





Malik Muhammad Rafique Rajwana Chancellor / Governor of the Punjab



Prof. Dr. Rai Niaz Ahmad Vice Chancellor

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# INTRODUCTION

Pakistan is predominantly an agricultural country. However, since its independence in 1947, emphasis has been on irrigated agriculture, while rainfed agriculture remained neglected. With rapid increase in population, the irrigated areas failed to provide sufficient food requirements and it became imperative to find out ways to make use of the huge part of cultivable land in the rainfed region. In the 1970s, the Government of Pakistan constituted a Barani Commission to review and recommend measures for the development of rainfed agriculture and uplift of the poor masses through education, research, and development of technology and manpower. Pursuant to the recommendations of the Barani Commission, the Government of Punjab established Barani Agricultural College, Rawalpindi which was later upgraded to the level of the University in 1994. The mandate of the University is to produce high-quality agricultural scientists and to form an organized scientific infrastructure for teaching and research for the development of dry land regions of the country, thus minimizing the income gap between the rich and poor.



The University includes Faculty of Crop and Food Sciences, Faculty of Sciences, Faculty of Veterinary and Animal Sciences, Faculty of Forestry, Range Management and Wildlife, Faculty of Agricultural Engineering & Technology, Directorate of Advanced Studies, Directorate of Research, Innovation & Commercialization, University Institute of Management Sciences (UIMS), University Institute of Information Technology (UIIT), University Institute of Biochemistry & Biotechnology (UIBB), Research Farm, Sub-campus Khushab, Sub-campus Attock. The University offers a number of degree programmes leading to Bachelor, Master and Ph.D. in various disciplines of Agriculture, Bachelor, Master and Ph.D. in Veterinary & Animal Sciences, Master and Ph.D in Forestry & Range Management, Wildlife Management and Environmental Sciences, Bachelor and Master in Business Administration, Bachelor and Master in Computer Sciences and Information Technology, Master and Ph.D. in Biological Sciences and Social Sciences, Bachelor, Master and Ph.D in Education.

Pursuit of excellence on the University campus is a function of competent and dedicated university faculty. The PMAS - Arid Agriculture University Rawalpindi has, therefore, made constant efforts at staff development with the result that nearly 65% of the faculty members possess Ph.D. degrees, while the others have M.Sc. (Hons.) and M.Phil degrees.

The University is open to all persons regardless of religion, race, creed, class or color, and no one is deprived of the benefit accruing from the University on any such grounds.

# Introduction



The University is located in Rawalpindi almost in the center of the twin cosmopolitan cities of Rawalpindi and Islamabad, the capital of the country. These cities are beautiful towns located in the foothills with a blend of old and new cultures and constructions. The towns provide pollution free environment, scenic Pothwar vegetation and topography of plateau land. The twin cities have a population of about one million. They are situated in the northern part of Pakistan on the Pothwar plateau in the Province of Punjab.

The University with its most beautiful building in the twin-cities is situated on Murree Road, close to the Rawalpindi Cricket Stadium and has assumed the significance of a landmark because of its architecture. The University building contains an auditorium, multi-storied administrative block, a library, four multi-storied academic blocks, UIMS, UIIT, UIBB buildings and Khalid Mahmood Khan Gymnasium.

The University is situated on the busy Murree Road where transport is easily available, which makes the university approachable from all parts of the twin-cities at all hours of the day. This facility and busy nature of the area allows the University to continue its curricular and co-curricular activities till late in the evening.

The central location of the university places it in proximity to major institutions of higher learning and research like Pakistan Agricultural Research Council (PARC), National Agricultural Research Centre (NARC), National Institute of Health (NIH), Pakistan Museum of Natural History (PMNH), Rawalpindi Medical College, Poultry Research Institute, Fisheries Research and Training Institute, International Institute for Biological Control of the Common Wealth and Agency for Barani Areas Development (ABAD). The location of University also allows the utilization of expertise scattered in the twin cities for providing quality education by teachers/executives in fields of their specialization.

Collaborative research and teaching programs are being developed with these institutions for better teaching and research facilities for the students. The university has signed MoUs with Pakistan Agricultural Research Council, Islamabad; Agricultural University of Hebei, China; International Centre for Agricultural Research in Dry land Areas (ICARDA), Syria, Federal Seed Certification and Registration Department, Korea, China and CABI to assist each other in teaching, research and extension activities.

# PMAS-Arid Agriculture University

# A D M I N I S T R A T I O N

The Syndicate is the highest executive body of the University while the Academic Council, the Selection Board, the Finance and Planning Committee and Advanced Studies and Research Board are advisory bodies to the Syndicate pertaining to their respective functions and responsibilities.

Governor of the Punjab is the Chancellor of the University. The Vice-Chancellor is the Chief Executive of the University. In the performance of his duties, the Vice Chancellor is assisted by the Deans of the Faculties, Directors of the Institutes/Chairpersons of teaching Departments, Director Quality Enhancement Cell, the Principal Officers, the Registrar, the Treasurer, the Controller of Examinations and Chief Engineer Works.

Administrative set up of the University is as follows:



# OFFICE OF THE VICE CHANCELLOR

Vice Chancellor	
P.S to the Vice Chancellor	
Deputy Registrar	
Assistant Registrar	

Prof. Dr. Rai Niaz Ahmad Mr. Muhammad Rafique Mr. Mustafa Mr. Waris Ali

# OFFICE OF THE REGISTRAR

Registrar Deputy Registrars

Assistant Registrars

Prof. Dr. Sarwat N. Mirza Mr. Muhammad Aqeel Sultan Dr. Muhammad Azam Khan Ms. Asma Safdar Ms. Sumera Saleem Mirza Haseeb Baig Mr. Muhammad Adnan Riaz



# Administration

#### OFFICE OF THE TREASURER

Director/Treasurer Deputy Registrars (TR)	Syeda Iram Umer Raja Afzaal Mehdi
Assistant Registrars (TR)	Mr. Abdul Wahid Mr. Zeeshan Ahmad Khan Mr. Muhammad Asad
	Malik Muhammad Khan Ms. Ainee Zafar
	Mr. Mohsin Iqbal
Resident Auditor Assistant Registrar (Internal Audit)	Mr. Junaid Hameed Mr. Ali Nasir

#### OFFICE OF THE CONTROLLER OF EXAMINATIONS

Controller of Examinations
Deputy Registrar (Exams)
Assistant Registrars (Exams)

Sheikh Naveed Akram Mr. Ayaz Ellahi Ms. Huda Javed Mr. Zahid Mahmood Mr. Imran Khurram

# DIRECTORATE OF RESEARCH INNOVATION & COMMERCIALIZATION

Director

Prof. Dr. Khalid Saifullah Khan

#### DIRECTORATE OF PLANNING AND DEVELOPMENT

Director

Mr. Shahid Ali Khan

# DIRECTORATE OF FINANCIAL ASSISTANCE & UNIVERSITY ADVANCEMENT

Director	Mr. Muhammad Sohail
Additional Director (Financial Assistance)	Mr. Waqas Ahmed Ch.
Deputy Registrar	Mr. Muzaffar Hussain Salik
Assistant Registrars	Ms. Shahida Yousaf
	Mr. Wagas Faroog



### DIRECTORATE OF ADVANCED STUDIES

Director	Prof. Dr. M. Inam UI Haq
Deputy Directors/Assistant Professors	Dr. M. Farooq Nasir
	Dr. M. Azam Khan
Assistant Director/Lecturer	Ms. Kanza Gulzar

### **PUBLIC RELATIONS & MEDIA AFFAIRS**

Principal Officer Public Relation Officer Mr. Nadeem Ahmad Malik Mr. Musa Kalim

# DIRECTORATE OF PROCUREMENT AND INVENTORY CONTROL

Director	Prof. Dr. Muhammad Yasin
Deputy Registrar	Mr. Waris Ali
Assistant Registrar	Mr. Haseeb Akhtar

# Administration

#### QUALITY ENHANCEMENT CELL

Director Deputy Registrar Assistant Registrar Prof. Dr. Riaz Ahmad Mr. Shahbaz Ahmad Khan Malik Muhammad Faisal

#### **STUDENT AFFAIRS, HALL WARDEN & SENIOR TUTOR**

Principal OfficerProf. Dr. Khalid Saifullah KhanDirector Student AffairsDr. Mazhar Hussain BhuttaHostel Warden (Boys)Dr. Ghulam QadirHostel Warden (Girls)Dr. Abida AkramSenior TutorDr. Anwaar Ahmad

#### DIRECTORATE OF SPORTS

Chairman Sports Board	Prof. Dr. Muhammad Azim Malik
Principal Officer Sports (Female)	Syeda Irum Umer
Deputy Director Sports	Agha Saleem Uddin Khilji
Assistant Director Sports	Mr. Zahid Qamar Khan
Sports Instructors	Mr. Muhammad Akhtar Jan
	Ms. Sehrish Gillani

#### LIBRARY

Librarian Assistant Librarian

#### Mr. Shahid Masood Mr. Bashir Ahmad

Mr. Muhammad Sohail Bhatti

Mr. Naeem Mahmood Aslam

Mr. Ahmad Saeed Awan

#### DIRECTORATE OF WORKS

Project Director Deputy Director Works Asst. Executive Engineer

#### TRANSPORT SECTION

Principal Officer (Transport) Incharge Transport Mr. Shahid Ali Khan Mr. Hassan Rashid



#### **NETWORK & IT SERVICES CENTER**

Additional Director (IT Services)Mr. Nadeem Ahmad MalikDatabase AdministratorMr. Majid TahirSystem AdministratorMr. Safdar AbbasNetwork AdministratorMr. Shahzad AshrafSoftware DeveloperMs. Zahida ShaheenWebmanagerMr. Hameed Ullah Khan

#### UNIVERSITY MEDICAL CENTER

Senior Medical Officer	Lt. Col (R) Dr. Sarwar Khan
Medical Officer	Dr. Sofia Nadeem
Dental Surgeon	Dr. Rizwan Mahmood Raja

# Faculties/ Institutes

The University consists of the following Faculties, Institutes and their Teaching Departments.

FACULTY OF CROP AND FOOD SCIENCES а **FACULTY OF SCIENCES FACULTY OF VETERINARY & ANIMAL SCIENCES** С **FACULTY OF FORESTRY, RANGE MANAGEMENT & WILDLIFE** d **FACULTY OF AGRICULTURAL ENGINEERING & TECHNOLOGY** е f UNIVERSITY INSTITUTE OF MANAGEMENT SCIENCES UNIVERSITY INSTITUTE OF INFORMATION TECHNOLOGY g **DIVISION OF CONTINUING EDUCATION, HOME ECONOMICS & WOMEN DEVELOPMENT** 



Dean of the FacultyProf. Dr. Safdar AliP.A. to the DeanMr. Sarfraz Ahmad Khalid

This faculty has the following departments.

#### I. DEPARTMENT OF AGRONOMY:

Chairman	Prof. Dr. Fayyaz Ul Hassan
Professors	Dr. M. Zammurad Iqbal Ahmed
	Dr. Abdul Razzaq
Associate Professors	Dr. Muhammad Ansar
	Dr. Ghulam Qadir
Assistant Professors	Dr. Muhammad Rasheed
	Dr. Abdul Manaf
	Dr. Irfan Aziz
	Dr. Mukhtar Ahmad
	Dr. Imran Mahmood
	Dr. Naveed Tahir
	Dr. Ghulam Abbas Shah
Lecturer	Dr. Safdar Ali

Faculty of Crop and Food Sciences

This is the major faculty among all the academic units. The faculty is responsible for teaching various courses in different disciplines of agriculture and conducting research on all aspects of crop production at both undergraduate and postgraduate levels. It offers courses of four years duration leading to the degree of B.Sc. (Hons.) Agriculture specializing in ten disciplines including Agric. Economics, Agricultural Extension, Agronomy, Entomology, Food Technology, Horticulture, Plant Breeding & Genetics, Plant Pathology & Soil Science and two years duration leading to M.Sc. (Hons.) Agriculture in Agricultural Extension, Agronomy, Entomology, Food Technology, Horticulture, Plant Breeding & Genetics, Plant Pathology & Soil Science. Ph.D. programme in the disciplines of Agronomy, Entomology, Food Technology, Food Technology, Food Technology, Food Technology, Food Technology, Food Technology, Plant Breeding & Genetics, Plant Pathology & Soil Science. Ph.D. programme in the disciplines of Agronomy, Entomology, Food Technology, Fo



### II. DEPARTMENT OF PLANT BREEDING AND GENETICS:

Chairman	Prof. Dr. M. Kausar Nawaz Shah
Associate Professor	Dr. Zahid Akram
	Dr. Ghulam Shabbir
	Dr. Nasir Mehmood Minhas
Assistant Professors	Dr. Talat Mehmood
	Dr. Saad Imran Malik
	Dr. Munir Ahmed
	Dr. Mahmood-ul-Hassan
	Dr. Rashid Mehmood
Lecturer	Dr. Fahad Masud Wattoo



# IV. DEPARTMENT OF SOIL SCIENCE AND SOIL & WATER CONSERVATION:

Chairman

# III. DEPARTMENT OF PLANT PATHOLOGY:

Chairman	Prof. Dr. Tariq Mukhtar	Professors
Professors	Dr. Abdul Rauf	
	Dr. M. Inam ul Haq	Associate Professo
Assistant Professors	Dr. Abid Riaz	
	Mr. M. Usman Raja	Assistant Professo
	Dr. Farah Naz	
	Dr. Muhammad Ashfaq	
	Dr. Gulshan Irshad	
		Lecturer

Prof. Dr. Khalid Saifullah Khan Dr. Safdar Ali Dr. Muhammad Saleem Akhtar ssors Dr. Ghulam Jilani Dr. M. Tariq Siddique ssors Dr. Muhammad Akmal Dr. Shahzada Sohail Ijaz Dr. Rifat Hayat Dr. Qaiser Hussain Dr. Arshad Nawaz Dr. Tanveer Iqbal

# Faculty of Crop and Food Sciences

### V. DEPARTMENT OF ENTOMOLOGY:

Chairman	Prof. Dr. Muhammad Naeem
Associate Professor	Dr. Atta ul Mohsin
	Dr. Humayun Javed
Assistant Professors	Dr. Muhammad Tariq
	Dr. Farooq Nasir
	Dr. Munir Ahmad
	Dr. Muhammad Asif Aziz
	Dr. Farid Asif Shaheen
	Dr. Imran Bodlah
	Dr. Asim Gulzar

### VI. DEPARTMENT OF FOOD TECHNOLOGY:

Chairman	Prof. Dr. Tariq Masud
Associate Professors	Dr. Asif Ahmad
	Dr. Anwaar Ahmed
Assistant Professors	Dr. Muhammad Ali
	Dr. Asma Sohail
Lecturers	Ms. Asia Latif
	Dr. Kashif Sarfraz Abbasi
	Mr. M. Tauseef Azam



### VII. DEPARTMENT OF HORTICULTURE:

Chairman Professor Associate Professor Assistant Professors

Lecturers

Prof. Dr. Nadeem Akthar Abbasi Dr. Ishfaq Ahmad Hafiz Dr. Khalid Mahmood Qureshi Dr. Shahid Javed Butt Ms. Najma Yousuf Zahid Dr. Imran Hassan Dr. Muhammad Azam Khan Dr. Ambreen Bhatti Dr. Touqeer Ahmad Mr. Mehdi Maqbool Mr. Umer Habib Mr. Usman Shoukat Qureshi Ms. Sumera Hafeez

# Faculty of Crop and Food Sciences

# VIII. DEPARTMENT OF AGRICULTURAL EXTENSION:

Chairman Lecturers Dr. Badar Naseem Siddiqui Mr. Arshad Ali Mr. Muhammad Ali



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# PROGRAMS OFFERED

## **B.Sc. (Hons.) Agriculture**

A minimum of eight semesters duration program after F.Sc (Pre-Medical).

# Admission and Registration

### (i) Minimum Academic Requirements:

a. A candidate holding F.Sc (Pre-Medical) or equivalent certificate from any recognized Institution with minimum 45% marks will be eligible for admission to B.Sc.(Hons.) Agriculture.

# <u>OR</u>

b. A person working as Field Assistant/Agriculture Inspector on regular basis with minimum three years service in Agriculture Department & 1st Division with compulsory subjects of Intermediate (i.e English, Urdu, Pak. Studies and Islamiyat) shall be eligible for admission to B.Sc (Hons.) Agriculture, Maximum age limit will be 45 years, NOC and surety bonds to the effect that after completion of B.Sc (Hons.) Agri. the candidate shall have to serve the Department for at least five years.

# 

c. A candidate having three years Field Assistant Diploma with 1st Division in compulsory subjects of Intermediate (i.e. English, Urdu, Pakistan Studies & Islamiyat) from Sub-campus Khushab of PMAS-AAUR.

#### AGE:

A candidate for clause 1(a & c) must not be more than 23 years of age on 1st October of the year of admission; provided that the Vice-Chancellor may relax age limit in very exceptional case.

### Distribution of Seats for B.Sc. (Hons.) Agri. Morning Programme

CATEGORY	NUMBI	ER OF S	SEATS
1. District wise quota from Punjab	URBAN	RURAL	ΤΟΤΑΙ
Open Merit quota from throughout	t Punjab		68
Rawalpindi	16	48	64
Attock	4	12	16
Jhelum	4	12	16
Chakwal	4	12	16
Gujrat	4	12	16
Mandi Bahuddin	4	12	16
Sialkot (Excluding Tehsil Daska)	4	12	16
Narowal	4	12	16
Mianwali	4	12	16
Dera Ghazi Khan	4	12	16
Muzaffargarh (Tehsil Muzaffargarh	4	12	16
and Kot Addu only)			
Jhang (Tehsil Jhang and Shorkot)	4	12	16
Layyah	4	12	16
Khushab	4	12	16
Bhakar	4	12	16
Rajanpur	4	12	16
Cholistan	2	6	8
2. Provincial Quota			
Sindh Province	-	-	4
Balochistan Province	-	-	6
K.P.K	-	-	4
F.A.T.A.	-	-	10
Azad Jammun & Kashmir	-	-	4
Gilgit - Baltistan	-	-	10
Islamabad	4	12	16
3. Other Reserved Seats			
Pakistan Army	-	-	10
Pakistan Air Force	-	-	2
Foreign Students	-	-	20
Children's of University Employees	-	-	8
Field Assistants/Agriculture Inspecto	r -	-	10
3 years Field Assistant Diploma Hold	lers -	-	4
from Sub Campus Khushab PMAS-A	AUR		
Special/Disabled Persons	-	-	6
4. Evening Programme (Self Finance	ce Basis)		400
Total	,		894

### (ii) **Domicile**

The candidates domiciled in the Barani Areas of Punjab shall only be eligible for admission other than open merit, special quotas and on self finance basis.

Each district of the Barani Area of Punjab has a specified quota to be determined by the Academic Council from time to time. The admission from each district will be made as follows; Rural 75% and urban 25% to be determined on domicile.

Each district will have its own merit for Rural and Urban area candidates separately.

Nominee from each province, FATA, Gilgit-Baltistan, Northern Areas, Azad Jammu & Kashmir, Army, Air Force, Special/disable persons, University Employees will have their own merit separately.

### **Academic Standing:**

(a)	Maximum Grade Point Average	4.00
(b)	Minimum Grade Point Average for obtaining the degree	2.50

To remain on the roll of the University a student shall be required to maintain the following minimum GPA/CGPA in each semester:

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

# **Explanation:**

- (i) A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be promoted to the next semester.
- (ii) A student who does not meet the above requirements may repeat the whole semester once only.

### M.Sc. (Hons.) Agriculture

A minimum of four semesters duration programme after B.Sc. (Hons.) Agriculture in respective discipline such as Agricultural Extension & Communication, Agronomy, Entomology, Soil Science, Plant Breeding & Genetics, Plant Pathology, Horticulture and Food Technology.

#### Admission to the Course:-

A candidate seeking admission to the Course for the Degree of Master of Science in full and partial residence:

- (i) must have passed the Bachelor Degree Examination in aggregate with CGPA of 2.50 or its equivalent for M.Sc. (Hons.) Agriculture, and 45% marks or its equivalent relating to the subject he / she desires to take up.
- (ii) must be resident of the Punjab Barani Areas except the children of the University employees.
- (iii) depending upon the availability of seats as mentioned in (ii) the candidates from the areas outside the Barani areas of Punjab shall also be eligible for admission.
- (iv) the nominees of different departments/ organizations with minimum of 2nd division or its equivalent in Bachelor.

