

Annexure -I

List of M.Sc. Courses Included in First Call

2 Mandatory Courses Selected from each Discipline for the Development and Review of eLearning Content						
	Discipline-Group	Discipline	Code		COURSE TITLE	No of Units
1	Basic sciences					
	1	AGRICULTURAL CHEMICALS	AC	503	BASIC CHEMISTRY I	5
			AC	504	BASIC CHEMISTRY II	5
	2	BIOCHEMISTRY	BIOCHEM	501	BASIC BIOCHEMISTRY	4
			BIOCHEM	502	INTERMEDIARY METABOLISM	4
	3	CHEMISTRY	CHEM	502	THERMODYNAMICS	5
			CHEM	503	CHEMICAL KINETICS AND SURFACE CHEMISTRY	5
	4	MICROBIOLOGY	MICRO	501	PRINCIPLES OF MICROBIOLOGY	4
			MICRO	502	MICROBIAL PHYSIOLOGY AND METABOLISM	4
	5	PLANT PHYSIOLOGY	PP	504	HORMONAL REGULATION OF PLANT GROWTH AND DEVELOPMENT	6
			PP	508	MORPHOGENESIS, TISSUE CULTURE AND TRANSFORMATION	6

2	Biotechnology & Bioinformatics	Discipline	Code		COURSE TITLE	Units
	1	PLANT MOLECULAR BIOLOGY & BIOTECHNOLOGY	MBB	501	PRINCIPLES OF BIOTECHNOLOGY	4
			MBB	502	FUNDAMENTALS OF MOLECULAR BIOLOGY	4
	2	ANIMAL BIOTECHNOLOGY	ABT	602	FUNDAMENTALS OF CELL & MOLECULAR BIOLOGY	4
			ABT	604	ANIMAL CELL CULTURE: PRINCIPLES & APPLICATIONS	4
	3	BIOINFORMATICS	BIF	501	INTRODUCTION TO BIOINFORMATICS	4
			BIF	502	ADVANCED BIOINFORMATICS	4

3	Plant Sciences	Discipline	Code		COURSE TITLE	Units
	1	GENETICS AND PLANT BREEDING	GP	502	PRINCIPLES OF CYTOGENETICS	6
			GP	504	PRINCIPLES OF QUANTITATIVE GENETICS	5
	2	SEED SCIENCE AND TECHNOLOGY	SST	501	FLORAL BIOLOGY, SEED DEVELOPMENT & MATURATION	4
			SST	502	PRINCIPLES OF SEED PRODUCTION	5

4	Physical Sciences	Discipline	Code		COURSE TITLE	Units
	1	AGRICULTURAL METEOROLOGY	AGM	501	FUNDAMENTALS OF METEOROLOGY AND CLIMATOLOGY	6
			AGM	502	FUNDAMENTALS OF AGRICULTURAL METEOROLOGY	6
	2	AGRICULTURAL PHYSICS	AP	501	FUNDAMENTALS OF SOIL PHYSICS	9
			AP	502	FUNDAMENTALS OF METEOROLOGY AND CLIMATOLOGY	6
	3	AGRONOMY	AGRON	501	MODERN CONCEPTS IN CROP PRODUCTION	5
			AGRON	502	PRINCIPLES AND PRACTICES OF SOIL FERTILITY AND NUTRIENT MANAGEMENT	5
	4	SOIL SCIENCE	SOILS	504	SOIL MINERALOGY, GENESIS, CLASSIFICATION AND SURVEY	6
			SOILS	506	SOIL BIOLOGY AND BIOCHEMISTRY	6

5	Plant Protection	Discipline	Code		COURSE TITLE	Units
	1	ENTOMOLOGY	ENT	501	INSECT MORPHOLOGY	4
			ENT	502	INSECT ANATOMY, PHYSIOLOGY AND NUTRITION	4
	2	NEMATOLOGY	NEMA	501	PRINCIPLES OF NEMATOLOGY	5
			NEMA	503	STRUCTURAL ORGANIZATION OF NEMATODES	5
	3	PLANT PATHOLOGY	PL PATH	501	MYCOLOGY	4
			PL PATH	502	PLANT VIROLOGY	6

