



4.4a Faculty of Science

Degree	Course	Duration	Seat	Type	Fees	Eligibility Requirements
M.Sc.	Anthropology	4 Semester	12	Regular	5177 Per Semester	B.Sc. with Anthropology in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Biochemistry	4 Semester	20	Regular	14177 Per Semester	B.Sc. with Chemistry/Biochemistry in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Biostatistics	4 Semester	20	Self Financed	16000 Per Semester	Graduate with a minimum of 50% marks and Mathematics as one of the subjects at the Intermediate / Higher Secondary (10+2) level
M.Sc.	Botany	4 Semester	50	Regular	7877 Per Semester	B.Sc. with Botany in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Chemistry	4 Semester	80	Regular	7677 Per Semester	B.Sc. with Chemistry in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Electronics	4 Semester	30	Self Financed	25000 Per Semester	B.Sc. with Physics or Electronics in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Environmental Science	4 Semester	30	Self Financed	25000 Per Semester	B.Sc. (Except B.Sc. Agriculture) (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Food Processing and Food Technology	4 Semester	50	Self Financed	35000 Per Semester	B.Sc. with (Science, Biotechnology, Microbiology, Home Science, Food Science) (Minimum marks: General/OBC 50%, SC/ST 45%)
M.Sc.	Geology	4 Semester	22	Regular	7877 Per Semester	B.Sc. with Geology in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)

Admission on the basis of written test (See 5.1)



PG Admission Brochure 2016-17

4.4b Faculty of Science

Degree	Course	Duration	Seat	Type	Fees	Eligibility Requirements
M.Sc.	Mass Communication in Science & Technology	4 Semester	30	Self Financed	18000 Per Semester	Bachelor's degree in any science subject including Engineering or Medicine (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Mathematics	4 Semester	120	Regular	5177 Per Semester	B.Sc. with Mathematics in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Microbiology	4 Semester	30	Self Financed	25000 Per Semester	B.Sc. Biology Group. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Nutrition & Health	4 Semester	30	Self Financed	35000 Per Semester	Bachelor of Medicine, B.Sc., B.A. (Anthropology, Home Science, Sociology, Social Work, Political Science, Public Administration, Psychology, Rural Development) (Minimum marks: General/OBC 45%, SC/ST 40%) merit based on 70% graduation marks and 30% interview
M.Sc.	Pharmaceutical Chemistry	4 Semester	30	Self Financed	25000 Per Semester	B.Sc. with Chemistry in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Physics	4 Semester	72	Regular	6677 Per Semester	B.Sc. with Physics in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Plant Science	4 Semester	50	Self Financed	25000 Per Semester	B.Sc. with Botany in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Renewable Energy	4 Semester	25	Self Financed	22000 Per Semester	B.Sc. with Physics or Electronics in final year, or BE/B.Tech. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Renewable Energy	4 Semester	5	Sponsored	22000 Per Semester	B.Sc. with Physics or Electronics in final year, or BE/B.Tech. (Minimum marks: General/OBC 45%, SC/ST 40%)



PG Admission Brochure 2016-17

4.4c Faculty of Science

Degree	Course	Duration	Seat	Type	Fees	Eligibility Requirements
M.Sc.	Statistics	4 Semester	15	Regular	7677 Per Semester	B.Sc. with Statistics in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Statistics	4 Semester	15	Self Financed	16000 Per Semester	B.Sc. with Statistics in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
M.Sc.	Total Quality Management	4 Semester	30	Self Financed	40000 Per Semester	B.Sc./B.Com./B.A./B.Tech/ BBA/BCA from a recognized University (Minimum marks: General/OBC 50%, SC/ST 45%)
M.Sc.	Zoology	4 Semester	50	Regular	7877 Per Semester	B.Sc. with Zoology or Genetics & Genomics in final year. (Minimum marks: General/OBC 45%, SC/ST 40%)
Masters	Computer Application (MCA)	6 Semester	30	Self Financed	54025 Per Annum	B.Sc. (CS)/B.Sc. (CA)/B.Sc. (IT)/BCA (Minimum marks: General/OBC 50%, SC/ST 45%)
Admission on the basis of written test (See 5.2)						
PG Diploma	Quality Management	2 Semester	20	Self Financed	20000 Per Annum	M.Sc/MBA/B.Tech from recognized University (Minimum marks: General/OBC 50%, SC/ST 45%)
PG Diploma	Remote Sensing and GIS	2 Semester	15	Self Financed	20000 Per Semester	PG in Geology/Geography/ environmental Science/Physics/Computer Science/Botany with 60% marks



5 Entrance Examination

Entrance test will be held in the following courses according to the details given against each

5.1 M.Sc. Food Processing and Food Technology

5.1.1 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.

5.1.2 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.

5.1.2.1 Physics : Elements of mechanics, colligative properties, laws of thermodynamics, modes of heat transfer, electrostatics, magnetism and electrodynamics, outlines in optics and sound, electromagnetic radiation, radioactivity and elements in quantum physics.

5.1.2.2 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 therein, 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.

5.1.2.3 Mathematics : Theory of quadratic equations, binomial theorem, uses of natural and common logarithms, trigonometry, ratios and their relations, basics of matrices, vectors, determinants.

5.1.2.4 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.

5.1.2.5 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.

5.1.2.6 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.

5.1.2.7 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.

5.1.2.8 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.



5.1.2.9 Food Technology: Maillard's reaction, engineering of foods, preservation: drying, pasteurization, canning, concentration and freezing, infant foods, geriatric foods, sports foods and convalescent foods.

5.1.2.10 Horticulture : Global scenario of horticultural crops, divisions of horticulture, area and production, export and 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.

5.1.2.11 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.

5.2 Masters in Computer Application

Multiple Choice Questions based on B.C.A./B.Sc.(Computer Science) Syllabus of University of Lucknow, Logical reasoning, Numerical Aptitude, English Comprehension, General Knowledge.