### Academic Standing:-

- (i) Grade Point Average
  - (a) Maximum grade point average: 4.00
  - (b) Minimum grade point average for obtaining Master's Degree: 2.50
- (ii) To remain on the roll of the University a student shall be required to maintain the following minimum GPA /CGPA in each semester:

Semester	CGPA
1st	1.50
2nd	1.75
3rd	2.00
4th	2.50

# Faculty of Crop and Food Sciences

- (iii) A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work or minimum residency, may be allowed to repeat the courses of the previous semesters in which he had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he shall cease to be on the roll.
- (iv) A student will be required to repeat those courses of the previous semesters in which he / she had failed, at the first available opportunity, provided that his / her maximum workload, including the courses being repeated by him / her, will not exceed the normal workload.

#### Ph.D.

Ph.D. Agriculture degree program in the disciplines of Agronomy, Entomology, Food Technology, Soil Science, Horticulture, Plant Pathology, and Plant Breeding & Genetics after M.Sc. (Hons.) Agriculture in the relevant discipline, a minimum of six semesters duration.

#### Admission to Course:

- (i) A candidate seeking admission to the Course for the Degree of Doctor of Philosophy in full and partial residence must:
  - a. have passed the M.Sc (Hons.) Degree Examination or an equivalent examination in 1<sup>st</sup> division or 3.00/4.00 CGPA from a recognized institution in a field of study related to the subject, he desires to take up.
  - b. meet all the requirements mentioned in these regulations.
  - c. the application of the candidate must be accompanied with a comprehensive research proposal that he intends to undertake. He/She will also be required to defend the proposal in an open seminar after admission before undertaking the research study.
  - d. Must have passed University Entrance Test with 70% marks.

### ACADEMIC STANDING:

- (i) **Grade Point Average:** Grade point will be as follows: A for 4, B for 3, and C for 2 and F for failure (that is zero).
  - a. Maximum grade point average 4.00
  - b. Minimum grade point average for obtaining the degree 3.00

(ii) To remain on the rolls of the University, a student shall be required to maintain the minimum CGPA of 3.00.

(iii) A student, who obtains CGPA less than 3.00 may be allowed to repeat once the courses of the previous semesters in which he has failed.

# SCHEME OF STUDIES FOR B.Sc. (HONS.) AGRICULTURE

	COURSE	TITLE OF COURSE	CREDITS
SEMESTER - I	AEC-301	Principles of Agricultural Economics	3(3-0)
	AGR-301	Basic Agriculture	3(2-2)
	ENG-301	Functional English	3(3-0)
	HORT-301	Introductory Horticulture	3(2-2)
	SSH-301	Pakistan Studies	2(2-0)
	MATH-301/BIOL-301	Mathematics-I / Biology-I 3(3-	0) / 3(2-2)
	SS-301	Introduction to Soil Science	3(2-2)

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SEMESTER - II	AGR-302	Summer Crops	3(2-2)
	ENG-302	Communication Skills	3(3-0)
	FT-302	Introduction to Food Science	2(2-0)
	HORT-302	Horticultural Crop Production	2(1-2)
	IS-302 / ET-302	Islamic Studies/Ethics	2(2-0)
	IT-302	Introduction to Information Technology	3(1-4)
	MATH-302 / BIOL-302	Mathematics-II / Biology-II 3(3-0)	/ 3(2-2)
	AS-302	Animal Husbandry	3(2-2)



STAT-402

MGT-402

	COURSE	TITLE OF COURSE	CREDITS
SEMESTER - III	AEN-401	Farm Mechanization & Water Conservation Engineering	3(2-2)
	AGR-401	Winter Crops	3(2-2)
	ENT-401	Introductory Entomology	2(1-2)
	FT-401	Food Processing and Preservation	3(2-2)
	PBG-401	Introductory Genetics	2(1-2)
	PP-401	Introduction to Plant Pathogens	2(1-2)
	STAT-401	Introduction to Statistics	3(3-0)
	SS-401	Instrumentation and Laboratory Techniques	3(2-2)
			20
SEMESTER - IV	AE-402	Introduction to Agricultural Extension, Education & Communication	3(3-0)
	ENT-402	Applied Entomology	3(2-2)
	FR-402	Introduction to Forestry and Range Management	3(2-2)
	PBG-402	Introductory Plant Breeding	3(2-2)
	PP-402	Introduction to Plant Pathology	3(2-2)
	SS-402	Soil and Water Conservation	2(2-0)

**Experimental Designs** 

Introduction to Agri. Business Management

2(1-2)

2(2-0)

SEMESTER - V	COURSE	TITLE OF COURSE	CREDITS
Agricultural Economics	AEC-501 AEC-503 AEC-507 AEC-505 AEC-509	Principles of Microeconomics Principles of Macroeconomics Elementary Calculus Agricultural Problems of Pakistan Introduction to Natural Resource Economics	3 (3-0) 3(3-0) 3(3-0) 3(3-0) 3(3-0)
Agricultural			
Extension	AE-501	Rural Development Programmes in Pakistan	3(2-2) 3(2-2)
	AE-505	Fundamentals of Agricultural Journalism	3(2-2)
	AE-507	Communication and Journalism	3(2-2)
	AE-509	Broadcast Journalism	3(3-0)
<b>A</b>			
Agronomy	AGR-501	Field Crop Physiology	3(2-2)
	AGR-503	Agro-Technology of Field Crops	3(2-2)
	AGR-505	Seed Production and Technology	3(2-2)
	SS-501	Physical Properties of Soil	3(2-2)
	PBG-503	Breeding Field Crops	3(2-2)

	COURSE	TITLE OF COURSE	CREDITS
Entomology	ENT-501	Insect Morphology	3(2-2)
	ENT-503	Principles of Insect Taxonomy	3(2-2)
	ENT-505	Insect Ecology	3(2-2)
	ENT-507	Insect Pests of Household, Man and Animals	3(2-2)
	ENT-509	Insect Behaviour	3(2-2)
Food	ET COA		
recimology	F1-501	Principles of Food Preservation	3(2-2)
	F1-503	Food Analysis and Sensory Evaluation	3(2-2)
	FT-505	Food Microbiology	3(2-2)
	FT-507	Oil and Fat Technology	3(2-2)
	F1-509	Food Toxicology & Salety	3(3-0)
Horticulture	HORT-501	Principles of Fruit Production	3(2-2)
•	HORT-503	Principles of Vegetable Production	3(2-2)
	HORT-505	Principles of Ornamental Crop Production	3(2-2)
	HORT-507	Nursery Management and Certification System	4(3-2)
	HORT-509	Arid Horticulture	2(1-2)
Plant Breeding			
& Genetics	PBG-501	Principles of Genetics	3(2-2)
	PBG-503	Breeding of Field Crops	3(2-2)
	PBG-505	Cytogenetics of Plants	3(2-2)
	PBG-507	Genetic Diversity and Germplasm Resources	3(3-0)
	PBG-509	Molecular Genetics	3(3-0)

	COURSE	TITLE OF COURSE	CREDITS
Plant Pathology	PP-501 PP-503 PP-505 PP-507 PP-509	Introductory Mycology Introduction to Plant Parasitic Nematodes Introduction to Plant Prokaryotes Introduction to Plant Viruses Abiotic Diseases of Plants	3(2-2) 3(2-2) 3(2-2) 3(2-2) 3(2-2)
Soil Science	SS-501 SS-503 SS-505 SS-507 SS-509	Physical Properties of Soils Chemical Properties of Soils Soil Erosion and its Control Soil Genesis and Taxonomy Trace Elements in Agriculture	3(2-2) 3(2-2) 3(2-2) 3(2-2) 3(3-0)
Agricultural Economics	AEC-502 AEC-504 AEC-506 AEC-508 AEC-510	Elementary Production Economics Agribusiness Management Agricultural Finance Mathematics for Economists Rural development	3(3-0) 3(3-0) 3(3-0) 3(3-0) 3(3-0)
Agricultural Extension	AE-502 AE-504 AE-506 AE-508 AE-510	Agricultural Extension Methods News Writing and Editing Audio-Visual Aids in Agricultural Extension Journalism Ethics and Laws Introduction to Cyber Extension	3(2-2) 3(2-2) 3(2-2) 3(3-0) 3(3-0)

	COURSE	TITLE OF COURSE	CREDITS
Agronomy	AGR-502	Crop Growth and Development	3(2-2)
	AGR-504	Principles of Plant Nutrition and Growth Regulator	3(2-2)
	AGR-506	Principles of Weed Science	3(2-2)
	AGR-508 SS-506	Forage and Fodder Production Soil Fertility and Fertilizers	3(2-2) 3(2-2)
	ENT-502	Insoct Physiology	3(2-2)
•	ENT-502	Insect Riodiversity and Evolution	3(2-2)
	ENT-506	Agricultural Pests and Their Management	3(2-2)
	ENT-508	Stored Product Pests and Their Management	3(2-2)
	PP-510	Plant Resistance to Diseases	3(2-2)
Food			~ /
Technology	FT-502	Sugar Technology	3(2-2)
•	FT-504	Dairy Technology	3(2-2)
	FT-506	Post Harvest Technology	3(2-2)
	FT-508 FT-510	Food Chemistry Extrusion Technology	3(3-0) 3(3-0)
Herticulture			
Horticulture	HORT-502	Commercial Fruit Production	3(2-2)
	HORT-504	Introductory Landscape Gardening	3(2-2)
	HORT-508	Post-Harvest Horticulture	3(2-2)
	HORT-510	Medicinal and Aromatic Plants	3(2-2)

	COURSE	TITLE OF COURSE	CREDITS
Diant Draading			
A & Genetics	PBG-502	Breeding Cereal Crops	3(2-2)
	PBG-504	Breeding Maize and Millets	3(2-2)
	PBG-506	Breeding Oilseed Crops	3(2-2)
	PBG-508	New Trends in Crop Improvement	3(2-2)
	PBG-510	Breeding Fodder and Forage Crops	3(2-2)
Plant Pathology	PP-502	Diseases of Filed Crops	3(2-2)
	PP-504	Diseases of Vegetable Crops	3(2-2)
	PP-506	Diseases of Fruits and Ornamentals	3(2-2)
	PP-508	Plant Disease Diagnosis	3(2-2)
	PP-510	Plant Resistance to Diseases	3(2-2)
Soil Science	SS-502	Salt Affected Soils and Water Quality	3(2-2)
	SS-504	Soil Water Plant Relationship	3(3-0)
	SS-506	Soil Fertility and Fertilizers	3(3-0)
	SS-508	Introduction to Soil Microbiology	3(2-2)
	AGR-502	Physiology of Crop Growth and Development	3(2-2)
SEMESTER VI			
Agricultural	AEC-601	Principles of Agricultural Marketing	3(3-0)
	AEC-603	Islamic Economics	3(3-0)
	AEC-605	Development Economics	3(3-0)
	AEC-607	Introduction to Econometrics	3(3-0)
	AEC-609	Introduction to Research Methods	3(2-2)
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	COURSE	TITLE OF COURSE	CREDITS
Agricultural Extension	AE-601 AE-603 AE-605 AE-607 AE-609	Journalistic Writing Journalism an Public Relation Media Management and Advertising Agriculture Reporting and Production Dyadic communication	3(2-2) 3(2-2) 3(2-2) 3(3-0) 3(2-2)
Agronomy		One Mister Management	
	AGR-601 AGR-603 AGR-605 AGR-607 SS-605	Crop Water Management Biological Nitrogen Fixation Field Crop Ecology Stress Physiology Methods of Soil and Plant Analysis	3(2-2) 3(2-2) 3(3-0) 3(2-2) 3(1-4)
Entomology	ENT-601 ENT-603 ENT-605 ENT-607 ENT-609	Integrated Pest Management Plant Resistance to Insect Pests Insecticides and their Application Range and Forest Entomology Agriculture and Environmental Pollution	3(2-2) 3(2-2) 3(2-2) 3(2-2) 3(2-2)
Food Technology	FT-601 FT-603 FT-605 FT-607 FT-609	Nutrition and Dietetics Cereal Technology Confectionery and Snack Foods Food Quality Management Food Laws and Regulation	3(3-0) 3(2-2) 3(2-2) 3(3-0) 3(3-0)
	COURSE	TITLE OF COURSE	CREDITS
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Horticulture	HORT-601 HORT-603 HORT-605 HORT-607	Mushroom Culture Minor Fruits Commercial Flower Production Breeding of Horticultural Crops	3(2-2) 3(2-2) 3(2-2) 3(2-2)
	HORT-609	In Vitro Propagation	3(2-2)
Plant Breeding & Genetics	PBG-601 PBG-603 PBG-605 PBG-607	Breeding Vegetable Crops Breeding Pulse Crops Fundamentals of Plant Biometry Breeding for Quality	3(2-2) 3(2-2) 3(3-0) 3(2-2)
Plant Pathology	PP-601 PP-603 PP-605 PP-607 ENTO-603	Plant Disease Management Introductory Forest Pathology Seed and Post Harvest Pathology Plant Disease Epidemiology Plant Resistance to Insect Pests	3(2-2) 3(2-2) 3(2-2) 3(2-2) 3(2-2)
Soil Science	00.004		
•	SS-603 SS-605 SS-607 AGR-607	Soil and Water Pollution Methods of Soil and Plant Analysis Nuclear Techniques in Soil Research Stress Physiology	3(2-2) 3(2-2) 3(1-4) 3(2-2) 3(2-2)

SEMESTER VIII	COURSE	TITLE OF COURSE	CREDITS
Agricultural Extension	AE-602 AE-604	Psychology of Adult Learning Human Resource Management	2(2-0) 3(2-2)
	AE-606 AE-608 AE-610	Administration and Supervision Project Planning, Execution and Scientific Writing	3(2-2) 3(3-0) 4(1-6)
Aminutum			
Agricultural Economics	AEC-602 AEC-604 AEC-606 AEC-608	Agricultural Policies of Pakistan International Economics Economics of Livestock Production Project Planning, Execution and Scientific Writing	3(3-0) 3(3-0) 3(3-0) 4(1-6)
♦ Agronomy	AGR-602 AGR-604 AGR-606 AGR-608 AGR-610	Organic Farming Conservation Agronomy Environment and Crop Production Project Planning, Execution and Scientific Writing Crop Growth Modeling	2(2-0) 2(2-0) 2(2-0) 4(1-6) 3(2-2)
Entomology			
•	ENT-602 ENT-604 ENT-606 ENT-608	Scientific Writing and Presentation Apiculture Biological Control of Insect Pests and Weeds Project Planning, Execution and Scientific Writing	3(2-2) 3(2-2) 3(2-2) 4(1-6)

	COURSE	TITLE OF COURSE	CREDITS
Food			
Technology	FT-602	Beverage Technology	3(2-2)
•	FT-604	Meat Technology	3(2-2)
	FT-608	Project Planning, Execution and Scientific Writing	3(3-0) 4(1-6)
	HORT-602	Vegetable and Flower Seed Production	3(2-2)
•	HORT-604	Protected Horticulture	3(2-2)
	HORT-606	Business Management in Horticulture	3(3-0)
	HORT-608	Project Planning, Execution and Scientific Writing	4(1-6)
Plant Breeding	PBG-602	Breeding for Stress Conditions	2(2-0)
	PBG604	Breeding Fiber and Sugar Crops	4(3-2)
	PBG-606	Intellectual Property Rights In Crop Varieties	3(3-0)
	PBG608	Project Planning, Execution and Scientific Writing	4(1-6)
Plant Pathology	PP-602	Beneficial Microorganisms	3(2-2)
<b>•</b>	PP-604	Pesticides, Their Action and Application	3(2-2)
	PP-606	Introduction to Molecular Plant Pathology	3(2-2)
	PP-608	Project Planning, Execution and Scientific Writing	4(1-6)

	COURSE	TITLE OF COURSE	CREDITS
Soil Science	SS-602	Organic Waste Management	3(3-0)
	SS-604	Land Degradation and Management	3(3-0)
	SS-606 SS-608	Soil Survey and Land Evaluation Project Planning, Execution and Scientific Writing	3(2-2) 4(1-6)



## Scheme of Studies for M.Sc. (Hons.) Agri. / Ph.D. Agri.

#### Scheme of Studies for M.Sc (Hons.) Agricultural Extension

Scheme of Studies for M.Sc (Hons.) Agri./Ph.D Agri. in Agronomy

Research & Thesis (Ph.D)

COURSE	TITLE OF COURSE C	REDITS	COURSE	TITLE OF COURSE	CREDITS
AE-701	Agricultural Extension Methods	3(2-2)	AGR-701	Modern Crop Production	4(3-2)
AE-702	Program Planning	3(2-2)	AGR-702	Advanced Agronomy	4(3-2)
AE-703	Field Training	3(0-6)	AGR-703	Dryland Agro Management	3(3-0)
AE-704	Monitoring and Evaluation in Agricultural Extension	3(2-2)	AGR-704	Crop Environment	3(2-2)
AE-705	Communication Strategies in Agricultural Extension	3(2-2)	AGR-705	Sustainable Agriculture	3(3-0)
AE-706	Advanced Research Methods	3(2-2)	AGR-706	Weed Management	4(3-2)
AE-707	Scientific and Technical Writing	3(2-2)	AGR-707	Field Crop Experimentation	4(3-2)
AE-708	Electronic Media and Information Communication	3(2-2)	AGR-708	Advanced Seed Technology	4(3-2)
	Technologies in Agricultural Extension		AGR-709	Herbicides and Crop Production	4(3-2)
AE-709	Human Resource Development in Agricultural Extension	3(2-2)	AGR-710	Crop Nutrition	3(2-2)
AE-710	Community Development and Gender Issues	3(3-0)	AGR-711	Recent Advances in Agronomy	3(3-0)
AE-711	International Agricultural Extension Systems	3(2-2)	AGR-712	Plant Water Relations	3(2-2)
AE-712	Adult and Continuing Education	3(2-2)	AGR-713	Seed Physiology	3(3-0)
AE-713	Administration and Supervision in Agricultural Extension	3(3-0)	AGR-714	Agro-environment Conservation	3(3-0)
AE-719	Special Problem	1(1-0)	AGR-715	Seed Production and Management	3(2-2)
AE-720	Seminar	1(1-0)	AGR-716	Principles of Remote Sensing	3(2-2)
AE-799	Research & Thesis	10(0-20)	AGR-717	Integrated Agriculture	3(3-0)
		- ( )	AGR-718	Crop Modeling	3(2-2)
			AGR-719	Special Problem	1(1-0)
			AGR-720	Seminar-I	1(1-0)
				Seminar-II	1(1-0)
			AGR-799	Research & Thesis [M.Sc. (Hons.)]	10(0-20)

AGR-799

50(0-100)

## Scheme of Studies for M.Sc (Hons.) Agri./Ph.D Agri. in Entomology

COURSE	TITLE OF COURSE	
ENT-701	Research Methods in Entomology	4(2-4)
ENT-702	Origin and Phylogeny of Insects	3(3-0)
ENT-703	Environmental Entomology	2(2-0)
ENT-704	Advanced Insect Morphology	3(2-2)
ENT-705	Advanced Insect Ecology	3(2-2)
ENT-706	Numerical Taxonomy	2(1-2)
ENT-707	Advanced Insect Physiology and	3(2-2)
ENT-708	Embryology	3(2-2)
ENT-709	Insect Molecular Biology	3(2-2)
ENT-710	Insecticide Resistance and Management	3(2-2)
ENT-711	Insects in Relation to Plant Diseases	3(2-2)
ENT-712	Medical and Veterinary Entomology	3(2-2)
ENT-713	Acarology	3(2-2)
ENT-714	Classification of Immature Insects	3(2-2)
ENT-715	Insecticide Toxicology	3(2-2)
ENT-716	Insect Nutrition	3(2-2)
ENT-717	Insecticide and Public Health	3(2-2)
ENT-718	Advances in Biological Control	3(2-2)
ENT-719	Advanced Insect Behaviour	1(1-0)
ENT-720	Special Problems	1(1-0)
ENT-720	Seminar-I	1(1-0)
ENT-721	Seminar-II	3(1-4)
ENT-722	Pesticides Application Equipment	3(2-2)
ENT-723	Advances in Pest Management Research	3(2-2)
ENT-724	Insect Cytogenetics and Cytotaxonomy	3(2-2)
ENT-725	Insect Pathology	3(2-2)
ENT-726	Insect Biochemistry	3(3-0)
ENT-727	Chemical Ecology of Insects	3(2-2)
ENT-799	Forensic Entomology and Techniques	10(0-20