6	Social Sciences	Discipline	Code		COURSE TITLE	Units
	1	AGRI-BUSINESS MANAGEMENT	ABM	513	COMPUTERS FOR MANAGERS	4
				514	MANAGEMENT INFORMATION SYSTEM	5
	2	AGRICULTURAL ECONOMICS	AG ECON	501	MICRO ECONOMIC THEORY AND APPLICATIONS	4
			AG ECON	502	MACRO ECONOMICS AND POLICY	5
	3	AGRICULTURAL EXTENSION	EXT	501	DEVELOPMENT PERSPECTIVES OF EXTENSION EDUCATION	4
			EXT	502	DEVELOPMENT COMMUNICATION AND INFORMATION MANAGEMENT	4

7	Statistical Sciences	Discipline	Code		COURSE TITLE	Units
	1	STATISTICS / AGRICULTURAL STATISTICS	STAT	561	STATISTICAL METHODS	5
			STAT	564	DESIGN OF EXPERIMENTS	6
	2	BIO-STATISTICS	BST	551	MATHEMATICAL METHODS - I	4
			BST	552	MATHEMATICAL METHODS - II	4
	3	COMPUTER APPLICATION	MCA	560	COMPUTER ORGANIZATION AND ARCHITECTURE	6
			MCA	561	COMPUTER FUNDAMENTALS AND PROGRAMMING	6

8	Horticultural Sciences	Discipline	Code		COURSE TITLE	Units
	1	FRUIT SCIENCE	FSC	501	TROPICAL AND DRY LAND FRUIT PRODUCTION	5
			FSC	502	SUBTROPICAL AND TEMPERATE FRUIT PRODUCTION	5
	2	VEGETABLE SCIENCE	VSC	501	PRODUCTION TECHNOLOGY OF COOL SEASON VEGETABLE CROPS	5
			VSC	502	PRODUCTION TECHNOLOGY OF WARM SEASON VEGETABLE CROPS	5
	3	FLORICULTURE AND LANDSCAPE ARCHITECTURE	FLA	501	BREEDING OF FLOWER CROPS AND ORNAMENTAL PLANTS	5
			FLA	502	PRODUCTION TECHNOLOGY OF CUT FLOWERS	5
	4	PLANTATION, SPICES, MEDICINAL & AROMATIC CROPS	PSMA	501	PRODUCTION OF PLANTATION CROPS	5
			PSMA	502	PRODUCTION TECHNOLOGY OF SPICE CROPS	5

9	Forestry	Discipline	Code		COURSE TITLE	Units
	1	FORESTRY	FOR	501	SILVICULTURE	3
			FOR	502	FOREST BIOMETRY	3

10	Agricultural Engineering & Technology	Discipline	Code		COURSE TITLE	Units
	1	FARM MACHINERY AND POWER ENGINEERING	FMPE	501	DESIGN OF FARM POWER AND MACHINERY SYSTEMS	5
			FMPE	502	SOIL DYNAMICS IN TILLAGE AND TRACTION	4
	2	PROCESSING AND FOOD ENGINEERING	PFE	501	TRANSPORT PHENOMENA IN FOOD PROCESSING	4
			PFE	502	ENGINEERING PROPERTIES OF FOOD MATERIALS	4
	3	SOIL AND WATER ENGINEERING	SWE	501	WATERSHED HYDROLOGY	5
			SWE	502	DESIGN OF FARM IRRIGATION SYSTEMS	5

11	Home Science	Discipline	Code		COURSE TITLE	Units
	1	FOODS & NUTRITION	FN	501	ADVANCED FOOD SCIENCE	4
			FN	502	ADVANCED NUTRITION	4
	2	FAMILY RESOURCE MANAGEMENT	FRM	501	APPROACHES TO RESOURCE MANAGEMENT	4
			FRM	502	CONSUMER ERGONOMICS	4
	3	HUMAN DEVELOPMENT AND FAMILY STUDIES	HDFS	501	THEORIES OF HUMAN DEVELOPMENT & BEHAVIOUR	4
			HDFS	502	ADVANCES IN LIFE SPAN DEVELOPMENT	4

	4	TEXTILE AND APPAREL DESIGNING	TAD	501	FIBRE CHEMISTRY	4
			TAD	502	TEXTILE QUALITY ANALYSIS	4
	5	HOME SCIENCE EXTENSION & COMMUNICATION MANAGEMENT	HECM	501	GLOBAL EXTENSION SYSTEMS	4
			HECM	502	TRAINING AND HUMAN RESOURCE DEVELOPMENT	4

