:					
Name of issuing Bank		Draft No.	Date	Amount	
DECLARATION: I do hereby declare that the information furnished by me in respect of all the above items is true to the best of my knowledge and belief. In case any of the above information is found incorrect or false at any stage my admission shall automatically stand cancelled.					
Place:					
Date:	(Signature of the Applicant)				
Note:					
<ol> <li>Incomplete forms will be su</li> <li>* Candidate must provide t</li> </ol>	-	•			

Completed application form along with the desired Fee should reach the following address by Speed Post only on or before 31 st July, 2015 (Friday).

The Coordinator, (Prof. Kaman Singh)
Innovation Centre on Food Processing and Food Technology,
Department of Chemistry,
University of Lucknow,
Lucknow-226 007
E-mail: drkamansingh@yahoo.com
Mobile: +91-9415409189, +91-9450722783, +91-9451949105

### **ADMIT CARD**



## M.Sc. (FOOD PROCESSING AND FOOD TECHNOLOGY) ADMISSION-2015

(Two Year-Four Semester Full Time CBCS Post Graduation Programme)

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF LUCKNOW, LUCKNOW

For office use only Application Receipt No:		Roll No.		
1. Name of Applican	nt (Mr./Ms.)			D
Name of Applicant (Mr./Ms.)      Father's Name			Paste Recent	
	3. Date of Entrance Test: 5 <sup>th</sup> August, 2015 (Wednesday).			Passport size
	4. Duration of test: 2 hrs (10:00 am to 12:00 noon)			
	•	noon)		the camera
5. Reporting Time: 9	9:30 am			(Self-Attested)
6. Venue for Entranc	ce Test: Department of Che Lucknow-226 007	•	Lucknow,	
The Coordinator,				
M.Sc.(Food Processing and Food Technology)-2015				

### **VERIFICATION CARD**



5<sup>th</sup> August, 2015 (Wednesday) (10:00 am to 12:00 noon)

# M.Sc. (FOOD PROCESSING AND FOOD TECHNOLOGY) ADMISSION-2015

(Two Year-Four Semester Full Time CBCS Post Graduation Programme)

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF LUCKNOW, LUCKNOW

or office use only Application Receipt No:	Roll No.		
3. Venue for Entrance Test: Dep			Paste Recent Passport size Photograph facing
4. Applicant's Signature			the camera (Self-Attested)
5. Candidate has to sign in pres	ence of Invigilator during Exami	nation:	
Date of Entrance Test	Applicant's Signature	Signature of Invig	gilator

The Coordinator,

CHECK		YES	NO			
1.	Two Self addressed Envelops size (27x12cm) duly stamped with Rs.39/-					
2.	High School/Equivalent Mark sheet					
3.	High School/Equivalent Certificate					
4.	Intermediate Mark sheet					
5.	Intermediate Certificate					
6.	*Weightage Certificate as per item no. 9 given in the Form					
7.	Draft of application Fee					
8.	*e –Cast Certificate					
9.	*e-Income Certificate					
10.	*Document for proof of address:					
11.	Any other Information					
12.						
13.						
14.						
Note: *Candidate must provide the information with Proof, If candidate requires benefits.  Ensure that:						
The Xei						
The Pos	stal receipt is retained or not					
Name o	of the Applicant :					
Mobile	No :					
Email	:					

(Signature of the candidate)

Father's Mobile No.

<sup>\*\*</sup>Completed application form along with the desired Fee should reach the following address by Speed Post only on or before 31<sup>st</sup> July,2015 (Friday).

## Appendix-1

### Syllabus for Entrance Test (Food Processing and Food Technology)

The question paper of the entrance test will contain objective type multiple choice questions from the following subjects.

- 1. **Physics:** Elements of mechanics, colligative properties, laws of thermodynamics, modes of heat transfer, electrostatics, magnetism and electrodynamics, outlines in optics and sound, electro-magnetic radiation, radioactivity and elements in quantum physics.
- 2. Chemistry: The gas laws, properties of gases, electrolytes, thermo-chemistry, chemical equilibria, chemical kinetics, concept of pH and buffer, molecular orbital theory, chemical bonds and forces involved therin, periodic table, aliphatic and aromatic hydrocarbons, organic substitution reactions, electrophilic and nucleophilic reactions, isomerism, structural and optical isomers, food chemistry, composition of foods, minerals in foods, water activity in foods, carbohydrates, mono and disaccharides, reducing and non-reducing sugars, mutarotation, starch, cellulose, pectins, plant acids and proteins, primary, secondary and tertiary structures of proteins, protein denaturation, peptide bonds, amino acids, saturated and unsaturated fats, rancidity.
- **3. Mathematics:** Theory of quadratic equations, binomial theorem, uses of natural and common logarithms, trigonometry, ratios and their relations, basics of matrices, vectors, determinants.
- **4. Biology:** Botany- systemic of plants, ecology, cytology and physiology of plants, economic botany; Zoology-molecular basis of life, nucleic acids and their role in life, elements of genetics, organization of animal tissues, elements in human physiology, endocrine glands, digestion, absorption, respiration, general physiology of animals, systematic s of animals.
- **5. Microbiology:** Historical development in microbiology, morphology, cytology, reproduction and genetics of bacteria, yeasts and moulds, culture technique and identification, stains and staining techniques, growth, nutrition and physiology of micro-organisms, control and food safety, general principles of food preservation, microbiological standards.
- **6. Biochemistry and Nutrition:** Enzymes, coenzymes and cofactors, hormones, elements of carbohydrate, fat and protein metabolism, elements photosynthesis, vitamins and their function in body, minerals and their function in body, elements on protein synthesis, RDA, nutritional deficiencies, role of vitamins, water, dietary fiber and minerals in health, macro and micronutrients and their role in health, foods for specific diseases like PKU, CVD and diabetes.
- 7. Agriculture and Dairy Technology: Agriculture, weather and crops, soil and water resources, soil and water conservation, soil fertility and fertilizer use, cropping patterns and weed control, diseases, insect pests and nematodes of crops, agricultural engineering, agriculture marketing and storage, farm management, field crops, plantation crops, commercial crops, horticultural crops, foliage crops and grasses, condiments, spices, medicinal and aromatic plants. Dairy science: Dairy cattle management, diseases of cattle, chemistry of milk, microbiology of milk and milk products, milk standards.
- **8. Engineering:** Units, dimensions and conventions, fundamentals of fluid flow, pressure, energy and heat relationships and their measurements, emulsions-basics and examples, basics of mixing, equipment and applications, mechanical operations: size reduction and sieve analysis, centrifugation and filtration, power and steam generators, strength of materials- basics, heat exchangers, basics of computers.
- **9. Food Technology:** Maillard's reaction, engineering of foods, preservation: drying, pasteurization, canning, concentration and freezing, infant foods, geriatric foods, sports foods and convalescent foods.
- **10. Horticulture:** Global scenario of horticultural crops, divisions of horticulture, area and production, export an import, classification of horticultural crops, nutritive value of horticultural crops, horticultural therapy, horticulture zones of India, horticultural developmental agencies, soil and climatic factors on crop production influence of soil, physical and chemical properties and climatic factors, light, temperature, photoperiod, relative humidity, rainfall, micro climate, pollution, influence of biotic and abiotic stresses on crop production.
- **11. Home Science:** Human development and nutrition during life span: pregnancy, infancy, childhood, adolescence, adulthood and the older adulthood (geriatrics), fundamentals of sociology-society and culture: structure, function, interrelationship and scope, community health, consumer studies, health education, home management- meaning, concepts, family-meaning, functions, life cycles, management and responsibilities of family members.