## Scheme of Studies for M.Sc (Hons.) Agri./Ph.D Agri. In Food Technology



DURSE	TITLE OF COURSE	CREDITS
FT-701	Quality Assurance Management	3(3-0)
T-702	Food Additives	3(2-2)
FT-703	Food Enzymology	3(2-2)
FT-704	Food Biotechnology	3(2-2)
FT-705	Food Toxicology	3(3-0)
FT-706	Baking Science and Technology	3(2-2)
FT-707	Milling of Cereals	3(2-2)
FT-708	Food Carbohydrates Chemistry and Technology	3(3-0)
FT-709	Post Harvest Management of Fruits and Vegetables	3(3-0)
FT-710	Dairy Chemistry	3(2-2)
FT-711	Dairy Microbiology	3(2-2)
FT-712	Processing of milk and milk products	3(2-2)
FT-713	Industrial waste Management	3(3-0)
FT-714	Chemistry of Edible Oils and Fats	3(2-2)
T-715	Industrial Processing of Edible Oils and Fats Products	3(2-2)
T-716	Plant Design and Layout of Food Factories	3(3-0)
-T-717	Processing of Meat and Meat Products	3(2-2)
-T-718	Chemistry and Technology of Sugar Processing	3(2-2)
-T-719	Special Problem	1(1-0)
-T-720	Seminar-I	1(1-0)
	Seminar-II	1(1-0)
-T-721	Advances in Beverages	3(2-2)
-1-722	Food Packaging	3(2-2)
-1-723	Physical Properties of Food	3(2-2)
-1-724	Recent Advances In Food Sciences and Technology	3(3-0)
-1-725	Advanced Food Microbiology	3(2-2)
-1-726	Advanced Food Chemistry	3(2-2)

#### Scheme of Studies for M.Sc (Hons.) Agri./Ph.D Agri. in Horticulture

	TITLE OF COURSE	CREDITS
HORT-701	Rootstock for Horticultural Crops	3(2-2)
HORT-702	Advanced Physiology of Horticultural Pla	nts 3(2-2)
HORT-703	Advanced Fruit Production	3(2-2)
HORT-704	Advanced Vegetable Production	3(2-2)
HORT-705	Breeding of Horticultural Plants	3(2-2)
HORT-706	Landscape Horticulture	3(2-2)
<b>HORT-707</b>	Nutrition of Horticultural Crops	3(2-2)
HORT-708	Propagation of Horticultural Plants	3(2-2)
<b>HORT-709</b>	Plant Growth Regulators	3(3-0)
HORT-710	Plant Tissue Culture	3(1-4)
HORT-711	Advanced Ornamental Plants Production	3(2-2)
HORT-712	Post Harvest Physiology of Horticultural Cro	ops 3(2-2)
HORT-713	Environmental Horticulture	3(2-2)
HORT-719	Special Problem	1(1-0)
HORT-720	Seminar-I	1(1-0)
	Seminar-II	1(1-0)
<b>HORT-799</b>	Research & Thesis [M.Sc.(Hons.)]	10(0-20)
HORT-799	Research & Thesis (Ph.D)	50(0-100)

# Scheme of Studies for M.Sc (Hons.) Agri./Ph.D Agri. in Plant Breeding & Genetics

Course No.	Course Title Cred	it Hours
PBG-701	Principles of Plant Breeding	3(2-2)
PBG-702	Cytogenetics of Crop Plants	3(2-2)
PBG-703	Biometrical Genetics	3(2-2)
PBG-704	Advanced Methods in Plant Breeding	3(2-2)
PBG-705	Mutation Breeding	3(3-0)
PBG-706	Evolution of Field Crops	2(2-0)
PBG-707	Advanced Genetics	3(3-0)
PBG-708	Genetic Engineering and Biotechnology	3(2-2)
PBG-709	Breeding of Fodder and Forage Crops	3(2-2)
PBG-710	Evolution of Field Crops-I	3(3-0)
PBG-711	Cereal Genetics	4(3-2)
PBG-712	Maize Genetics	4(3-2)
PBG-713	Advanced Cytogenetics	3(3-0)
PBG-714	Genetics of Plant Diseases and Insect Resistance	9 3(2-2)
PBG-715	Hybrid Seed Production	3(2-2)
PBG-716	Breeding for Stress Environments	3(2-2)
PBG-719	Special Problem	1(1-0)
PBG-720	Seminar-I	1(1-0)
	Seminar-II	1(1-0)
PBG-799	Research Thesis [M.Sc.(Hons.)]	10(0-20)
PBG-799	Research Thesis (Ph.D)	50(0-100)



Scheme of Studies for M.Sc (Hons.) Agri./Ph.D Agri. in Plant Pathology





Course No.	Course Title	Credit Hours
PP-701	Fungal Plant Pathology	3(2-2)
PP-702	Fungal Systematics	3(2-2)
PP-703	Plant Bacteriology	3(2-2)
PP-704	Plant Nematology	3(2-2)
PP-705	Biology and Cultivation of Edible Fungi	3(2-2)
PP-706	Plant Virology	3(2-2)
PP-707	Biochemistry and Physiology of Diseased Plant	ts 3(2-2)
PP-708	Genetics of Plant Pathogens	3(3-0)
PP709	Seed Pathology	3(2-2)
PP-710	Post Harvest Pathology	3(2-2)
PP-711	Insects in Relation to Plant Diseases	3(2-2)
PP-712	Ecology and Epidemiology of Plant Diseases	3(2-2)
PP-713	Urban Plant Pathology	3(2-2)
PP-714	Integrated Plant Disease Management	3(2-2)
PP-715	Plant Quarantine and SPS measures	3(2-2)
PP-716	Molecular Plant Microbe Interactions	3(2-2)
PP-717	Forest and shade tree Pathology	3(2-2)
PP-718	Advances in Plant Pathology	3(2-2)
PP-719	Special Problem	1(1-0)
PP-720	Seminar-I	1(1-0)
	Seminar-II	1(1-0)
PP-721	Molecular Plant Virology	3(2-2)
PP-722	<b>Biological Control of Plant Pathogens</b>	3(2-2)
PP-799	Research thesis for M. Sc (Hons)	10 (0-20)
PP-799	Research thesis for (Ph. D)	50(0-100)

# Scheme of Studies for M.Sc (Hons.) Agri./Ph.D Agri. in Soil Science

Course No.	Course Title	<b>Credit Hours</b>	
M.Sc (Ho	<u>ns.) Soil Science</u>		
SS-701	Instrumental Techniques	2(1-2)	
SS-702	Soil Genesis and Morphology	3(2-2)	
SS-703	Soil Chemistry	3(2-2)	
SS-704	Soil Fertility and Plant Nutrition	3(2-2)	
SS-705	Soil Physics	3(2-2)	
SS-706	Soil and Water Pollution & its Contro	3(2-2)	
SS-707	Soil Microbiology and Biochemistry	3(2-2)	
SS-708	Soil and Water Resources Managem	nent 3(2-2)	
SS-709	Soil Mineralogy	3(2-2)	
SS-710	Soil Classification	3(2-2)	
SS-711	Soil Salinity	3(2-2)	
SS-712	Fertilizer Technology and Marketing	3(2-2)	
SS-719	Special Problem	1(1-0)	
SS-720	Seminar-I	1(1-0)	
<u>Ph.D (Soi</u>	I Sciences)		
SS-713	Advanced Soil Physics	3(3-0)	
SS-714	Advanced Soil Fertility	3(3-0)	
SS-715	Advanced Soil Microbiology	3(3-0)	
SS-716	Advanced Soil Chemistry	3(3-0)	
SS-720	Seminar-I	1(1-0)	
	Seminar-II	1(1-0)	
SS-799	Research Thesis [M.Sc.(Hons.)]	10(0-20)	
	Research Thesis (Ph.D)	50(0-100)	



## Faculty of Sciences



The faculty consists of different departments dealing with Statistics and Mathematics, Social and Biological Sciences. The faculty offers undergraduate courses leading to the degrees of BS in Biochemistry, Microbiology and Economics and postgraduate courses leading to the degrees of M.Sc. (Hons.) in Agricultural Economics, M.Sc. in Statistics, Mathematics, Social and Biological Sciences, M.Phil and Ph.D. in Biological Sciences (Bio-Chemistry, Biotechnology, Botany and Zoology), Economics/Agri. Economics and Sociology.

**Dean** Prof. Dr. S. M. Saqlan Naqvi There are seven departments in the faculty.

#### . DEPARTMENT OF BIOCHEMISTRY:

Chairman Professor Associate Professor Assistant Professors

Lecturers

Dr. Ghazala Kaukab Dr. S.M. Saqlan Naqvi Dr. M. Javaid Asad Dr. Feroza Hamid Wattoo Dr. M. Sheeraz Ahmad Dr. Pakeeza Arzo Shaiq Dr. Sadia Saeed Ms. Hina Ali Mr. Saqib Hussain Haidri Ms. Noureen Aslam Ms. Tehseen Rubab



## Faculty of Sciences



#### II. DEPARTMENT OF BOTANY:

Chairperson	Prof. Dr. Muhammad Arshad
Professor	Dr. Abdul Waheed
Associate Professors	Dr. Rahmat Ullah Qureshi
	Dr. Abida Akram
Assistant Professors	Dr. Noshin Ilyas
	Dr. M. Naveed Iqbal Raja
	Dr. Yamin Bibi
	Dr. Mubashrah Munir
.ecturers	Dr. Zia ur Rehman Mashwani
	Ms. Saira Asif

#### **III. DEPARTMENT OF ZOOLOGY AND BIOLOGY:**

Chairman	Prof. Dr. Mazhar Qayyum	
Associate Professor	Dr. Shamim Akhtar	
	Dr. Muhammad Sajid Nadeem	
Assistant Professors	Dr. Farhana Riaz Ch.	
	Dr. Amjad Rashid Kayani	
	Dr. Muhammad Mushtaq	
	Dr. M. Zubair Anjam	
	Dr. Abida Arshad	
Lecturer	Mr. Muhammad Irfan	



#### IV. DEPARTMENT OF STATISTICS AND MATHEMATICS:

Offers M.Sc/M.Phil degrees in Statistics and M.Sc in Mathematics. The department also offers supporting courses to undergraduate and postgraduate classes in Faculty of Crop & Food Sciences, Faculty of Forestry Range Management & Wildlife, Faculty of Veterinary & Animal Sciences.

Chairman	Dr. Muhammad Hanif	
Assistant Professors	Mr. Muhammad Azam Ch.	
	Mr. Nasir Jamal	
	Dr. Saima Mustafa	
Lecturers	Ms. Shahrukh Hussain	
	Mr. Nasir Ali	
	Ms. Beenish Shakir	

#### V. DEPARTMENT OF ECONOMICS AND AGRICULTURAL ECONOMICS:

Offers BS (Economics), B.Sc. (Hons.) Agricultural Economics, M.Sc. (Hons.) degree in Agricultural Economics and M.Sc. degree in Economics. The department also offers M.Phil in Economics and Ph.D. Degrees' in Agriculture Economics, Economics alongwith supporting courses to undergraduate and postgraduate students.

Chairman	Prof. Dr. Abdul Saboor	
Associate Professor	Dr. Ikram Ali Malik	
	Dr. Irfan Ahmed Baig	
Assistant Professors	Dr. Abdul Qayyum Mohsin	
	Mr. Arshad Mahmood Malik	
Lecturers	Ms. Saima Asad	
	Mr. Nasir Mahmood	
	Mr. Bashir Ahmad Khan	
	Ms. Gulnaz Hameed	
	Ms. Sumera Saleem	

#### VI. DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY :

Offers M.Phil degree in Sociology and M.Sc. degree in Sociology, Anthropology and Criminology. The department also offers supporting courses in Rural sociology to undergraduate and postgraduate students of Faculty of Crop & Food Sciences and Faculty of Veterinary & Animal Sciences.

## Faculty of Sciences

#### Chairman Assistant Professors

#### Lecturers

Dr. Muhammad Farooq Dr. Aneela Afzal Dr. Abid Ghafoor Dr. Mazhar Hussain Ms. Asma Zafar Ms. Mahwish Zeeshan Ms. Faria Ibad Mirza Mr. Zaheer Adnan Ms. Nazia Rafiq Ms. Humera Dinar

#### VII. DEPARTMENT OF HUMANITIES:

Offers supporting courses in English, Pakistan Studies and Islamic Studies to the undergraduate classes.

Assistant Professor (Islamiyat) Dr. Ghulam Hussain

Lecturer (Pak Studies)

Ms. Salma Shujeb Akhtar

Lecturer (English)

Mr. Yasir Iqbal

## **DEGREES OFFERED** BS (Biochemistry)

A minimum of eight semesters and maximum of twelve semesters duration program after Intermediate Science Certificate (Pre-Medical) or and equivalent certificate.

#### 1. Minimum Requirements for Award of BS (Biochemistry) Degree

- (i) The duration of the Course for completing the course for the degree of Bachelor of Sciences (Biochemistry) shall normally be eight semesters and maximum 12 semesters.
- (ii) The minimum course requirement is 130 credit hours.
- (iii) A full time student shall be required to take courses not less than 12 credits hours in a semester.

#### 2. Admission and Registration:-

- i. Minimum Academic Requirement:
  - a. A person holding Intermediate Sciences Certificate (Pre-Medical) or an equivalent certificate from any recognized Institute/College with at least 45% marks excluding Hafiz-e-Quran, or any other marks specified shall be eligible for admission to BS Biochemistry.



#### ii. Domicile

- a. For Morning program Seats are for all Punjab and Islamabad Capital Territory.
- b. Two seats reserved for the children of University employees and students of Gilgit-Baltistan each.
- c. For Evening program 50 seats are on all Pakistan basis.

#### 3. Admission Authority:-

The Dean, Faculty of Sciences shall be responsible for admission to the programme.

AGE: A candidate must not be more than 23 years of age on 1<sup>st</sup> October of the year of admission: provided that the Vice Chancellor may relax age limit in very exceptional cases.

#### 4. Academic Standing:-

#### Grade Point Average

Maximum grade point average (GPA) 4.00 Minimum grade point average for obtaining Degree (CGPA) 2.50 To remain on the roll of the University a student shall required to maintain the following minimum CGPA in each semester:

Semester	CGPA
1 <sup>st</sup>	0.75
2 <sup>nd</sup>	1.00
3 <sup>rd</sup>	1.25
4 <sup>th</sup>	1.50
5 <sup>th</sup>	1.75
<b>6</b> <sup>th</sup>	2.00
7 <sup>th</sup>	2.25
8 <sup>th</sup>	2.50

#### 5. Explanation:-

- (i) A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be promoted to the next semester.
- (ii) A student who does not meet the above requirements may repeat the whole semester once only.
- (iii) If a student fails to achieve CGPA 2.50 in the 8<sup>th</sup> semester, he shall have to repeat the course/courses of lowest grade(s) to make CGPA of 2.50 within the maximum time allowed for the degree otherwise he/shall cease on the University roll.

## **BS (Microbiology)**

A minimum of eight semesters and maximum of twelve semesters duration program after Intermediate Science Certificate (Pre-Medical) or and equivalent certificate.

#### 1. Minimum Requirements for Award of BS (Microbiology) Degree

- (i) The duration of the Course for completing the course for the degree of Bachelor of Sciences (Microbiology) shall normally be eight semesters and maximum 12 semesters.
- (ii) The minimum course requirement is 130 credit hours.
- (iii) A full time student shall be required to take courses not less than 12 credits hours in a semester.

#### 2. Admission and Registration:-

- i. Minimum Academic Requirement:
  - a. A person holding Intermediate Sciences Certificate (Pre-Medical) or an equivalent certificate from any recognized Institute/College with at least 45% marks excluding Hafiz-e-Quran, or any other marks specified shall be eligible for admission to BS Microbiology.
- ii. Domicile
  - a. For Morning program Seats are for all Punjab and Islamabad Capital Territory.
  - b. Two seats reserved for the children of University employees and students of Gilgit-Baltistan each.

#### 3. Admission Authority:-

The Dean, Faculty of Sciences shall be responsible for admission to the programme.

AGE: A candidate must not be more than 23 years of age on 1<sup>st</sup> October of the year of admission: provided that the Vice Chancellor may relax age limit in very exceptional cases.

#### 4. Academic Standing:-

Grade Point Average

Maximum grade point average (GPA) 4.00 Minimum grade point average for obtaining Degree (CGPA) 2.50 To remain on the roll of the University a student shall required to maintain the following minimum CGPA in each semester:

Semester	CGPA
1 <sup>st</sup>	0.75
2 <sup>nd</sup>	1.00
3 <sup>rd</sup>	1.25
4 <sup>th</sup>	1.50
5 <sup>th</sup>	1.75
<b>6</b> <sup>th</sup>	2.00
7 <sup>th</sup>	2.25
8 <sup>th</sup>	2.50

#### 5. Explanation:-

- (i) A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be promoted to the next semester.
- (ii) A student who does not meet the above requirements may repeat the whole semester once only.
- (iii) If a student fails to achieve CGPA 2.50 in the 8<sup>th</sup> semester, he shall have to repeat the course/courses of lowest grade(s) to make CGPA of 2.50 within the maximum time allowed for the degree otherwise he/shall cease on the University roll.

## **BS (Economics)**

A minimum of eight semesters and maximum of twelve semesters duration program after Intermediate or an equivalent certificate.

#### 1. Minimum Requirements for Award of BS (Economics) Degree

- (I) The duration of the Course for completing the course for the degree of Bachelor of Sciences (Economics) shall normally be eight semesters and maximum 12 semesters.
- (ii) The minimum course requirement is 130 credit hours while the maximum is 140 credit hours (as per approved criteria of Higher Education Commission).
- (iii) A full time student shall be required to take courses not less than 12 credits hours in a semester.

#### 2. Admission and Registration:-

- i. Minimum Academic Requirement:
  - a. A person holding Intermediate or an equivalent certificate from any recognized Institute/College with at least 45% marks excluding Hafiz-e-Quran, or any other marks specified shall be eligible for admission to BS (Economics).
- ii. Domicile
  - (a) There will be open merit. All Pakistanis including AJK and GB domiciled are eligible for the degree programme provided that the are meeting the above admission criteria.
  - (b) There will be two seats reserved for the children of University employees.
- iii. Number of seats will be 120 (60 each in morning and evening sessions)
- 3. Admission Authority:-

The Dean, Faculty of Sciences in consultation with Chairman of the concerned department shall be responsible for admission to the programme.

AGE: A candidate must not be more than 23 years of age on 1<sup>st</sup> October of the year of admission: provided that the Vice Chancellor may relax age limit in very exceptional cases.

#### Academic Standing:-4.

Grade Point Average

Maximum grade point average (GPA)

4.00 2.50

Minimum grade point average for obtaining Degree (CGPA)

To remain on the roll of the University a student shall required to maintain the following minimum CGPA in each semester:

Semester	CGPA	5.	Explanation:-
1 <sup>st</sup>	0.75	(i)	A student who maintains the minimum GPA/CGPA for promotion and meets the
2 <sup>nd</sup>	1.00		requirements will be promoted to the next semester.
3 <sup>rd</sup>	1.25	(ii)	A student who does not meet the above requirements may repeat the whole
<b>4</b> <sup>th</sup>	1.50		semester once only.
<b>5</b> <sup>th</sup>	1.75	(iii)	If a student fails to achieve CGPA 2.50 in the $8^{th}$ semester, he shall have to
<b>6</b> <sup>th</sup>	2.00		repeat the course/courses of lowest grade(s) to make CGPA of 2.50 within the
7 <sup>th</sup>	2.25		maximum time allowed for the degree otherwise he/shall cease on the
8 <sup>th</sup>	2.50 /	/	University roll.

M.Sc A minimum of four semesters and maximum of six semesters duration program after Bachelor's degree in the relevant subject. The degrees are offered in Anthropology, Biochemistry, Biology, Botany, Economics, Mathematics, Sociology, Statistics, Zoology and M.Sc (Hons.) in Agri. Economics.