12	Basic Veterinary Subjects	Discipline	Code		COURSE TITLE	Units
	1	VETERINARY ANATOMY & HISTOLOGY	VAN	601	COMPARATIVE OSTEOLOGY AND ARTHROLOGY	5
			VAN	602	COMPARATIVE SPLANCHNOLOGY	5
	2	VETERINARY & ANIMAL HUSBANDRY EXTENSION	AHE	601	FUNDAMENTALS OF VETERINARY AND ANIMAL HUSBANDRY EXTENSION	4
			AHE	602	COMMUNICATION FOR LIVESTOCK DEVELOPMENT	3
	3	VETERINARY BIOCHEMISTRY	VBC	601	CHEMISTRY OF ANIMAL CELL	3
			VBC	603	APPLICATIONS OF GENOMICS AND PROTEOMICS IN MOLECULAR BIOLOGY	3
	4	VETERINARY PHYSIOLOGY	VPY	601	PHYSIOLOGY OF DIGESTION	5
			VPY	602	CARDIOVASCULAR AND RESPIRATORY PHYSIOLOGY	5

13	Veterinary Para-clinical Subjects	Discipline	Code		COURSE TITLE	Units
	1	VETERINARY MICROBIOLOGY	VMC	601	BACTERIOLOGY – I	3
			VMC	602	BACTERIOLOGY – II	3
	2	VETERINARY PARASITOLOGY	VPA	603	VETERINARY ENTOMOLOGY AND ACAROLGY	9
			VPA	604	VETERINARY PROTOZOOLOGY	5
	3	VETERINARY PATHOLOGY	VPP	601	GENERAL PATHOLOGY	4
			VPP	602	TECHNIQUES IN PATHOLOGY	3
	4	VETERINARY PHARMACOLOGY AND TOXICOLOGY	VPT	601	GENERAL PHARMACOLOGY	4
			VPT	602	AUTONOMIC AND AUTACOID PHARMACOLOGY	6
	5	VETERINARY PUBLIC HEALTH	VPH	601	ELEMENTS OF VETERINARY PUBLIC HEALTH	3
			VPH	602	BACTERIAL AND RICKETTSIAL AGENTS OF PUBLIC HEALTH SIGNIFICANCE	4

14	Veterinary Clinical Subjects	Discipline	Code		COURSE TITLE	Units
	1	ANIMAL REPRODUCTION, GYNAECOLOGY & OBSTETRICS	VOG	601	GENERAL GYNAECOLOGY	7
			VOG	602	FEMALE INFERTILITY	9
	2	VETERINARY CLINICAL MEDICINE, ETHICS & JURISPRUDENCE	VCM	601	RUMINANT CLINICAL MEDICINE -I	3
			VCM	602	RUMINANT CLINICAL MEDICINE -II	3
	3	VETERINARY EPIDEMIOLOGY & PREVENTIVE MEDICINE	VEP	601	PRINCIPLES OF EPIDEMIOLOGY	4
			VEP	602	APPLIED EPIDEMIOLOGY	4
	4	VETERINARY SURGERY & RADIOLOGY	VSR	601	PRINCIPLES OF SURGERY	5
			VSR	604	SMALL ANIMAL ANAESTHESIA	5

15	Livestock Production Technology & Products Management	Discipline	Code		COURSE TITLE	Units
	1	ANIMAL GENETICS & BREEDING	AGB	601	ANIMAL CYTOGENETICS AND IMMUNOGENETICS	4
			AGB	602	MOLECULAR GENETICS IN ANIMAL BREEDING	4
	2	ANIMAL NUTRITION	ANN	601	ANIMAL NUTRITION – ENERGY AND PROTEIN	4
			ANN	602	ANIMAL NUTRITION – MINERALS, VITAMINS AND FEED ADDITIVES	3
	3	LIVESTOCK PRODUCTION AND MANAGEMENT	LPM	601	CATTLE AND BUFFALO PRODUCTION AND MANAGEMENT	5
			LPM	602	SHEEP AND GOAT PRODUCTION AND MANAGEMENT	5
	4	LIVESTOCK PRODUCTS TECHNOLOGY	LPT	601	FRESH MEAT TECHNOLOGY	2
			LPT	602	MEAT PROCESSING, PACKAGING, QUALITY CONTROL AND MARKETING	5
	5	POULTRY SCIENCE	PSC	601	POULTRY BREEDING AND GENETICS	3
			PSC	602	POULTRY NUTRITION AND FEEDING	4