#### Admission to the Course:-

A candidate seeking admission to the Course for the Degree of Master of Science in full and partial residence:

- must have passed the Bachelor Degree Examination in aggregate with at least 45% marks from a recognized institution. (i) For admission in:
  - a. M.Sc Biochemistry: Any three subjects out of Zoology, Botany, Chemistry & Biochemistry are compulsory.
  - b. M.Sc Biology: Botany and Zoology are compulsory. c.
  - d. M.Sc Zoology: Zoology is compulsory. (Minimum 45% marks required in each compulsory subject mentioned above in addition to overall 45% in B.Sc)
  - e. M.Sc Anthropology & Criminology: Candidates with Sociology, Economics, Social Work, Psychology or Geography at Bachelor level.
  - f. M.Sc Sociology: Sociology one of the subject in B.A.
  - h. M.Sc Economics: B.A/B.Sc with Economics or B.Com
- M.Sc Statistics: B.A/B.Sc with Statistics & B.Com g. i. M.Sc Mathematics: B.A/B.Sc with Mathematics
- (ii) the nominees of different departments/ organizations with minimum of 2nd division or its equivalent in Bachelor
- admissions in the Morning programmes are on all Punjab and Islamabad Capital Territory basis. (iii)
- (iv) admissions in the evening programme are open on all Pakistan basis.

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M.Sc Botany: Botany is compulsory.

#### Academic Standing:-

- (i) Grade Point Average
  - (a) Maximum grade point average:

4.00

- (b) Minimum grade point average for obtaining Master's Degree: 2.50
- (ii) To remain on the roll of the University a student shall be required to maintain the following minimum GPA/CGPA in each semester:

Semester	GPA/CGPA
1st	1.50
2nd	1.75
3rd	2.00
4th	2.50

- (iii) A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work or minimum residency, may be allowed to repeat the courses of the previous semesters in which he had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he/ she shall cease to be on the roll.
- (iv) A student will be required to repeat those courses of the previous semesters in which he / she had failed, at the first available opportunity, provided that his / her maximum workload, including the courses being repeated by him / her, will not exceed the normal workload.

## Master of Philosophy (M.Phil):-

In Anthropology, Biochemistry, Biology, Biotechnology, Botany, Zoology, Statistics, Economics and Sociology with a minimum of 4 and maximum of 6 semesters duration for full time student and a minimum of 6 and maximum of 8 semesters for part time students

#### **ADMISSION TO THE COURSE:-**

The candidate seeking admission to the course for the M.Phil Degree must have passed the M.Sc. Examination in aggregate with CGPA not less than 2.50 or with 45% of the marks secured under Annual Examination system or its equivalent in the field of study or related disciplines from HEC recognized institutions.

#### **ACADEMIC STANDING:**

(i) **Grade Point Average**:

Maximum grade point average Minimum grade point average for obtaining M.Phil Degree 4.00 2.50

- (ii) To remain on the rolls of the University a student shall be required to maintain the following GPA/CGPA in each semester.
- (iii) A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work or minimum residency, may be allowed to repeat the courses of the previous semesters in which he/she had obtained the lowest grades in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he/she shall cease to be on the roll.

Semester	CGPA	
1st 2nd 3rd 4th	1.50 1.75 2.00 2.50	

(iv) A student will be required to repeat those courses of the previous semesters in which he/she had failed at the first available opportunity, provided that his/her maximum workload, including the courses being repeated by him/her will not exceed the normal workload.

## Ph.D.

Ph.D. degree program in the disciplines of Biochemistry, Biotechnology, Botany, Zoology, Economics, Agricultural Economics and Sociology with a minimum of six semesters duration and maximum 10 semesters duration. Residency period for part time student is minimum of 8 semesters.

#### Admission to Course:

A candidate seeking admission to the course for the Degree of Doctor of Philosophy in full and partial residence must:

- (i) have passed the M.Phil Degree Examination or an equivalent examination in 1st division or with CGPA 3.00 out of 4.00 from a recognized institution in a field of study related to the subject, he/ she desires to take up.
- (ii) meet all the requirements mentioned in these regulations.
- (iii) the applications of the candidates must be accompanied with a comprehensive research proposal that he/ she intends to undertake. The candidates will also be required to defend the proposal in an open seminar after admission before undertaking the research study.
- (iv) must have passed University Entrance Test with 70% marks.

#### ACADEMIC STANDING: (i) Grade Point Av

- **Grade Point Average:** Grade points will be as follow:
  - a. Maximum grade point average
  - b. Minimum grade point average for obtaining the degree 3.00

4.00

### Scheme of studies for BS (Biochemistry)

#### **Core Courses**

S.No.	COURSE	TITLE OF COURSE	CREDITS
1	BCH-301	Organic Chemistry	3(2-2)
2	BCH-302	Introductory Biochemistry	3(2-2)
3	BCH-303	Inorganic Chemistry	3(2-2)
4	BCH-304	Carbohydrates	4(3-2)
5	BCH-401	Amino Acids and Proteins	3(2-2)
6	BCH-402	Principles of Genetics	3(2-2)
7	BCH-403	Physical Chemistry	3(2-2)
8	BCH-404	Lipids	3(2-2)
9	BCH-405	Cell Biology	3(2-2)
10	BCH-406	Tissue and Cell Culture	3(2-2)
11	BCH-407	General Microbiology	3(2-2)
12	BCH-408	Plant Biochemistry	3(2-2)
13	BCH-409	Biomembranes	2(2-0)
14	BCH-410	Biophysics	2(2-0)
15	BCH-501	Fundamentals of Enzymology	3(2-2)
16	BCH-502	Biochemical Techniques	3(1-4)
17	BCH-503	Biosafety and Ethics	2(2-0)
18	BCH-504	Molecular Biology	3(2-2)
19	BCH-505	Nucleic Acids	2(2-0)
20	BCH-506	Integrated Metabolism	2(2-0)
21	BCH-507	Genetic Engineering	3(2-2)
22	BCH-508	Protein Chemistry	2(2-0)
23	BCH-509	Cellular Signaling	3(3-0)
24	BCH-510	Introduction to Bioenergetics	2(2-0)
25	BCH-511	Industrial Biochemistry	3(2-2)
26	BCH-520	Seminar-I	1(1-0)

- (li) To remain on the rolls of the University a student shall be required to maintain the minimum CGPA of 3.00.
- (iii) A student who obtains CGPA less than 3.00 may be allowed to repeat once the courses of the previous semesters in which he/ she had failed.
- (iv) For admission to Ph.D programmes in Biochemistry, Botany and Zoology, minimum criteria will be followed as per HEC policy.

S.No.	COURSE	TITLE OF COURSE	CREDITS
27	BCH-601	Research Planning and Report Writir	ng3(1-4)
28	BCH-602	Nutritional Biochemistry	3(2-2)
29	BCH-603	Bioinformatics	3(2-2)
30	BCH-604	Biotechnology	3(2-2)
31	BCH-605	Immunology and Immunochemistry	3(2-2)
32	BCH-606	Current Trends in Biochemistry	3(3-0)
33	BCH-607	Good Laboratory Practices and	2(2-0)
		Quality Control	
34	BCH-619	Special Problem	1(1-0)
35	BCH-620	Seminar-II	1(1-0)
COM	PULSORY CC	OURSES	
36	ENG-301	Functional English	3(3-0)
37	SSH-301	Pakistan Studies	2(2-0)
38	MATH-303	General mathematics	3(3-0)
39	SOC-301	Introduction of Sociology	3(3-0)
40	ENG-302	Communication SKills	3(3-0)
41	STAT-301	Statistics and Biometry	3(3-0)
42	CS-301	Introduction to Computing	3(2-2)
43	IS/ET-401	Islamic Studies/Ethics	2(2-0)
44	ZOOL-402	Human Physiology	3(3-0)
45	BOT-501	Plant Physiology	3(2-2)
OPTI	ONAL COURS	<u>SES</u>	
46	BCH-608	Proteomics	3(3-0)
47	BCH-609	Clinical Biochemistry	3(2-2)
48	BCH-610	Medical Microbiology	3(2-2)
49	BCH-611	Vitamins and Minerals	3(2-2)

50	BCH-612	Environmental Biochemistry	3(2-2)
51	BCH-613	Medical Nutrition Therapy	3(3-0)
52	BCH-614	Cell Organelles	3(3-0)

## SCHEME OF STUDIES FOR BS (Microbiology)

#### Semester-I

Course Code	Title of Course	Credit Hours
ENG-301	Functional English	3(3-0)
SSH-301	Pakistan Studies	2(2-0)
SOC-301	Introduction to Sociology	2(2-0)
MATH-303	General Mathematics	3(3-0)
MIC-301	General Microbiology	3(2-2)
MIC-302	Cell Biology - I	3(2-2)

#### **Semester-III**

Course Code	Title of Course	Credit Hours
IS/ET-401	Islamic Studies/Ethics	2(2-0)
BCH-504	Molecular Biology	3(2-2)
MIC-401	General Microbiology - III	3(2-2)
MIC-402	Biochemistry - I	3(2-2)
MIC-403	Cell Biology - II	3(2-2)
MIC-404	Microbial Taxonomy	3(2-2)

#### Semester-V

Course Code	Title of Course	<b>Credit Hours</b>
MIC-501	Medical Microbiology	3(3-0)
MIC-502	Environmental Current Issues	3(2-2)
MIC-503	Microbial Anatomy & Physiology	3(2-2)
MIC-504	Food Preservation Technology	2(2-0)
MIC-505	Human Physiology - II	3(2-2)
BCH-501	Fundamentals of Enzymology	3(2-2)

53	BCH-615	Nanobiotechnology	3(3-0)
54	BCH-616	Agricultural Biochemistry	3(3-0)
55	BCH-617	Nutrition and Dietetics	3(2-2)

#### Semester-II

Course Code	Title of Course	Credit Hours
STAT-301	Statistics and Biometry	3(3-0)
CS-301	Introduction to Computing	3(2-2)
ENG-302	Communication Skills	3(2-2)
MIC-303	General Microbiology - II	3(2-2)
MIC-304	General Virology	3(2-2)

#### **Semester-IV**

Course Code	Title of Course	<b>Credit Hours</b>
ECON-301	Introduction to Economics	2(2-0)
MIC-405	Biochemistry - II	3(2-2)
MIC-406	Human Physiology - I	3(2-2)
MIC-407	Soil Microbiology	3(2-2)
MIC-408	Environmental Microbiology	2(2-0)
MIC-409	Immunobiology	3(2-2)

#### **Semester-VI**

Course Code	Title of Course	Credit Hours
MIC-506	Biotechnology	3(2-2)
MIC-507	Fresh Water Microbiology	3(2-2)
MIC-508	Research Methodology	3(3-0)
MIC-509	Mycology	3(3-0)
MIC-510	Bacterial Genetics	3(2-2)
MIC-520	Seminar - I	1(1-0)

#### **Semester-VII**

Course Code	Title of Course C	<b>Credit Hours</b>
MIC-601	Molecular Disease Diagnostic	3(2-0)
MIC-602	Epidemiology of Infectious Disease	es 3(2-0)
MIC-603	Molecular Mechanisms of	3(2-2)
	Antimicrobial Drugs	
MIC-604	<b>Bio-Safety and Risk Management</b>	2(2-0)
	Optional - I	3(*-*)
	Optional - II	3(*-*)

### **Optional Courses**

BCH-402	Principles of Genetics	3(2-2)
BCH-406	Tissue and Cell Culture	3(2-2
BCH-409	Biomembranes	2(2-0
BCH-410	Biophysics	2(2-0
BCH-502	Biochemical Techniques	3(1-4
BCH-505	Nucleic Acids	2(2-0
BCH-506	Integrated Metabolism	2(2-0
BCH-507	Genetic Engineering	3(2-2
BCH-508	Protein Chemistry	2(2-0
BCH-509	Cellular Signaling	3(3-0
BCH-510	Introduction to Bioenergetics	2(2-0
BCH-511	Industrial Biochemistry	3(2-2
BCH-601	Research Planning and Report Writing	3(1-4)
BCH-602	Nutritional Biochemistry	3(2-2)
BCH-603	Bioinformatics	3(2-2
BCH-605	Immunology and Immunochemistry	3(2-2
BCH-608	Proteomics	3(3-0
BCH-609	Clinical Biochemistry	3(2-2
BCH-612	Environmental Biochemistry	3(2-2)
BCH-614	Cell Organelles	3(3-0)
BCH-615	Nanobiotechnology	3(3-0
	BCH-402 BCH-409 BCH-409 BCH-502 BCH-505 BCH-506 BCH-507 BCH-507 BCH-508 BCH-509 BCH-510 BCH-510 BCH-611 BCH-602 BCH-603 BCH-603 BCH-608 BCH-609 BCH-612 BCH-614 BCH-615	BCH-402Principles of GeneticsBCH-406Tissue and Cell CultureBCH-409BiomembranesBCH-410BiophysicsBCH-502Biochemical TechniquesBCH-505Nucleic AcidsBCH-506Integrated MetabolismBCH-507Genetic EngineeringBCH-508Protein ChemistryBCH-509Cellular SignalingBCH-510Introduction to BioenergeticsBCH-511Industrial BiochemistryBCH-601Research Planning and Report WritingBCH-602Nutritional BiochemistryBCH-603BioinformaticsBCH-604ProteomicsBCH-605Immunology and ImmunochemistryBCH-608ProteomicsBCH-609Clinical BiochemistryBCH-612Environmental BiochemistryBCH-614Cell OrganellesBCH-615Nanobiotechnology

#### **Semester-VIII**

Course Code	e Title of Course	<b>Credit Hours</b>
MIC-605	Current Trends in Microbiology	3(3-0)
MIC-606	Clinical Bacteriology	3(3-2)
	Optional - III	3(*-*)
	Optional - IV	3(*-*)
MIC-620	Seminar - II	1(1-0)
MIC-619	Special Problem	1(1-0)
MIC-607	Good Laboratory Practices and	2(2-0)
	Quality Control	

#### SCHEME OF STUDIES FOR BS (Economics)

#### **Semester-I**

Course Code	e Title of Course C	redit Hours
ECON-301	Introduction to Economics	3(3-0)
ECON-303	Introduction to Economy of Pakis	tan 2(2-0)
STAT-301	Basics of Statistics	2(2-0)
CS-301	Introduction to Computing	3(3-0)
MATH-301	Mathematics-I	3(3-0)
ENG-301	Functional English	3(3-0)
IS-301	Islamic Studies	2(2-0)

#### **Semester-II**

Course Code	Title of Course	<b>Credit Hours</b>
ECON-302	Introduction to Microeconomics	3(3-0)
ECON-304	Introduction to Macroeconomics	3(3-0)
ECON-306	Introduction to Marketing	3(3-0)
SOC-308	Introduction to Sociology	3(3-0)
MATH-302	Mathematics-II	3(3-0)
ENG-302	Communication Skills	3(3-0)
SSH-302	Pakistan Studies	2(2-0)

#### Semester-III

<b>Course Code</b>	Title of Course Cr	edit Hours
ECON-401	Agricultural Economics	2(2-0)
ECON-403	Introduction to Banking and Finance	ce 3(3-0)
ECON-405	Econometrics-I	3(3-0)
ECON-407	Elementary Calculus	3(3-0)
ECON-409	Islamic Economics	3(3-0)
MGT 411	Introduction to Management	3(3-0)

#### Semester-V

<b>Course Code</b>	Title of Course	<b>Credit Hours</b>
ECON-501	Microeconomics	3(3-0)
ECON-503	Macroeconomics	3(3-0)
ECON-505	Economic Problems of Pakistan	3(3-0)
ECON-507	Mathematics for Economists	3(3-0)
ECON-509	Development Economics-II	3(3-0)
ECON-508	Human Resource Development	3(3-0)

#### **Semester-VII**

Course Code	Title of Course	Credit Hours
ECON-601	International Trade	3(3-0)
ECON-603	Monetary Economics	3(3-0)
ECON-605	Rural Development	3(3-0)
ECON-607	Natural Resource Economics	2(2-0)
ECON-609	Managerial Economics	3(3-0)
STAT-601	Experimental Design	3(3-0)
Semester-VII		

## Course Code

Course Code	Title of Course	<b>Credit Hours</b>
ECON-602	Project Planning and Manageme	ent 3(3-0)
ECON-604	Research Methods in Economics	s 2(1-2)
ECON-606	Marketing System Analysis	3(3-0)
ECON-608	Labour Economics	2(2-0)
ECON-619	Special Problem	1(1-0)
ECON-612	Internship	3(0-6)

#### **Semester-IV**

Course Code	Title of Course	Credit Hours
ECON-402	Institutional Economics	3(3-0)
ECON-404	Principles of Accounting	2(3-0)
ECON-406	Econometrics-II	3(3-0)
ECON-408	Development Economics-I	3(3-0)
MATH 415	Differential Equations	3(3-0)
STAT-402	Introduction to Statistics	3(3-0)

#### **Semester-VI**

Course Code	Title of Course	<b>Credit Hours</b>
ECON-502	International Economics	3(3-0)
ECON-504	Production Economics	3(3-0)
ECON-506	Public Finance	3(3-0)
ECON-520	Seminar	1(1-0)
ECON-510	Political Economy of Pakistan	3(3-0)
ECON 512	Environmental Economics	3(3-0)

## Scheme of studies for M.Sc. Biochemistry

S.No.	COURSE	TITLE OF COURSE C	REDITS
1	BCH-701	Biochemistry	3(2-2)
2	BCH-702	Bio-informatics	3(2-2)
3	BCH-703	Metabolism	3(2-2)
4	BCH-704	Molecular Biology	3(2-2)
5	BCH-705	Enzymology	3(2-2)
6	BCH-706	Tissue and Cell Culture	3(2-2)
7	BCH-707	Cellular Signaling Mechanism	3(3-0)
8	BCH-708	Human Physiology	3(2-2)
9	BCH-709	Biological Methods and Instrumentation	on 2(0-4)
10	BCH-710	Protein Chemistry	2(2-0)
11	BCH-711	Biomembranes	2(2-0)
12	BCH-712	Genetic Engineering	3(2-2)
13	BCH-713	Biotechnology	3(2-2)
14	BCH-720	Seminar-I	1(1-0)
15		Comprehensive Examination	P/F
		· · ·	

#### OPTIONAL COURSES FOR M.Sc./M.Phil/Ph.D Biochemistry

S.No.	COURSE	TITLE OF COURSE	CREDITS
1	BCH-714	Clinical Biochemistry	3(1-4)
2	BCH-715	Medical Microbiology	3(2-2)
3	BCH-716	Nutrition and Dietetics	3(2-2)
4	BCH-718	Plant Biochemistry	3(3-0)
5	BCH-719	Special Problem	1(1-0)
6	BCH-720	Seminar-I	1(1-0)
7	BCH-720	Seminar-II	1(1-0)
8	BCH-721	Environmental Biochemistry	3(2-2)
9	BCH-722	Recent Topics in Molecular Biology	3(3-0)
10	BCH-723	Current Topics in Microbiology	3(3-0)
11	BCH-724	Fundamentals of Biotechnology	4(3-2)
12	BCH-725	Trends in Immunology	3(3-0)
13	BCH-726	Advanced Biochemistry	3(3-0)
14	BCH-727	General Microbiology	3(2-2)
15	BCH-728	Immunology and Immunochemistry	3(2-2)
16	BCH-731	Advances in Biochemistry	3(3-0)
17	BCH-732	Medical Nutrition Therapy	3(3-0)
18	BCH-733	Plant Molecular Physiology	3(3-0)
19	BCH-734	Numerical Problems in Biochemistry	3(3-0)
20	BCH-735	Principles of Advanced Biochemical Techniques	3(3-0)
21	BCH-736	Proteomics	3(3-0)
22	BCH-737	Cellular and Molecular Immunology	3(3-0)
23	BCH-751	Advances in Biotechnology	3(3-0)
24	BCH-799	Thesis	10(0-20)
25	BCH-799	Thesis	50(0-100
			•

#### SCHEME OF STUDIES FOR M.PHIL BIOTECHNOLOGY

S.No.	COURSE	TITLE OF COURSE	CREDITS
1 1	BIOT-701	Applications of Biotechnology	3(3-0)
2	BIOT-702	Advanced Recombinant DNA Technology	y 2(2-0)
3 1	BIOT-703	Techniques in Biotechnology	3(2-2)
4 I	BIOT-704	Cell and Tissue Culture	3(2-2)
5 I	BIOT-705	Advances in Plant Biotechnology	3(3-0)
6 I	BIOT-706	Health Biotechnology	3(3-0)
7 I	BIOT-707	Laboratory Practices and Bioethics	2(2-0)
8 I	BIOT-708	Bioinformatics	3(1-4)
9 I	BIOT-715	Fundamentals of Pharmacology	3(3-0)
10 I	BIOT-716	Molecular Bases of Human Genetic Diseases	3(3-0)
11 I	BIOT-719	Special Problem	1(1-0)
12 I	BIOT-720	Seminar - I	1(1-0)
13 I	BIOT-720	Seminar - II	1(1-0)
14 \$	STAT-702	Biostatistical Analysis	3(3-0)
15		Minor/Optional Course	3(*-*)
16 I	BIOT-799	Research & Thesis	10(0-20)

#### SCHEME OF STUDIES FOR PH.D BIOTECHNOLOGY

S.No.	COURSE	TITLE OF COURSE	CREDITS			
1	BIOT-720	Seminar - I	1(1-0)			
2	BIOT-720	Seminar - II	1(1-0)			
3	BCH-751	Advances in Biotechnology	3(3-0)			
4	BIOT-799	Thesis	50(0-100)			
5		Comprehensive Examination	P/F			
Com	pulsory Cou	Irses:- In addition to the above courses, the	e students			
are re	are required to take compulsory course:-					

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1	BO1-751	Integrated Biological Resource Management	3(:3-())
			$\lambda \cup \cup \lambda$

- 2. ZOOL-751 Project Planning, Monitoring and Evaluation 3(3-0)
- 3. STAT-711 Advanced Experimental Design with 3(2-2) Data Processing

#### SCHEME OF STUDIES FOR M.Sc. BIOLOGY

#### **CORE COURSES**

S.No.	Course No.	Course Title	Credit Hours
1	BIOL-701	Cellular Biology	3(2-2)
2	BIOL-702	Physiological System of Animals	3(2-2)
3	BIOL-703	Plant Physiology	3(2-2)
4	BIOL-704	Environmental Biology	3(2-2)
5	BIOL-705	Evolutionary Biology	2(2-0)
6	BIOL-706	Biosystematics	4(3-2)
7	BIOL-707	Biodiversity	4(3-2)
8	BIOL-708	Economic Biology	4(3-2)
9	BIOL-709	Fundamentals of Microbiology and Immunology	/ 3(2-2)
10	BIOL-710	Mycology and Plant Pathology	3(2-2)
11	BIOL-711	Research Planning and Report Writing	3(1-4)
12	BIOL-720	Seminar-I	1(1-0)
13	BIOL-728	Concepts of Genetics	3(2-2)



#### **OPTIONAL COURSES FOR M. Sc/M.Phil Biology**

S.No.	Course No.	Course Title Cre	edit Hours
1	BIOL-712	Principles of Biotechnology	3(2-2)
2	BIOL-713	Plant Reproductive Biology	3(3-0)
3	BIOL-714	Biosociology	3(2-2)
4	BIOL-715	Cacti and Succulents	3(2-2)
5	BIOL-716	Aromatic, Poisonous and Medicinal Plan	ts 3(2-2)
6	BIOL-717	Plant Adaptation to Arid Environment	3(2-2)
7	BIOL-718	Neurology and Neurochemistry	3(2-2)
8	BIOL-719	Special Problem	1(1-0)
9	BIOL-720	Seminar-I	1(1-0)
10	BIOL-720	Seminar-II	1(1-0)
11	BIOL-721	Fish Biology	3(2-2)
12	BIOL-722	Host/Parasite Interactions in Animals	3(2-2)
13	BIOL-723	Immunology	3(2-2)
14	BIOL-724	Conservation Biology	3(2-2)

S.No.	Course No	. Course Title	Credit Hours
15	BIOL-725	Animal Reproductive Biology	3(2-2)
16	BIOL-726	Patho-physiology	3(2-2)
17	BIOL-727	Population Biology	2(2-0)
18	BIOL-729	General Pharmacology	3(2-2)
19	BIOL-730	Conservation of Phytodiversity	3(2-2)
20	BIOL-731	Molecular Endocrinology	3(3-0)
21	BIOL-732	Mytochondria and Plastids	3(3-0)
22	BIOL-733	Freshwater Biology	3(2-2)
23	BIOL-735	Physiology and Genetics of	3(2-2)
		Biological Nitrogen Fixation	
24	BIOL-736	General Pharmacognosy	3(2-2)
25	BIOL-734	Molecular Evolution	3(3-0)
26	BIOL-799	Thesis	10(0-20)

#### SCHEME OF STUDIES FOR M. Sc. /M.Phil BOTANY

S.No.	Course No.	Course Title	Credit Hours
1	BOT-701	Diversity in Non-Vascular Plants	3(2-2)
2	BOT-702	Plant and Cell Physiology-I	3(2-2)
3	BOT-703	Plant and Cell Physiology-II	3(2-2)
4	BOT-704	Phytosociology	3(2-2)
5	BOT-705	Plant Taxonomy and Embryology	3(2-2)
6	BOT-706	Diversity in Vascular Plants	3(2-2)
7	BOT-707	Plant Anatomy	3(2-2)
8	BOT-708	Mycology and Plant Pathology	3(2-2)
9	BOT-709	Plant Ecology	3(2-2)
10	BOT-710	Ethnobotany	3(2-2)
11	BOT-711	Environmental Pollution	3(2-2)
12	BOT-712	Research Planning and Report Wri	iting 3(1-4)



S.No.	Course No.	Course Title Crea	lit Hours
13	BOT-713	Medicinal Plants of Pakistan	3(2-2)
14	BOT-714	Molecular Plant Development	3(3-0)
15	BOT-715	Phytogeography	3(2-2)
16	BOT-716	Research Techniques and Instrumentation	3(2-2)
17	BOT-717	Phytohormons	3(2-2)
18	BOT-718	Arid Zone Ecology	3(2-2)
19	BOT-719	Special Problem	1(1-0)
20	BOT-720	Seminar-I	1(1-0)
21	BOT-720	Seminar-II	1(1-0)
22	BOT-721	Stress Physiology	3(2-2)
23	BOT-722	Plant Nutrition	3(2-2)
24	BOT-723	Advances in Plant Physiology	3(3-0)

S.No.	Course No.	Course Title	Credi	t Hours
25	BOT-724	Molecular Basis of Morphogenesis		3(3-0)
26	BOT-725	Molecular Advances in Phytosystematics		3(3-0)
27	BOT-726	Environmental Toxicology and Bioremedi	ation	3(2-2)
28	BOT-727	Environmental Biotechnology		3(3-0)
29	BOT-728	Principles of Genome Analysis and Geno	omics	3(3-0)
30	BOT-729	Biology of Halophytes		3(2-2)
31	BOT-730	Environmental Plant Physiology		3(2-2)
32	BOT-731	Conservation and Management of Plant	Resources	3(1-4)
33	BOT-732	Plant Proteomics		3(2-2)
34	BOT-733	Physiological Genetics of Plants		3(3-0)
35	BOT-734	Forensic Botany		3(3-0)
36	BOT-735	Plant-Microbe Interactions		3(2-2)
37	BOT-736	Plant Systematics		3(2-2)
38	BOT-737	Applied Enthobotany		3(2-2)
39	BOT-738	Advances in Phycology		3(2-2)
40	BOT-799	Thesis		10(0-20)

#### SCHEME OF STUDIES FOR M. Sc. ZOOLOGY

#### **CORE COURSES**

S.No.	Course No.	Course Title	Credit Hours
1	ZOOL-701	Cell Biology	3(2-2)
2	ZOOL-702	Animal Diversity and Zoogeograph	y 3(2-2)
3	ZOOL-703	Principles of Genetics	3(2-2)
4	ZOOL-704	Comparative Animal Physiology	3(2-2)
5	ZOOL-705	Animal Behavior	3(2-2)
6	ZOOL-706	Developmental Biology	3(2-2)
7	ZOOL-707	Comparative Endocrinology	3(2-2)

S.No.	Course No.	Course Title	Credit Hours
8	ZOOL-708	Aquaculture and Fisheries	3(2-2)
9	ZOOL-709	Principles of Animal Systematics	2(1-2)
10	ZOOL-710	Foundations of Parasitology	3(2-2)
11	ZOOL-711	Research Planning and Report Writi	<mark>ng 3(</mark> 1-4)
12	ZOOL-720	Seminar	1(1-0)

## OPTIONAL COURSES FOR M.Sc./M.Phil Zoology

S.No.	Course No.	Course Title C	redit Hours
1	ZOOL- 712	Clinical Endocrinology	3(2-2)
2	ZOOL -713	Clinical Bacteriology	3(2-2)
3	ZOOL -714	Medical Virology	3(2-2)
4	ZOOL -715	Faunal Biodiversity of Pakistan	3(2-2)
5	ZOOL -716	Museology	3(0-6)
6	ZOOL -717	Reproductive Physiology	3(2-2)
7	ZOOL -718	Applied Reproductive Physiology	3(2-2)
8	ZOOL -719	Special Problem	1(1-0)
9	ZOOL -720	Seminar-I	1(1-0)
10	ZOOL -720	Seminar-II	1(1-0)
11	ZOOL -721	Helminthology and Protozoology	3(2-2)
12	ZOOL -722	Wildlife Conservation and Manageme	ent 3(2-2)
13	ZOOL -723	Aquaculture System Management	3(2-2)
14	ZOOL -724	Fish Nutrition and Health	3(2-2)
15	ZOOL -725	Human Genetics	3(2-2)





#### OPTIONAL COURSES FOR M.Sc./M.Phil Zoology

S.N	o. Course No.	Course Title Cred	dit Hours
16	ZOOL -726	Ecological and Microbial Genetics	3(2-2)
17	ZOOL -727	Epidemiology of Animal Parasites	3(2-2)
18	ZOOL -728	Cellular and Molecular Physiology	3(3-0)
19	ZOOL -729	Wildlife of Pakistan	3(2-2)
20	ZOOL -730	Quantitative Zoology	3(2-2)
21	ZOOL -731	Behavioural Ecology	3(3-0)
22	ZOOL -732	Herpetology	3(2-2)
23	ZOOL -733	Ornithology	3(2-2)
24	ZOOL -734	Mammalogy	3(2-2)
25	ZOOL -735	Advances in Aquaculture	3(3-0)
26	ZOOL -736	Aquaculture Biotechnology	3(2-2)
27	ZOOL -737	Limnology	3(2-2)
28	ZOOL -738	Wildlife Ecology	3(3-0)
29	ZOOL -739	Wildlife Techniques & Data Analysis	3(3-0)
30	ZOOL -740	Molecular Parasitology	3(3-0)
31	ZOOL -741	Vector Biology	3(2-2)
32	ZOOL-742	Animal Diversity and Conservation	3(2-2)
33	ZOOL-743	Population Genetics	3(2-2)
34	ZOOL -799	Thesis	10(0-20)

## Scheme of studies for Ph.D. In Biochemistry, Botany, Biology & Zoology

#### S.No. Course No. Course Title

1	BCH-751	Advances in Biotechnology	3(3-0)
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2	BOT-751	Integrated Biological Resource Management	3(3-0)
3	ZOOL-751	Project Planning, Monitoring & Evaluation	3(3-0)
4	ZOOL-752	Integrated Principles of Zoology	3(3-0)
5	STAT-702	Experimental Design & Computer Application	3(2-2)
6	BCH-720	Seminar-I, II	1(1-0)
7	BOT-720	Seminar-I, II	1(1-0)
8	ZOOL-720	Seminar-I, II	1(1-0)
9	BOT-799	Thesis	50(0-10
10	ZOOL-799	Thesis	50(0-10
11	BCH-799	Thesis	50(0-10



Scheme of Studies for M.Sc. Statistics



S.No.	Course No.	Course Title Cre	dit Hours
1	STAT-700	Elements of Statistics and Biometry	3(3-0)
2	STAT-701	Experimental Statistics	3(3-0)
3	STAT-702	Biostatistical Analysis	3(3-0)
4	STAT-703	Statistical Methods	3(3-0)
5	STAT-704	Bayesian Statistics	3(3-0)
6	STAT-705	Probability-I	3(3-0)
7	STAT-706	Probability-II	3(3-0)
8	STAT-707	Sampling Techniques-I	3(3-0)
9	STAT-708	Sampling Techniques-II	3(3-0)
10	STAT-709	Experimental Design-I	3(3-0)
11	STAT-710	Experimental Design-II	3(3-0)
12	STAT-711	Advanced Experimental Design with Data Process	ing 3(2-2)
13	STAT-712	Multivariate Analysis	3(3-0)
14	STAT-713	Statistical Quality Control and Reliability	3(2-2)
15	STAT-714	Econometrics-I	3(3-0)
16	STAT-715	Econometrics-II	3(3-0)
17	STAT-716	Survey and Research Report	4(2-4)
18	STAT-717	Non Parametric Statistics	2(2-0)
19	STAT-718	Time Series Analysis and Forecasting	3(3-0)
20	STAT-719	Special Problem	1(1-0)
21	STAT-720	Seminar	1(1-0)
22	STAT-721	Population Analysis	2(2-0)
23	STAT-722	Mathematical Statistics	3(3-0)
24	STAT-723	Statistical Inference-I	3(3-0)
25	STAT-724	Statistical Inference-II	2(2-0)

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#### S.No. Course No. **Course Title Credit Hours** MATH-701 **Computer Applications in Statistics** 3(1-4) 1 Theory of Matrices and Numerical Analysis **MATH-704** 3(3-0) 2 **Operations Research** 3 **MATH-705** 3(3-0) 4 MATH-706 Calculus-I 2(2-0) 5 **MATH-707** Calculus-II 2(2-0) MATH-708 **Computer Application Software** 6 4(2-4) 7 **MATH-709 Computer Programming** 3(2-2) 8 **MATH-710 Computational Analysis** 3(1-4)

#### Scheme of Studies for M.Phil Statistics

S No. Course No Course Title

#### Scheme of Studies for M.Sc Mathematics

	0.110.			ant nours	0.1
	1	STAT-751	Applied Experimental Designs	3(3-0)	1
	2	STAT-752	Linear Models	3(3-0)	3
	3	STAT-753	Applied Multivariate Analysis	3(3-0)	4
	4	STAT-754	Bayesian Analysis	3(3-0)	
	5	STAT-755	Probability and Survival Analys	sis 3(3-0)	7
	6	STAT-756	Applied Survey Sampling	3(2-2)	8
	7	STAT-757	Applied Statistical Inference	3(3-0)	9
	8	STAT-758	Research Methods	3(2-2)	12
I	9	STAT-759	Categorical Analysis	3(3-0)	12
	10	STAT-760	Regression Analysis	3(3-0)	
	11	STAT-719	Special Problem	1(1-0)	1
	12	STAT-720	Seminar-I	1(1-0)	16
	13	STAT-720	Seminar-II	1(1-0)	
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#### MINOR COURSES FOR M.PHIL STATISTICS

S.No.	Course No. Course Title	Credit Hours
1	MATH-772 Applied Numerical Analysis	s 3(3-0)
2	MATH-773 Operations Research Mod	els 3(3-0)

#### MINOR COURSES FOR M.SC MATHEMATICS

S.No.	Course No.	Course Title Credit	Hours
1	STAT-725	Mathematical Statistics	3(3-0)
2	STAT-726	Stochastic Processes	3(3-0)
3	STAT-700	Elements of Statistics and Biometry	3(3-0)
4	STAT-701	Experimental Statistics	3(3-0)

Credit Hours		S.No.	Course No.	Course Title Cre	edit Hours
iane	3(3-0)	1	MATH-700	Real Analysis	3(3-0)
igns	3(3-0)	2	MATH-702	Group Theory	3(3-0)
	3(3-0)	3	MATH-703	Linear Algebra	3(3-0)
sis	3(3-0)	4	MATH-705	Operations Research	3(3-0)
	3(3-0)	5	MATH-709	Computer Programming	3(2-2)
		6	MATH-711	Ordinary Differential Equations	3(3-0)
naiysis	3(3-0)	7	MATH-712	Numerical Analysis	3(3-0)
	3(2-2)	8	MATH-713	Topology	3(3-0)
e	3(3-0)	9	MATH-714	Complex Analysis	3(3-0)
	3(2-2)	10	MATH-715	Mathematical Physics	3(3-0)
	3(2-2)	11	MATH-716	Combinatorics	3(3-0)
	3(3-0)	12	MATH-717	Special Functions	3(3-0)
	3(3-0)	13	MATH-718	Modeling and Simulation	3(2-2)
	1(1-0)	14	MATH-719	Special Problem	1(1-0)
	1(1 0)	15	MATH-720	Seminar	3(3-0)
	1(1-0)	16	MATH-721	Functional Analysis	3(3-0)
	1(1-0)	17	MATH-722	Partial Differential Equations	3(3-0)
		18	MATH 723	Rings and Fleids	3(3-0)
S		19		Optimization	3(3-0)
		20			3(3-0)
Credit	Hours	21		Fluid Mochanica	2(2 0)
s	3(3-0)	22		Analytical Dynamics	3(3-0)
	2(2, 0)	23	MATH-720 MΔTH-720	Quantum Mechanics	3(3-0)
leis	3(3-0)	25	MATH-730	Differential Geometry	3(3-0)
		26	MATH-731	Special Relativity	3(3-0)
	_	27	MATH-732	Galois Theory	3(3-0)
ATICS		28	MATH-733	Measure Theory	3(3-0)
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ĺ	S.No.	Course No.	Course Title Credit	Hours
	5	STAT-712	Multivariate Analysis	3(3-0)
	6	STAT-713	Statistical Quality Control and Reliability	3(2-2)
l	7	STAT-716	Survey and Research Report	4(2-4)

#### Scheme of studies for M.Sc. Agri. Economics/ Economics

COURSE	TITLE OF COURSE	CREDITS
ECON-701	Micro Economics-I	3(3-0)
ECON-702	Macro Economics-I	3(3-0)
ECON-703	Micro Economics-II	3(3-0)
ECON-704	Macro Economics-II	3(3-0)
AEC-705	Research Methods in Social Sciences	2(1-2)
AEC-720	Seminar	1(1-0)
AEC-710	Research Thesis	10(0-20)
AEC-714	Production Economics	3(3-0)
AEC-715	Applied Econometerics	3(3-0)
AEC-730	Advanced Marketing Agri. Analysis	3(3-0)
AEC-732	Agricultural Development	3(3-0)
AEC-738	Project Planning and Evaluation	3(3-0)
AEC-740	Econometrics	3(3-0)
AEC-741	Mathematical Economics	3(3-0)
AEC-742	Agriculture Policy & Trade	3(3-0)
AEC-743	Economics of Land & Water Resources	3(3-0)
AEC-744	Mathematical Programming	3(3-0)
AEC-745	Topics in Arid Agriculture	3(3-0)
AEC-746	Human Resource Development	3(3-0)
AEC-747	Environmental Economics	3(3-0)
AEC-748	Economic System of Islam	3(3-0)
AEC-749	WTO Regime and Developing Countries	3(3-0)
AEC-799	Research Thesis	10(0-20)



#### Courses for M.Sc. (Hons.)/ M.Phil Agri. Economics/Economics

S.No.	Course.No.	Course Title C	redit Hours
1	ECON-705	Topic in Economics Analysis	2(1-2)
2	ECON-714	Monetary Theory and Banking	3(3-0)
3	ECON-715	Econometrics-I	3(3-0)
4	ECON-716	Econometrics-II	3(3-0)
5	ECON-719	Special Problem	1(1-0)
6	ECON-720	Seminar-I	1(1-0)
7	ECON-720	Seminar-II	1(1-0)
8	ECON-721	Public Finance	3(3-0)
9	ECON-724	Human Resources Management	3(3-0)
10	ECON-728	Managerial Economics	3(3-0)
11	ECON-730	International Economics	3(3-0)
12	ECON-732	Forecasting and Business Analysis	s 3(3-0)
13	ECON-734	Labour Economics	3(3-0)
14	ECON-736	Economic Development	3(3-0)
15	ECON-738	Selected Topic in Economics	3(3-0)
16	ECON-740	Tools and Technique in Applied Econom	nics 3(3-0)
17	ECON-748	Islamic Economics	3(3-0)
			4