16	Fisheries Science	Discipline	Code		COURSE TITLE	Units
	1	AQUACULTURE	AQC	501	SUSTAINABLE AQUACULTURE	6
			AQC	502	SOIL AND WATER QUALITY MANAGEMENT IN AQUACULTURE	4
	2	AQUATIC ENVIRONMENT MANAGEMENT	AEM	501	AQUATIC ENVIRONMENT AND BIODIVERSITY	3
			AEM	502	CHEMICAL INTERACTIONS IN THE AQUATIC ENVIRONMENT	4
	3	AQUATIC ANIMAL HEALTH	AAH	501	VIRAL AND BACTERIAL DISEASES OF FINFISH AND SHELLFISH	5
			AAH	502	PARASITIC DISEASES OF FINFISH AND SHELLFISH	6
	4	BUSINESS MANAGEMENT	FBM	501	MANAGERIAL ECONOMICS	5
			FBM	502	MARKETING MANAGEMENT	5
	5	FISH BIOTECHNOLOGY	FBT	503	GENE STRUCTURE AND REGULATION OF EXPRESSION	8
			FBT	502	BASIC CONCEPTS OF CELL BIOLOGY	6
	6	FISH GENETICS AND BREEDING	FGB	502	POPULATION GENETICS	6
			FGB	503	QUANTITATIVE GENETICS	6
	7	FISH NUTRITION AND FEED TECHNOLOGY	FNB	501	FISH NUTRITION	8
			FNB	502	FISH BIOCHEMISTRY	4

	8	FISH PHYSIOLOGY AND BIOCHEMISTRY	FPB	501	PHYSIOLOGY OF DIGESTION, GROWTH AND ENERGETICS	4
			FPB	502	REPRODUCTIVE PHYSIOLOGY AND ENDOCRINOLOGY	6
	9	FISH PROCESSING TECHNOLOGY	FPT	501	TECHNOLOGY OF FREEZING AND STORAGE	10
			FPT	502	THERMAL PROCESSING OF FISHERY PRODUCTS	9
	10	FISHERIES ECONOMICS	FEC	501	MICROECONOMICS	5
			FEC	502	MACROECONOMICS	6
	11	FISHERIES ENGINEERING AND TECHNOLOGY	FET	501	ADVANCED FISHING GEAR TECHNOLOGY	10
			FET	502	ADVANCED FISHING CRAFT TECHNOLOGY	10
	12	FISHERIES EXTENSION	FEX	501	PERSPECTIVES AND PRACTICES OF FISHERIES EXTENSION	4
			FEX	502	EXTENSION COMMUNICATION AND METHODS	4
	13	FISHERIES RESOURCE MANAGEMENT	FRM	501	INLAND FISHERIES RESOURCES	7
			FRM	503	MARINE ECOSYSTEMS, BIODIVERSITY AND CONSERVATION	5
17	Dairy Science & Technology	Discipline	Code		COURSE TITLE	Units
	1	Dairy Technology	DT	511	ADVANCED DAIRY PROCESSING	6
			DT	514	DAIRY PROCESS BIOTECHNOLOGY	6
	2	DAIRY MICROBIOLOGY	DM	512	MICROBIAL PHYSIOLOGY	4
			DM	515	MICROBIOLOGY OF PROCESSED DAIRY FOODS	5

	3	DAIRY CHEMISTRY	DC	513	CHEMISTRY OF MILK LIPIDS	5
			DC	521	CHEMISTRY OF MILK PROTEINS	6
	4	DAIRY ENGINEERING	DE	511	DAIRY AND FOOD ENGINEERING-I	5
			DE	515	DESIGN OF PROCESS EQUIPMENT	6

18	Food Science & Technology	Discipline	Code		COURSE TITLE	Units
	1	FOOD TECHNOLOGY	FST	501	FOOD CHEMISTRY & NUTRITION	4
			FST	502	FOOD MICROBIOLOGY	4