#### **COURSES FOR M.Sc./ M.Phil**

S.No.	Course.No.	Course Title Cred	lit Hours
18	AEC/ECON-751	Microeconomics Analysis	3(3-0)
19	AEC/ECON-752	Macroeconomics Analysis	3(3-0)
20	AEC/ECON-753	Mathematical Methods in Economics	3(3-0)
21	AEC/ECON-754	Econometric Techniques and Application	3(3-0)
22	ECON-755	Mathematical Programming and Application	3(3-0)
23	ECON-756	Preparation of Projects and Evaluation	3(3-0)
24	ECON-757	Agricultural Economics and Farm Managemen	t 3(3-0)
25	AEC/ECON-758	Research Methods in Economics	2(1-2)
26	ECON-761	International Trade	3(3-0)
27	ECON-762	Monetary Economics	3(3-0)
28	ECON-763	Public Finance and Fiscal Policy	3(3-0)
29	ECON-764	Economic Development in Developing Countrie	es 3(3-0)
30	ECON-799	Research Thesis	10(0-20)
30	ECON-799	Research thesis	10(0-20)

# Scheme of studies for Ph.D in Agri. Economics/ Economics

S.No.	Course No.	Course Title	Credit Hours
1	AEC-771	Microeconomic Theory	3(3-0)
2	AEC-772	Macroeconomic Theory	3(3-0)
3	AEC-773	Advanced Econometrics	3(3-0)
4	AEC-774	Advanced Mathematical Economic	cs 3(3-0)
5	ECON-719	Special Problem	1(0-2)
6	ECON-720	Seminar-I	1(1-0)
7	ECON-720	Seminar-II	1(1-0)
8	ECON-799	Research Thesis	50(0-100)
9	AEC-799	Research Thesis	50(0-100)

#### Scheme of studies for M.Sc. Sociology

#### CORE COURSES

S.No.	Course No.	Course Title	Credit Hours
1	SOC-701	Principles of Sociology	3(3-0)
2	SOC-702	Diffusion of Innovations	3(3-0)
3	SOC-703	Sociological Theory	3(3-0)
4	SOC-704	Demographic Dynamics	3(3-0)
5	SOC-705	Research Methods in Sociology	3(3-0)
6	SOC-719	Special Problem	1(1-0)
7	SOC-720	Seminar	1(1-0)
8	SOC-799	Research Thesis	10(0-20)

#### **Optional Courses**

S No	Courso No	Course Title	adit Llaura
3.110.	Course No.	Course mile Cr	euit nouis
9	SOC-706	Community Development	3(3-0)
10	SOC-707	Social Psychology	3(3-0)
11	SOC-708	Rural Sociology	3(3-0)
12	SOC-709	Sociology of Globalization	3(3-0)
13	SOC-710	Sociology of Health	3(3-0)
14	SOC-711	Social Institutions	3(3-0)
15	SOC-712	Gender and Development	3(3-0)
16	SOC-713	Criminology	3(3-0)
17	SOC-714	Social Problems of Pakistan	3(3-0)
18	SOC-715	Technical Writing	3(3-0)
19	SOC-716	Project Planning and Management	3(3-0)
20	SOC-717	Non Government Organization Managem	ent 3(3-0)
21	SOC-718	Technology and Culture	3(3-0)
22	SOC-721	Sociology of Knowledge	3(3-0)
23	SOC-722	Sociology of Education	3(3-0)

#### Scheme of studies for M.Sc. Anthropology

#### **CORE COURSES**

S.No.	Course No.	Course Title	Credit Hours
1	ANTH-701	Introduction to Anthropology	3(3-0)
2	ANTH-702	Physical Anthropology	3(3-0)
3	ANTH-703	Socio-Cultural Anthropology	3(3-0)
4	ANTH-704	Anthropological Theory	3(3-0)
5	ANTH-705	Linguistic Anthropology	2(1-2)
6	ANTH-706	Archaeological Anthropology	3(3-0)
7	ANTH-707	Ethnographic Research Methods	3(3-0)
8	ANTH-719	Special Problem	1(1-0)
9	ANTH-720	Seminar	1(1-0)
10	ANTH-799	Thesis	10(0-20)

#### **Optional Courses**

S.No.	Course No.	Course Title Cr	edit Hours
1	ANTH-708	Human Variations and Genetics	3(3-0)
2	ANTH-709	Urban Societies	3(3-0)
3	ANTH-710	Perspectives on Development	3(3-0
4	ANTH-712	Rituals and Supernatural Beliefs	3(3-0)
5	ANTH-713	Political Process and Governance	3(3-0)
6	ANTH-714	Sex, Gender and Kinship	3(3-0
7	ANTH-715	Emergence of State and Culture	3(3-0
8	ANTH-716	Environment, Technology and Socie	ty 3(3-0
9	ANTH-717	Human Ecology	3(3-0)
10	ANTH-718	Modernity and Post Modernity	3(3-0
11	ANTH-721	Past Societies	3(3-0
12	ANTH-722	Culture and Medical Practices	3(3-0
13	ANTH-723	Human Development	3(3-0
14	ANTH-724	Anthropology of Family and Kinship	3(3-0)
15	ANTH-725	South Asian Society	3(3-0
16	ANTH-726	Applied Anthropology	3(3-0
17	ANTH-727	Global Cultural Transformation	3(3-0)
18	ANTH-728	Anthropology of Pakistan	3(3-0)

### Scheme of studies for M.Phil Anthropology

#### **CORE COURSES**

S.No.	Course No.	Course Title	Credit Hours
1	ANTH-731	Theoretical Debates in Anthropology	3(3-0)
2	ANTH-732	Social Theory	3(3-0)
3	ANTH-733	Methodological Issues in Anthropology	/ 3(2-2)
4	ANTH-734	Methods in Anthropological Research	3(2-2)
5	ANTH-719	Special Problem	1(1-0)
6	ANTH-720	Seminar-I	1(1-0)
7	ANTH-720	Seminar-II	1(1-0)
8	ANTH-799	Thesis	10(0-20)

#### **OPTIONAL COURSES**

S.No.	Course No.	Course Title Crea	lit Hours
9	ANTH-735	Agrarian Societies & Culture	3(3-0)
10	ANTH-736	Indigenous Knowledge System	3(3-0)
11	ANTH-737	Issues in Development Policy	3(3-0)
12	ANTH-738	Cultural Geography & Human Ecology	3(3-0)
13	ANTH-739	Ethnology of Pakistan	3(3-0)
14	ANTH-740	Historical Anthropology & Cultural History	3(3-0)

#### Scheme of Studies for M.Sc. Criminology

#### Semester - I

Course No.	Course Title	Credit Hours
CRM-701	Introduction to Criminology	3(3-0
CRM-702	Introduction to Security Studies	3(3-0
CRM-703	Social Statistics in Criminology	3(3-0
CRM-704	Patterns of crime and PPC	3(3-0
CRM-705	Criminal Justice administration in Pakistan	a 3(3-0

#### Semester - II

Course No.	Course Title	Credit Hours
CRM-706	Correctional Institutions	3(3-0)
CRM-707	Advanced Criminology Theory	3(3-0)
CRM-708	Criminal Psychology	3(3-0)
CRM-709	Research Methods in Criminology	3(3-0)
CRM-710	Police & Policing	3(3-0)

#### Semester - III

Course Title	Credit	Hours
Criminal Investigations		3(3-0)
Phenology		3(3-0)
Irses (Three of the following subjects to be offer	ed)	
Islamic Perspectives on Crime and Punishi	ment	3(3-0)
Organized Crime And Money Laundering		3(3-0)
Community Justice and Crime Prevention		3(3-0)
Cyber Crime		3(3-0)
Crime & Media		3(3-0)
	Course Title Criminal Investigations Phenology Irses (Three of the following subjects to be offer Islamic Perspectives on Crime and Punishr Organized Crime And Money Laundering Community Justice and Crime Prevention Cyber Crime Crime & Media	Course Title Credit Criminal Investigations Phenology Irses (Three of the following subjects to be offered) Islamic Perspectives on Crime and Punishment Organized Crime And Money Laundering Community Justice and Crime Prevention Cyber Crime Crime & Media

#### Semester - IV

Elective Courses (Three of the following subjects to be offered)

Course No.	Course Title Cre	edit Hours
CRM-718	Introduction to private security	3(3-0)
CRM-719	Terrorism & Counter Terrorism	3(3-0)
CRM-720	Drug Abuse and Related Crimes	3(3-0)
CRM-721	Forensic Science in Criminology	3(3-0)
CRM-722	Crime Mapping	3(3-0)
Thesis		
CRM-799	Research Thesis	10(0-20)
# Scheme of studies for M.Phil. Sociology

S.No.	Course No.	Course Title	Credit Hours
1	SOC-731	Advanced Research Methods of Social Sciences	3(2-2)
2	SOC-732	Sociology of Development	3(3-0)
3	SOC-733	Industrial Sociology	3(3-0)
4	SOC-734	Sociology of Politics	3(3-0)
5	SOC-735	Sociology of Human Rights	3(3-0)
6	SOC-736	Religiosity	3(3-0)
7	SOC-737	Medical Sociology	3(2-2)
8	SOC-738	Sociology of Gender Issues	3(3-0)
9	SOC-739	Sociology of Migration	3(3-0)
10	SOC-740	Advanced Sociological Theory	3(3-0)
11	SOC-719	Special Problem	1(1-0)
12	SOC-720	Seminar-I	1(1-0)
13	SOC-720	Seminar-II	1(1-0)
14	SOC-799	Thesis	10(0-20)

# Scheme of studies for Ph.D. Sociology

S.No.	Course No.	Course Title	Credit Hours
1	SOC-731	Advanced Research Methods of Social Sciences	3(2-2)
2	SOC-732	Sociology of Development	3(3-0)
3	SOC-733	Industrial Sociology	3(3-0)
4	SOC-734	Sociology of Politics	3(3-0)
5	SOC-735	Sociology of Human Rights	3(3-0)
6	SOC-736	Religiosity	3(3-0)
7	SOC-737	Medical Sociology	3(2-2)
8	SOC-738	Sociology of Gender Issues	3(3-0)
9	SOC-739	Sociology of Migration	3(3-0)
10	SOC-740	Advanced Sociological Theory	3(3-0)
11	SOC-719	Special Problem	1(1-0)
12	SOC-720	Seminar-I	1(1-0)
13	SOC-720	Seminar-II	1(1-0)
14	SOC-799	Thesis	50(0-100)

### The faculty offers the following Degree/Diploma programmes

- a. Doctor of Veterinary Medicine (DVM) five years programme
- b. Livestock Assistant Diploma (LAD) two years programme at Sub-Campus Khushab

Dean of the Faculty P.A to Dean Prof. Dr. M. Safdar Anjum Mr. M. Bilal Bashir

1. Department of Veterinary Basic Sciences

Associate Professor	Dr. Mansur Abdullah
Assistant Professors	Dr. Riaz Hussain
	Dr. Mazhar ul Haq
Lecturers	Mr. Mujeeb-ur-Rehman Sohoo
	Mr. Asif Riaz
	Ms. Sumaira Hassan
	Mr. Zeeshan Akbar

2. Department of Pathobiology

Chairman	Dr. M. Ali Abdullah Shah
Associate Professor	Dr. Imtiaz Ahmad Khan
Assistant Professors	Dr. Murtaz-ul-Hasan
	Mr. Muhammad Asif
	Dr. Saif-ur-Rehman
	Dr. Ayesha Riaz
Lecturer	Mr. Sajid Umer



**Department of Clinical Studies** 3. Chairman Prof. Dr. Arfan Yousaf **Assistant Professors** Dr. Muhammad Arif Zafar Dr. Muhammad Yaqoob Mr. Fahad Raza Lecturers Mr. Zahid Naseer Mr. Muddassar Nawaz Mr. Muhammad Shakeel **Department of Poultry Sciences** 4. Chairman Prof. Dr. M. Safdar Anjum Assistant Professor Dr. Nasir Mukhtar Lecturer Mr. Zaib-ur-Rehman 5. Department of Livestock Production & Management Associate Professor Dr. Tanveer Ahmad Dr. M. Moaeen-ud-Din Assistant Professors Dr. Muhammad Fiaz Dr. Ghulam Bilal Dr. M. Farooq Iqbal Mr. Kashif Ishaq Lecturers Hafiz Muhammad Waheed

Mr. M. Imran Khan

### I. Doctor of Veterinary Medicine (DVM)

A minimum of ten semesters duration program after F.Sc. (Pre-Medical )

# 1. Minimum Requirements for Award of (DVM) Degree

- (a) The minimum duration for completing the course for the degree of Doctor of Veterinary Medicine (DVM) shall be 10 semesters and maximum 14 semesters
- (b) There will be 15 credit hours internship in the 10th semester.
- (c) The minimum course requirement is 215 credit hours as per approved scheme of studies.
- (d) A full time student shall be required to take courses not less than 15 credit hours in a semester.

### 2. Admission and Registration:-

(i) Minimum Academic Requirements

A person holding Higher Secondary School Certificate (Pre-Medical) or an equivalent certificate from any recognized institution with 45% marks shall be eligible for admission to the degree of Doctor of Veterinary Medicine (DVM)

(ii) Domicile:

# **Reserved Seats**

- (a) The candidates domiciled in the Barani Areas of Punjab and Islamabad shall only be eligible for admission.
- (b) Each district of the Barani Area of Punjab has a specified quota to be determined by the Academic Council from time to time.
- (c) The admission from each barani district, to be determined on domicile, will be made on the basis of 66% Rural and 33% Urban.
- (d) There will be two seats reserved for the children of University employees.
- (e) Each district will have its own merit for rural and urban areas' candidates separately.
- (f) There will be five seats reserved for Balochistan province nominees.
- (g) Provision of certificate from Cholistan Desert Authority is must for Cholistan reserved seats

### 3. Admission Authority

The Dean, Concerned shall be responsible for admission.

### 4. <u>Age</u>

A candidate must not be more than 23 years of age on 1st October of the year of admission provided that the Vice-Chancellor may relax age limit in very exceptional cases.

# 5. Distribution of Seats for DVM Morning Program

NUMBER OF SEATS

**URBAN RURAL TOTAL** 

# CATEGORY

Islamabad	1	2	3
District wise quota from Punjab			
Rawalpindi	2	2	4
Attock	1	2	3
Jhelum	1	2	3
Chakwal	1	2	3
Guirat	1	2	3
Sialkot and Narowal	1	2	3
(Excluding Tehsil Daska)			
Mianwali	1	2	3
Dera Ghazi Khan	1	2	3
Muzaffargarh (Tehsil Muzaffargarh	1	2	3
and Kot Addu only)			
Jhang (Tehsil Jhang and Shorkot)	1	2	3
Lavyah	1	2	3
Khushab	1	2	3
Bhakar	1	2	3
Rajanpur	1	2	3
Cholistan	0	2	2
Children's of University Employees	0	0	2
Balochistan Nominees	-	-	5
Gilgit-Baltistan	-	-	2
Veterinarians	-	-	2
Open Merit	-	-	15
Evening Program	-	-	50
Total	16	32	124

### 6. Minimum and Maximum Credit Hours

(a) Each student shall enroll himself/ herself in the first and second semester for all the credit hours prescribed for these semester.

(b) Subsequently, (except for tenth semester) he/she shall has to enroll for courses carrying not less than 15 and not more than 32 credit hours.

(c) In his/ her 8th, 9th semester, a student may enroll himself/ herself for the courses carrying the remaining credit hours provided that the maximum does not ordinarily exceed 34 credit hours provided further that this limit may be extended by the Vice-Chancellor up to 38 credit hours in the 8th semester if no even semester courses left behind & similarly he/ she may be allowed to enroll up to 38 credit hours in the 9th semester if no odd semester course is left behind in special circumstances to be determined carefully in each individual case.

The same is applicable to the 11th, 12th, 13th and 14th semester.

(d) No course shall be offered during any semester which does not fall within the "Scheme of Studies" in the respective semester.

Ac	ademic Standing:		
(i)	Grade Point Average	Semester	CGPA
( )	(a) Maximum Grade Point Average 4.00 (b) Minimum Grade Point Average for obtaining the degree 2.50	1st 2nd 3rd	0.75 1.00 1.25
(ii)	To remain on the roll of the University a student shall be required maintain the following minimum CGPA in each semester:	uired to 5th 6th	1.75
7.	Explanation:	7th 9th	2.00
	(i) A student who maintains the minimum GPA / CG promotion and meets the requirements will be pro- to the next semester.	PA for 9th moted 10th	2.25 2.25 2.50

(ii) A student who does not meet the above requirements may repeat the whole semester once only.

(iii) If a student fails to achieve CGPA 2.5 in the 10th semester, he/she shall have to repeat the course (s) with lowest grade (s) to make CGPA of 2.5 within the maximum time allowed for the degree otherwise he/she shall cease on the university rolls.

### 8. Internship

During the 10th semester of DVM, there shall be training in Civil Veterinary Hospitals, livestock and poultry farms (Government and Private), disease diagnostic laboratories, milk plants, feed mills, slaughter houses/abbattoirs, farmers cooperatives etc (Government and Private) where they will undertake skills and management developments trainings. After the completion of internship, the students shall be required to submit a report and present a seminar. The evaluation for internship will be made as determined by the board of study.

### SCHEME OF STUDIES FOR DVM 5-YEARS PROGRAMME

# **I SEMESTER**

S.No	. Course No.	Course Title C	redit Hours
1	ANAT-101	General and Systemic Anatomy	4(1-6)
2	ANAT-103	General Veterinary Histology and Embryology	3(1-4)
3	BCH-101	General Biochemistry	3(2-2)
4	PHYS-101	Cardiovascular, Respiratory and Renal Physic	ology 3(2-2)
5	IT-101	Computer Applications	1(0-2)
6	LM-101	Introduction to Livestock Management	2(1-2)
7	PS-101	Introduction to Poultry Production	2(1-2)
8	IS-101/ET-101	Islamic Studies/Ethics	1(1-0)
9	ENG-101	English - I (Functional English)	2(2-0)



### 21(11-20)

25(15-20)

II SEMESTER				
S.No.	Course No.	Course Title Credit	Hours	
1	ANAT-102	Comparative Anatomy	4(1-6)	
2	ANAT-104	Systemic Veterinary Histology	3(1-4)	
3	MICRO-102	General Veterinary Microbiology	3(2-2)	
4	PARA-102	General Veterinary Parasitology	2(1-2)	
5	PHYS-102	Physiology of Digestion and Lactation	3(2-2)	
6	BCH-102	Biochemistry of Metabolism	2(2-0)	
7	ABG-102	Introduction to Animal Breeding and Genetics	4(3-2)	
8	AN-102	Principles of Animal Nutrition	3(2-2)	
9	SSH-102	Pakistan Studies	1(1-0)	

# III SEMESTER

S.No.	Course No.	Course Title Credit	Hours
1	PATH-201	General Veterinary Pathology	4(3-2)
2	PARA-201	Veterinary Protozoology	2(1-2)
3	BCH-201	Molecular Biology	2(2-2)
4	MICRO-201	Fundamentals of Immunology	2(1-2)
5	AN-201	Animal Feed Resources and Forage Conservation	n <b>3(2-2)</b>
6	PHYS-201	Endocrinology and Neuromuscular Physiology	3(1-4)
7	PS-201	Poultry Breeding and Hatchery Management	2(1-2)
8	ENG-201	English - II (Communication Skills)	2(2-0)
9	MATH-201	Mathematics	2(2-0)

23(15-16)

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# Scheme of Studies for Different Programmes

# IV SEMESTER

S.No.	Course No.	Course Title Cr	edit Hours
1	PATH-202	Systemic Veterinary Pathology	4(3-2)
2	PARA-202	Veterinary Helminthology	4(3-2)
3	MICRO-202	Veterinary Bacteriology and Mycology	3(2-2)
4	PHAR-202	General Veterinary Pharmacology and Pharmaceut	icals 3(2-2)
5	ZOOL-202	Introduction to Fisheries and Aquaculture	2(1-2)
6	LM-202	Small Ruminant Production	2(1-2)
7	AN-202	Poultry Nutrition	2(1-2)
8	STAT-202	Biostatistics	3(2-2)

# **V SEMESTER**

23(15-16)

S.No.	Course No.	Course Title Credi	t Hours
1	PHARM-301	Systemic Veterinary Pharmacology and Therapeutics	3(2-2)
2	MICRO-301	General Veterinary Virology	3(2-2)
3	PARA-301	Veterinary Entomology	3(2-2)
4	AEC-301	Livestock Economics and Business Management	3(3-0)
5	PATH-301	Necropsy Practices	1(0-2)
6	AN-301	Ruminant Nutrition	2(1-2)
7	ABG-301	Animal Breeding Plans and Policies	3(2-2)
8	LM-301	Dairy Production	3(2-2)
9	AE-301	Livestock Extension Education	2(2-0)

# **VI SEMESTER**

23(16-14)

S.No.	Course No.	Course Title	Credit Hours	
1	MED-302	General Veterinary Medicine	3(2-2)	
2	MED-304	Dairy Herd Health	2(1-2)	
3	SURG-302	General Veterinary Surgery & Anesthesiolog	y 3(1-4)	
4	SURG-304	Diagnostic Imaging	2(1-2)	
5	THER-302	Animal Reproduction & Artificial Insemination	า 3(2-2)	
6	LM-302	Equine and Camel Production	2(1-2)	
7	LM-304	Dairy Technology	3(2-2)	
8	AN-302	Feed Evaluation, Formulation and Processin	g 3(2-2)	
9	PHARM-302	Veterinary Toxicology and Chemotherapy	2(1-2)	
10	PS-302	Poultry housing and Farm Management	3(2-2)	26(15-22)

# VII SEMESTER

S.No.	Course No.	Course Title Cred	lit Hours
1	SURG-401	Large Animal Surgery	2(1-2)
2	MED-401	Systemic Veterinary Medicine - I	3(3-0)
3	MED-405	Technical Report Writing and Presentatio	n 2(2-0)
4	PATH-401	Meat Hygiene and Public Health	2(1-2)
5	MICRO-401	Milk Hygiene and Public Health	2(1-2)
6	THER-401	Veterinary Obstetrics and Genital Disease	es 4(2-4)
7	LM-401	Beef Production	2(1-2)
8	MED-403	Medicine Clinic - I	2(0-4)
9	SURG-403	Surgery Clinic - I	2(0-4)
10	THER-403	Reproduction Clinic - I	2(0-4)



23(11-24)

# VIII SEMESTER

S.No.	Course No.	Course Title	Credit Hours
1	THER-402	Introduction to Reproductive Biotechnol	ogies 2(2-0)
2	MED-402	Systematic Veterinary Medicine-II	3(3-0)
3	MED-406	Lab and Zoo Animal Management	1(1-0)
4	FT-404	Meat and Slaughter Byproducts Techno	logy 3(2-2)
5	PATH-402	Forensic Medicine & Jurisprudence	1(1-0)
6	PATH-404	Veterinary Clinical Pathology	2(0-4)
7	MICRO-402	Veterinary Epidemiology and Public Heat	alth 3(2-2)
8	SURG-402	Shoeing and Soundness	2(1-2)
9	SURG-404	Small Animal Surgery	3(1-4)
10	THER-404	Reproduction Clinic - II	2(0-4)
11	MED-404	Medicine Clinic - II	2(0-4)
12	SURG-406	Surgery Clinic - II	2(0-4)

15(1-28)

# IX SEMESTER

S.No.	Course No.	Course Title	<b>Credit Hours</b>
1	PATH-501	Poultry Pathology	3(1-4)
2	THER-501	Reproduction Clinic - III	2(0-4)
3	MED-501	Medicine Clinic-III	2(0-4)
4	SURG-501	Surgery Clinic-III	2(0-4)
5	AN-501	Feed Mill Operations	2(0-4)
6	PS-501	Poultry Farm Operations	2(0-4)
7	LM-501	Livestock Farm Operations	2(0-4)

X SEMESTER		
Course No.	Course Title	Credit Hours
INTERNSHIP	Internship	10(0-20)

This faculty offers undergraduate and postgraduate degree programmes in Forestry & Range Management, Wildlife Management & Environmental Sciences.

Dean of the Faculty	Prof. Dr. Maqsood Anwar
P.A to the Dean	Mr. Muhammad Aurangzaib

#### This faculty has the following Departments:-

### I. DEPARTMENT OF FORESTRY & RANGE MANAGEMENT :

The Department offers degree programmes at Undergraduate level BS(Forestry) as well as Postgraduate levels (M.Phil and Ph.D).

Chairman
Associate Professor
<b>Assistant Professors</b>

Lecturers

Lecturer

Prof. Dr. Sarwat N. Mirza Dr. Syed Moazzam Nizami Dr. Abdul Khaliq Chaudhry Mr. Saeed Gulzar Dr. Aamir Saleem Dr. M. Irfan Ashraf Ms. Lubna Ansari Ms. Sabeeqa Usman Malik

# II. DEPARTMENT OF WILDLIFE MANAGEMENT :

The Department offers degree programmes at Postgraduate levels (M.Sc, M.Phil and Ph.D)

Chairman	
Professor	
<b>Assistant Professors</b>	

Dr. Maqsood Anwar Dr. Iftikhar Hussain Dr. Tariq Mahmood Dr. Muhammad Rais Ms. Bushra Allah Rakha

# III. DEPARTMENT OF ENVIRONMENTAL SCIENCES :

The Department offers postgraduate degree programmes at the levels of M.Sc, M.Phil and Ph.D in the field of Environmental Sciences

Chairman	Dr. Azeem Khalid
Professor	Dr. Tariq Mahmood
Assistant Professors	Dr. Audil Rashid
	Dr. Shahid Mahmood
	Dr. Allah Ditta
Lecturers	Ms. Aniqa Batool
	Ms. Beenish Saba
Adjunct Professor	Dr. Mauro Centritto (CNR-IVALSAA, Italy)
BS(Forestry)	A minimum of eight semesters and maximum of twelve semesters duration program after F.Sc. (Pre-Medical/Pre-Engineering) with at least 45% marks <u>OR</u> F.Sc (Pre-Agriculture) with CGPA of at least 2.50/4.00.
M.Sc. Wildlife Management, Environmental Sciences	A minimum of four semesters and maximum of six semesters duration program after B.Sc. (14 years education) in the relevant field.
M.Phil Forestry & Range Managen Wildlife Management, Environmental Sciences	A minimum of four semesters and maximum of six semesters duration nent, program for full time students and minimum of six semesters and maximum of eight semesters duration programme for part time students after M.Sc./B.Sc. (Hons.)/BS in the relevant field.
Ph.D Forestry & Range Managen Wildlife Management, Environmental Sciences	A minimum of six semesters and maximum of ten semesters duration programme for full time students and minimum of eight semesters duration programme for part time students after M.Phil/ MS/M.Sc. (Hons.) in the relevant field. Must have passed University Entrance Test with 70% marks.

# SCHEME OF STUDIES FOR BS(FORESTRY) PROGRAMME

# **I SEMESTER**

S.No.	Course No.	Course Title	Credit Hours
1	BIOL-301	Biology - I	3(2-2)
2	MATH-301	Mathematics - I	3(3-0)
3	ENG-301	Functional English	3(3-0)
4	SSH-301	Pakistan Studies	2(2-0)
5	FR-301	Introduction to Forestry	3(2-2)
6	AGRO-301	Basic Agriculture	3(2-2)
			<u>17</u>

### **II SEMESTER**

S.No	. Course No.	Course Title	<b>Credit Hours</b>
1	ENG-302	Communication Skills	3(3-0)
2	IS-302/ET-302	Islamic Studies/Ethics	2(2-0)
3	SS-302	Introduction to Soil Science	3(2-2)
4	FR-302	Principles of Agro-Forestry	2(2-0)
5	FR-304	Introduction to Wildlife	2(1-2)
6	FR-306	Forestry and Climate Change	3(3-0)
7	SOC-308	Introduction to Sociology	3(3-0)
			18

# **III SEMESTER**

S.No.	Course No.	Course Title	Credit Hours
1	STAT-401	Introduction to Statistics	3(3-0)
2	PBG-401	Introductory Statistics	2(1-2)
3	ENT-401	Introductory Entomology	2(1-2)
4	ECON-301	Introduction to Economics	3(3-0)
5	FR-403	Forest Accounts & Products	3(3-0)
6	FR-405	Marketing Agro Forestry Produ	ucts 2(2-0)
7	FR-407	Introduction to Forest Patholog	gy 3(2-2)
			18

# IV SEMESTER

S.No.	Course No.	Course Title Credit	Hours
1	FR-402	Forest Engineering	3(2-2)
2	FR-404	Basics of Wildlife Management	3(3-0)
3	FR-406	Participatory Forestry	3(3-0)
4	FR-408	Livestock Nutrition and Grazing Managment	3(3-0)
5	FR-410	Forest Utilization	3(3-0)
6	FR-412	Forestry Extension	3(3-0)
			<u>18</u>

# Scheme of Studies for Different Programmes

# **V SEMESTER**

S.No.	Course No.	Course Title	Credit I	Hours
1	FR-501	Silviculture - I		3(3-0)
2	FR-505	Range Management		3(2-2)
3	FR-507	Forest Biometrics		3(2-2)
4	FR-509	Tree Morphology and Physiology	ogy	3(2-2)
5	FR-511	Energy Plantation and Bio Fue	els	2(2-0)
6	FR-515	Forest Survey and Leveling		3(2-2)
				<u>17</u>

# VI SEMESTER

S.No.	Course No.	Course Title Cre	dit Hours
1	FR-502	Silviculture - II	3(3-2)
2	FR-504	Watershed Management	3(3-2)
3	FR-506	Wood Science and Technology	3(3-2)
4	FR-508	Range Vegetation-Livestock Interaction	ons 3(3-0)
5	FR-510	Forest Policy and Law	3(3-0)
			<u>15</u>

# VII SEMESTER

S.No.	Course No.	Course Title	Credit Hours
1	FR-601	Forest Management	3(3-0)
2	FR-603	Clean Development Mechanis	sm and 2(1-2)
		Carbon Sequestration	
3	FR-605	Non-Wood Forest Products	2(2-0)
4	FR-607	Application of GIS and Remo	te 3(2-2)
		Sensing in Forestry	
5	FR-609	Forest and Range Biodiversit	y <u>3(3-0)</u>
6	FR-611	Forest Ecology	2(2-0)
			<u>15</u>

# VIII SEMESTER

S.No.	Course No.	Course Title Credit	t Hours
1	FR-602	Forest Management Plan - I	3(3-0)
2	FR-604	Forest Management Plan - II	4(0-8)
3	FR-608	Project Planning and Scientific Writing	4(2-4)
4	FR-410	Ecotourism and Park Management	3(3-0)
			14

# Scheme of Studies of M.Sc./M.Phil/ Ph.D in Faculty of Forestry, Range Management & Wildlife

Department of Forestry and Range Management

COURSE	TITLE OF COURSE	CREDITS
FR-701	Range Vegetation Ecology	3(2-2)
FR-702	Advances in Forest Utilization	3(2-2)
FR-703	Agro Forestry Systems	3(2-2)
FR-704	Grazing Management of Rangelands	3(3-0)
FR-705	Forestry and Environment	3(3-0)
FR-706	Forest Biometrics and Resource Economics	3(2-2)
FR-707	Developments in Watershed Management	3(3-0)
FR-708	Research Methods and Communication	3(2-2)
FR-709	Forest Recreation and Park Management	3(3-0)
FR-710	Range Vegetation Manipulation and Management	3(3-0)
FR-711	Forest Soil and Water Conservation	3(2-2)
FR-712	Pastoral Communities and Range Development	3(3-0)
FR-713	Drought Management in Rangelands	3(3-0)
FR-714	Forest Diseases and Pest Management	3(2-2)
FR-715	Functional Tree Biology	3(2-2)
FR-716	Adaptation of Forests to Climate Change	3(3-0)
FR-717	Forest Resource Management	3(3-0)
FR-718	Forest Ecology	3(3-0)
FR-719	Special Problem	1(1-0)
FR-720	Seminar-I	1(1-0)
	Seminar-II	1(1-0)

# Department of Wildlife Management

COURSE	TITLE OF COURSE	CREDITS
WL-701	An Introduction to Wildlife of Pakistan	3(2-2)
WL-702	Wildlife Population Ecology	3(3-0)
WL-703	Principles of Wildlife Management	3(3-0)
WL-704	Wildlife Study Techniques-I: Biological Aspects	3(2-2)
WL-705	Wildlife Study Techniques-II: Management Aspects	3(2-2)
WL-706	Wildlife Management at Wetlands	3(3-0)
WL-707	Terrestrial Wildlife Management	3(3-0)
WL-708	Wildlife Damage Management	3(2-2)
WL-709	Society, Values & Economics of Wildlife	3(3-0)
WL-710	Protected Areas and their Management	3(3-0)
WL-711	Research Planning and Report Writing	3(1-4)
WL-712	Conservation Biology of Wildlife	3(3-0)
WL-713	Wildlife Food and Foraging	3(3-0)
WL-714	Reproductive Biology and Breeding	3(2-2)
WL-715	Management Aspects of Wildlife Behaviour	3(3-0)
WL-716	Wild Fish fauna of Pakistan	3(3-0)
WL-717	Endangered Species and their Management	3(3-0)
WL-718	Captive Wildlife Management	3(3-0)
WL-719	Special Problem	1(1-0)
WL-720	Seminar-I	1(1-0)
	Seminar-II	1(1-0)
WL-721	Wildlife Habitat Evaluation and Restoration	3(3-0)
WL-722	Predator Ecology and Management	3(3-0)
WL-723	Wildlife Eco-toxicology	3(3-0)
WL-724	Wildlife Diseases and their Management	3(3-0)
WL-725	Museum Science	3(2-2)
WL-726	Essentials of Wildlife Conservation-National Perspectives	3(3-0)
WL-727	Capture, Care and Transportation of Wildlife	3(2-2)
WL-728	Wildlife Policy, Legislation and International Conventions	3(3-0)
WL-729	Biology and Conservation of Amphibians and Reptiles	3(2-2)
WL-730	Captive Breeding and Assisted Reproduction in Wildlife	3(2-2)
WL-731	Wildlife Farming and Ranching	3(3-0)
WL-732	Wildlife Data Analysis	3(1-4)

# Department of Environmental Sciences

COURSE	TITLE OF COURSE	CREDITS
ENV-701	Introduction to Environmental Sciences	3(3-0)
ENV-702	Environmental Chemistry	3(2-2)
ENV-703	Environmental Microbiology	3(2-2)
ENV-704	Research Planning and Report Writing	3(2-2)
ENV-705	Environmental Analytical Techniques	3(2-2)
ENV-706	Environmental Impact and Risk Assessment	3(3-0)
ENV-707	Pollution Control Technologies	3(2-2)
ENV-708	Remote Sensing and GIS Applications in Environment	3(3-0)
ENV-709	Bioremediation of Environmental Contaminants	3(3-0)
ENV-710	Solid Waste Management	3(3-0)
ENV-711	Agricultural Pollution Management	3(3-0)
ENV-712	Environmental Law and Policy	3(3-0)
ENV-713	Climatology	3(2-2)
ENV-714	Eco-Health Management and Safety Approaches	3(3-0)
ENV-715	Public Health and Human Ecology	3(3-0)
ENV-716	Global Environmental Changes	3(3-0)
ENV-717	Wastewater Treatment Process Design	3(3-0)
ENV-718	Toxic Organics and Trace Metals in Ecosystem	3(2-2)
ENV-719	Special Problem	1(1-0)
ENV-720	Seminar-I	1(1-0)
	Seminar-II	1(1-0)
ENV-721	Cleaner Production Technology	3(3-0)
ENV-722	Waste Reuse and Recycling	3(3-0)
ENV-723	Physico-Chemical Processes for Wastewater	3(2-2)
ENV-724	Advanced Processes for Wastewater Treatment	3(3-0)
ENV-725	Environmental Management Systems	3(3-0)
ENV-726	Environmental Biotechnology	3(2-2)
ENV-727	Impact of Natural Disasters on Global Environment	nt 3(3-0)
ENV-728	Energy Conservation and Renewable Energy Resources	3(3-0)

This faculty offers undergraduate and postgraduate degree programmes in the field of Engineering and Geo-Informatics.



# This faculty has the following Departments:-

- i. Farm Machinery and Precision Engineering
- ii. Land & Water Conservation Engineering
- iii. Structures & Environmental Engineering
- iv. Food Engineering
- v. Energy Systems Engineering
- vi. Horticultural Engineering
- vii. Geo-Informatics

Incharge Faculty	Prof. Dr. Muhammad Yasin
Professor	Dr. Rai Niaz Ahmad
Associate Professor	Dr. Mobushir Riaz Khan
Assistant Professor	Dr. Muhammad Umair
Lecturers	Engr. Tahir Iqbal
	Mr. Muhammad Amin
	Mr. Naeem Abbas Malik
	Engr. Muhammad Usman
Lab. Engineer	Engr. Zahoor Ahmed Ibupoto

# **PROGRAMS TO BE OFFERED**

# **B.Sc. Agricultural Engineering**

A minimum of eight semesters duration program after F.Sc (Pre-Engineering).

# Admission and Registration

- (i) Minimum Academic Requirements:
- a. A candidate holding F.Sc (Pre-Engineering) or equivalent certificate from any recognized Institution with minimum 60% marks will be eligible for admission to B.Sc. Agricultural Engineering.

# <u>OR</u>

- b. 3 years diploma in Auto & Machinery/Civil/Mechanical/Electrical from a recognized Board with at least 60% marks.
- li. Entry Test marks not less than 60%
- iii. The merit for admission will be prepared on the basis of F.Sc and Entry Test marks @ 70:30, respectively.
- iv. An additional entry test fee of Rs. 1000/- will be charged from the candidates

# Faculty of Agricultural Engineering & Technology

### Academic Standing:

(a)	Maximum Grade Point Average	4.00	
(a)	Maximum Grade Point Average	4.00	

- (b) Minimum Grade Point Average for obtaining the degree
- (ii) To remain on the roll of the University a student shall be required to maintain the following minimum GPA / CGPA in each semester:

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

#### **B.Sc Agricultural Engineering** CATEGORY NUMBER OF SEATS TOTAL **1.Open Merit** 40 2. Provincial Quota Sindh Province **Balochistan Province** K.P.K F.A.T.A. Islamabad 3. Other Reserved Seats Pakistan Army 2 1 Pakistan Air Force University Employee Son/Daughter 1 3 years Diploma Holders in Auto Machinery/Civil/ 2 Mechanical/Electrical Total 51

**Distribution of Seats for** 

# MS(RS&GIS)

A minimum of four semesters duration program after 4 years BS (Remote Sensing & GIS) degree or Minimum of 16 years of education in Science discipline (HEC Recognized Institutes/Universities).

2.50

# Admission to the Course:

- 1. Must have passed the BS (Remote Sensing & GIS) or 16 years of education in Science discipline with 45% marks or 2.50 CGPA out of 4.00.
- Admission will be on open merit basis.

# Academic Standing:-

Grade Point Average		Semester	CGPA
a. Maximum grade point average:	4.00	1st	1.50
b. Minimum grade point average for obtaining the degree:	2.50	2nd	1.75
To remain on roll of the University a student shall be required to r	maintain the following	3rd	2.00
minimum CGPA in each semester.		4th	2.50

# SCHEME OF STUDIES FOR B.SC (AGRICULTURAL ENGINEERING) PROGRAMME

# I SEMESTER

S.No.	Course No.	Course Title C	Credit Hours
Major	Courses		
1	LWCE-301	Fluid Mechanics	3(2-1)
2	SEE-301	Engineering Drawing & Graphics	2(1-1)
3	FMPE-301	Metallurgy and Workshop Practices	3(2-1)
Suppo	orting Course	<u>s</u>	
4	IS-301	Islamic Studies	2(1-1)
5	MATH-301	Linear Algebra & Calculus	3(3-0)
6	PHY-301	Applied Physics	3(2-1)
7	ENG-301	English Composition & Comprehen	sion 3(3-0)
			<u>19</u>

# **II SEMESTER**

S.No. <u>Major</u>	Course No. Courses	Course Title	Credit Hours
1	SEE-306	Engineering Mechanics	3(2-1)
2	SEE-302	Computer Aided Design	2(1-1)
3	FMPE-302	Manufacturing Engineer	ring 3(2-1)
<u>Suppo</u>	orting Course	<u>s</u>	
4	SSH-302	Pakistan Studies	2(1-1)
5	SS-302	Soil Science	3(2-1)
6	AGR-302	Basic Agriculture	3(2-1)
			16

# III SEMESTER

S.No. Major	Course No. Courses	Course Title Credit	Hours
1	LWCE-401	Engineering Hydrology	3(2-1)
2	SEE-401	Surveying Leveling	4(2-2)
3	FMPE-401	Engineering Thermodynamics	3(2-1)
Suppo	orting Course	<u>s</u>	
4	MATH-401	Differential Equations, Power Series, Laplace Transform	3(2-1)
5	CS-401	Computer Programming and Applications in Engineering	3(2-1)
6	RS-401	Sociology	2(2-0)
			18

# IV SEMESTER

<mark>S.No.</mark> Major	Course No. Courses	Course Title Cr	edit Hours
1	LWCE-402	Soil Mechanics	3(2-1)
2	LWCE-406	Open Channel Hydraulics	3(2-1)
3	FMPE-402	Farm Power	3(2-1)
4	SEE-402	Mechanics of Materials	3(2-1)
5	SEE-406	Farm Structures & Material	s 3(2-1)
6	HE-402	Landscape Engineering	3(2-1)
			<u>18</u>

# Scheme of Studies for Different Programmes

# **V SEMESTER**

Course No.	Course Title	С	redit Hours		
Compulsory C	ourses				
SEE-501	Fundamentals o	f Environmental Engin	eering 3(2-1)		
FMPE-501	Instrumentation	& Measurements	3(2-1)		
Supporting Co	urses				
ENG-501	Communication	& Presentation Ski	lls 3(2-1)		
STAT-501	Statistics & Prob	ability	3(3-0)		
Department o	f FMPE Courses	<u>6</u>			
FMPE-503	Machine Design		3(3-0)		
FMPE-505	Boiler Engineeri	ng & Power Plants	3(2-1)		
Department of LWCE Courses					
LWCE-501	Irrigation Engine	ering	3(2-1)		
LWCE-503	Water Managem	nent Engineering	3(2-1)		

# VI SEMESTER

Course No. Compulsory	Course Title	Credit Hours
LWCE-502	Farm Irrigation Systems	3(2-1)
SEE-506	Meteorology and Climate Change	3(2-1)
RSG-502	GIS & Remote Sensing	3(2-1)
Supporting C	ourses	
RS-502	Professional Ethics	2(2-0)
Department of	of FMPE Courses	
FMPE-502	Farm Machinery Management	3(2-1)
FMPE-504	Agricultural Processing Engineering	3(2-1)
Department of	of LWCEE Courses	
LWCE-504	Drainage Engineering	3(2-1)
LWCE-506	Soil & Water Conservation Engineer	ing <u>3(2-1)</u>

# VII SEMESTER

Course No. Compulsory Co	Course Title	Credit	Hours		
FMPE-601	Energy Resources and Manager	nent	3(2-1)		
LWCE-601	Soil Dynamics		3(2-1)		
AET-601	Project & Report		2(0-2)		
Supporting Co	urses				
CHEM-601	Industrial Chemistry		3(2-1)		
Department of	FMPE Courses				
FMPE-603	Post-Harvest Engineering		3(2-1)		
FMPE-605	Design of Agricultural Machinery		3(3-0)		
Department of LWCE Courses					
LWCE-603	Ground Water Hydrology		3(2-1)		
LWCE-605	Water Quality Management		3(2-1)		

# VIII SEMESTER

Course No.	Course Title Credit	Hours
Compulsory C	Courses	
LWCE-602	Pumps and Tube Wells	3(2-1)
FMPE-602	Farm Machinery & Earth Moving Equipment	4(3-1)
AET-602	Project & Report	3(0-3)
Supporting Co	ourses	
ECO-602	Engineering Economics & Management	3(3-0)
MATH-602	Numerical Analysis	3(2-1)
Department of	of FMPE Courses	
FMPE-604	Industrial Engineering and Management	3(2-1)
FMPE-606	Reverse Engineering in Agricultural Engineering	3(2-1)
Department of	of LWCE Courses	
LWCE-604	Watershed Management	3(2-1)
LWCE-606	Irrigation Water Management Techniques	3(2-1)

# SCHEME OF STUDIES FOR BS (GEO-INFORMATICS)

# **I SEMESTER**

S.No. Major	Course No. Courses	Course Title Credit	Hours
1 2	RSG-301 RSG-303	Fundamentals of Remote Sensing Introduction to Geographic Information System	3(2-1) 3(2-1)
Minor	Courses		
3 4 5 6	ENG-305 SSH-307 IS-309 CS-311	Fundamentals English and Communication Skills Pakistan Studies Islamic Studies/Ethics Computer Basics	3(3-0) 3(3-0) 3(3-0) 3(2-1)
II SE	MESTER		<u>18</u>
S.No.	Course No.	Course Title Credit	Hours

Majoi	r Courses		
1	RSG-302	Physical and Human Geography	3(2-1)
2	RSG-304	Geo-data Capturing, Sources and Sta	andards 2(1-1)
3	RSG-306	Introduction to Earth Sciences	3(2-1)
Mino	r Courses		
4	MATH-308	Linear Algebra and Applications	2(1-1)
5	PHY-310	Applied Physics	3(2-1)
6	CS-312	Fundamentals of Computer Progra	mming 3(2-1)
	SEMESTER		<u>16</u>
S.No Majo	<mark>o. Course No</mark> or Courses	. Course Title	Credit Hours
S.No <u>Majo</u> 1	D. Course No or Courses PSG-401	. Course Title Fundamentals of Photogrammetry	Credit Hours
<b>S.No</b> <u>Majo</u> 1 2	D. Course No or Courses PSG-401 RSG-403	• Course Title Fundamentals of Photogrammetry Cartography	Credit Hours 3(2-1) 3(2-1)
<b>S.N</b> <u>Majo</u> 1 2 3	D. Course No or Courses PSG-401 RSG-403 RSH-405	Course Title Fundamentals of Photogrammetry Cartography Geo-Database Systems	Credit Hours 3(2-1) 3(2-1) 3(2-1)
S.No Majo 1 2 3 <u>Mino</u>	D. Course No or Courses PSG-401 RSG-403 RSH-405 or Courses	. Course Title Fundamentals of Photogrammetry Cartography Geo-Database Systems	Credit Hours 3(2-1) 3(2-1) 3(2-1)
S.No Majo 1 2 3 <u>Mino</u> 4	D. Course No pr Courses PSG-401 RSG-403 RSH-405 pr Courses MATH-407	Course Title Fundamentals of Photogrammetry Cartography Geo-Database Systems Discrete Mathematics	Credit Hours 3(2-1) 3(2-1) 3(2-1) 3(2-0)
S.No Majo 1 2 3 <u>Mino</u> 4 5	D. Course No pr Courses PSG-401 RSG-403 RSH-405 pr Courses MATH-407 MATH-409	Course Title Fundamentals of Photogrammetry Cartography Geo-Database Systems Discrete Mathematics Applied Statistics	Credit Hours 3(2-1) 3(2-1) 3(2-1) 3(2-1) 3(3-0) 3(3-0)

#### Object Oriented Programming 6 CS-411

# IV SEMESTER

18

<mark>S.No.</mark> <u>Major</u>	Course No. Courses	Course Title Credit	Hours
1	RSG-402	Advances Surveying Methods	3(2-1)
2	RSG-404	Advanced Remote Sensing Techniques	3(2-1)
3	RSG-406	Geo-Statistics	3(2-1)
4 <u>Minor</u>	RSG-408 <u>Courses</u>	Navigation Systems	3(2-1)
5	CS-410	Computer Graphics	3(2-1)
6	HE-412	Landscape Modeling	3(2-1)
V SE	MESTER		<u>18</u>
S.No.	Course No.	Course Title Credit	Hours
<u>Major</u>	Courses		
1	RSG-501	Digital Image Processing	3(2-1)
2	RSG-503	Computer Aided Drawing/Dafting	3(2-1)
3	RSG-505	Web GIS	3(2-1)
4	RSG-507	Spatial Data Structure and Modeling	3(2-1)
5	RSG-509	Geodesy	3(2-1)
Electiv	<u>re I (One Cou</u>	urse is to be selected)	
6	AGR-302	Fundamentals of Agriculture	3(3-0)
7	LWCE-402	Basics of Soil Mechanics	3(3-0)
VI SI	MESTER		
S.No.	Course No.	Course Title Credit	Hours
Major	<u>Courses</u>		
1	RSG-502	Remote Sensing Applications	3(2-1)
2	RSG-504	Spatial Decision Support Systems	3(2-1)
3	RSG-506	Computer Programming for GIS Development	3(2-1)
4	RSG-508	Geospatial Project Management	3(2-1)
5	RSG-510	Research Methods	3(2-1)

Mino	r Courses		•(= .)
6	SEE-501	Fundamentals of Environmental Engineerin	g3(2-1)
7	LWCE-501	Soil & Water Conservation Engineering	3(2-1)

# Scheme of Studies for Different Programmes

## VII SEMESTER

### VIII SEMESTER

S.No. Major	Course No. Courses	Course Title Credit	Hours	S.No. Major	Course No. Courses	Course Title	Credit Hours
1	RSG-601	Spatial Data Infrastructure	3(2-1)	1	RSG-602	Natural Resource Management	3(2-1)
2	RSG-603	Technical Writing and Presentation Skills	3(2-1)	2	RSG-604	Professional Ethics	3(2-1)
3	RSG-605	Elective I	3(2-1)	3	RSG-606	Elective III	3(2-1)
4	RSG-607	Elective II	3(2-1)	4	RSG-608	Elective IV	3(2-1)
5	RSG-609	Final Project I	3(2-1)	5	RSG-610	Final Project II	3(2-1)
<u>Elevti</u>	ve I and II Tw	o Courses to be selected		<u>Electi</u>	ve III and IV	Two Courses to be selected	
6	RSG-611	Spectroscopy	3(2-1)	6	RSG-612	Global Warming and Climate Chan	ige 3(2-1)
7	RSG-613	Weather Analysis and Forecasting	3(2-1)	7	RSG-614	Paleoclimatology	3(2-1)
8	RSG-615	GIS for Disaster Management	3(2-1)	8	RSG-616	Microwave Remote Sensing	3(2-1)
9	RSG-617	Infrastructure and Transport Planning	3(2-1)	9	RSG-618	Land Use Surveying	3(2-1)

# GRADUATE COURSES FOR M.SC (HONS.)/PH.D in AGRICULTURAL ENGINEERING) PROGRAMME

#### Department of Land & Water Conservation Engineering

S.No.	Course No.	Course Title Credi	t Hours
1	LWCE-701	Computational Methods in Water Resources Engineering	3(3-0)
2	LWCE-702	Advance Open Channel Hydraulics	3(2-1)
3	LWCE-703	Advanced Hydrology	3(2-1)
4	LWCE-704	Advanced Groundwater Hydrology	3(2-1)
5	LWCE-705	Groundwater Modeling	3(2-1)
6	LWCE-706	Advanced Drainage Engineering	3(2-1)
7	LWCE-707	Resource Conservation Engineering	3(3-0)
8	LWCE-708	Planning and Design of Irrigation Systems	3(2-1)
9	LWCE-709	Irrigation Secluding	3(2-1)
10	LWCE-710	Surface Irrigation Modeling	3(3-0)
11	LWCE-711	System Analysis of Integrated Water Resources Engineering	3(2-1)
12	LWCE-712	Spate Irrigation Practices and Management	3(2-1)
13	LWCE-713	Design of Hydraulics Structures	3(3-0)
14	LWCE-714	Water Quality Management	3(2-1)
15	LWCE-715	River Engineering	3(3-0)
16	LWCE-716	Water Resources Management	3(3-0)
17	LWCE-717	Climate Change and Water Resources	3(2-1)
18	LWCE-718	Watershed Management	3(2-1)
19	AET-719	Special Problem	1(1-0)
20	AET-720	Seminar	1(1-0)

#### Department of Farm Machinery & Precision Engineering

S.No.	Course No.	Course Title	Credit Hours
1	FMPE-701	Advanced Power and Machinery	3(2-1)
2	FMPE-702	Agricultural Storage Engineering	3(2-1)
3	FMPE-703	Computer Modeling of Engineering Sys	tems 3(2-1)
4	FMPE-704	Experimental Stress Analysis	3(2-1)
5	FMPE-705	Farm Machinery and Environment	3(2-1)
6	FMPE-706	Grain Preservation and Processing	3(2-1)
7	FMPE-707	Hydraulic Control Systems	3(2-1)
8	FMPE-708	Harvesting Machinery	3(2-1)
9	FMPE-709	Instrumentation and Machine Automatic	on 3(2-1)
10	FMPE-710	Operations Research	3(2-1)
11	FMPE-711	Product Design and Development	3(2-1)
12	FMPE-712	Renewable Energy Engineering	3(2-1)
13	FMPE-713	Similitude in Engineering	3(2-1)
14	FMPE-714	Tillage and Traction Dynamics	3(2-1)
15	FMPE-715	Theory of Manufacturing Process	3(2-1)
16	AET-719	Special Problem	1(1-0)
17	AET-720	Seminar	1(1-0)



#### **Department of Farm Structures and Environmental Engineering**

S.No.	Course No.	Course Title C	redit Hours
1	SEE-701	Parameters and Methods of Environmental Impact Assess	ment 3(2-1)
2	SEE-702	Contamination Transport in Soils	3(2-1)
3	SEE-703	Design of Water Supply and Sewage	3(2-1)
4	SEE-704	Energy and Environment	3(2-1)
5	SEE-705	Environmental Control in Farm Structures and Landscaping	g 3(2-1)
6	SEE-706	Environmental Health Engineering	3(2-1)
7	SEE-707	Farm Waste Disposal	3(2-1)
8	SEE-708	Geo Environment	3(2-1)
9	SEE-709	Land Surveying	3(2-1)
10	SEE-710	Machine and Environment	3(2-1)
11	SEE-711	Air and Noise Pollution Control	3(2-1)
12	SEE-712	Theory and Design of Structures	3(2-1)
13	SEE-713	Wastewater Engineering	3(2-1)
14	AET-719	Special Problem	1(1-0)
15	AET-720	Seminar	1(1-0)

# Scheme of Studies for Different Programmes

#### Postgraduate Deficiency Courses

#### S.No. Course No. Course Title

- RSG-701 Introduction to GIS and Spatial Analysis 1
- 2 RSG-702 Introduction to Remote Sensing and Digital Image Processing
- RSG-703 Introduction to GIS Database and Programming 3
- RSG-704 Prescribed Mathematics Course 4

#### Postgraduate Core Courses

#### S.

NO.	Course No.	Course little Credit	Hours
1	RSG-705	Advanced Remote Sensing and Digital Image Processing	3(2-1)
2	RSG-706	Advanced Geographic Information System	3(2-1)
3	RSG-707	Spatial Data Warehouse and Mining	3(3-0)
4	RSG-708	Advanced Research Methods	3(3-0)
5	RSG-711	Applied Remote Sensing and GIS	3(2-1)
6	RSG-712	Statistical Data Analysis	3(2-1)
7	RSG-713	Geospatial Data Modeling	3(2-1)

#### Postgraduate Elective/Minor Courses

S.No.	Course No.	Course Title Cre	edit Hours
1	RSG-701	Introduction to GIS and Spatial Analysis	3(2-1
2	RSG-702	Introduction to Remote Sensing and Digital Image Proces	sing 3(2-1
3	RSG-717	Geo-Information for Agriculture Monitoring	3(2-1
4	RSG-718	Forest Management	3(3-0
5	RSG-719	Soil Geomorphology and Classification	3(2-1
6	RSG-720	*Geo Spatial Analysis for Hydrology	3(2-1
7	RSG-721	Biodiversity	3(3-0
8	RSG-722	Management of Energy Resources	3(3-0
9	RSG-723	Management of Mineral Resources	3(3-0
10	RSG-724	Coastal Zone Management	3(3-0
11	RSG-725	Natural Resources Exploration	3(3-0
12	RSG-726	Natural Hazards and Disaster Management	3(3-0
13	RSG-727	Environmental Pollution	3(3-0
14	RSG-728	Environmental Impact Assessment	3(2-1
15	RSG-729	Environmental Decisions and Conflict Resoluti	on 3(2-1
16	RSG-730	Disease Ecology	3(3-0

S.No.	Course No.	Course Title C	redit Hours
17	RSG-731	Climatology	3(3-0)
18	RSG-732	Land Use Planning and Management	3(3-0)
19	RSG-733	District Planning and Management	3(2-1)
20	RSG-734	Urban Planning	3(2-1)
21	RSG-735	Infrastructure and Transport Planning	3(2-1)
22	RSG-736	E-Governance	3(3-0)
23	RSG-737	Planning and Management of Housing	3(2-1)
24	RSG-738	Poverty Alleviation	3(3-0)
25	RSG-739	Tourism Development	3(3-0)
26	RSG-740	Education and Health Services	3(3-0)
27	RSG-741	Business and Marketing	3(2-1)
28	RSG-742	Land Information and Management System	3(2-1)
29	RSG-743	Utilities and Services Management	3(3-0)
30	RSG-744	Advanced Geodesy	3(3-0)
31	RSG-745	GIS Standards, Security and ethics	3(3-0)
32	RSG-746	Integrated Geo-Technologies	3(2-1)
33	RSG-747	Corporate GIS	3(3-0)
34	RSG-748		3(2-1)
35	RSG-749	Fuzzy GIS	3(3-0)
30	RSG-750	Neural Networks and Artificial Intelligence	3(3-0)
37	RSG-751	Climate Chang	3(3-0)
30	RSG-752	Elled Medeling	3(3-0)
39	RSG-753	Archaology	3(2-1)
40	RSG-754	CIS for Energy Management	3(3-0)
41	RSG-756		3(3-0)
42	RSG-757	Ground Water Modeling	3(2-1)
43	RSG-758	Watershed Modeling and Management	3(2-1)
45	RSG-759	Crop Growth Modeling	3(2-1)
46	RSG-760	Advanced Mobile GIS	3(2-1)
47	RSG-761	Advanced Topics in GIS	3(2-1)
48	RSG-762	Advanced Topics in Remote Sensing	3(2-1)
49	RSG-763	Risk Assessment and Mapping	3(2-1)
50	RSG-764	Early Warning System	3(2-1)
51	RSG-765	Spectroscopy Theory	3(3-0)
52	RSG-766	Numerical Modeling	3(3-0)
53	RSG-767	GPS and Applications	3(2-1)
54	RSG-768	Digital Photogrammetry	3(3-0)
55	RSG-769	Terrain Mapping and Modeling	3(2-1)
56	RSG-770	Land Information System	3(3-0)
57	RSG-771	Forest Management	3(3-0)
58	RSG-772	Food Security	3(3-0)
59	RSG-773	Environmental Impact Assessment	3(3-0)

### Introduction

University Institute of Management Sciences (UIMS) is a constituent institute of the Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi (PMAS AAUR), a public sector university. UIMS was established in 1996 with the inception of MBA programs and the first intake of 50 students. Over the years UIMS has added several new programs to its portfolio and today it is the most diverse Business School of the country with the current (accumulated) enrollment of about 850 students in BBA(Hons.), Ph.D (Management Sciences), MBA 3.5 years, MBA (Agribusiness), MBA & MS(1.5 Year) and Master's in Development Management. Thousands of the graduates of UIMS are already serving the nation and making a great impact both socially and economically.



The Institute offers undergraduate and postgraduate degree courses leading to BBA (Hons.), MBA-Agribusiness; Master's in Development Management, MBA (3.5 Year) with specialization in Marketing, HRM, Finance, MBA, MS & Ph.D with specialization in Marketing, HRM, Finance.

Director P.A to the Director Assistant Directors Associate Professor Assistant Professors	Dr. Rauf-i-Azam Mr. Muhammad Sajjad Mr. Irfan Ullah Munir Hafiz Muhammad Hafeez Dr. Farida Faisal Dr. Abdul Rehman	Lecturers	Ms. Afsheen Fatima Ms. Sidra Shahzadi Mr. Zia-ur-Rehman Mr. Ammar Asghar Mr. Adnan Akhtar Mr. Ahmad Imran
Assistant Directors Associate Professor Assistant Professors	Mr. Irfan Ullah Munir Hafiz Muhammad Hafeez Dr. Farida Faisal Dr. Abdul Rehman Dr. Rabia Imran Dr. Muhammad Razzaq Athar Dr. Manzoom Akhtar Ms. Bushra Zulfiqar Syed Kashif Saeed Mr. Shuja Ilyas		Mr. Zia-ur-Rehman Mr. Ammar Asghar Mr. Adnan Akhtar Mr. Ahmad Imran Mr. Osman Zulfiqar Ms. Shumaila Mazhar Awan Mr. Kaleem Ullah Mr. Muhammad Waqas Mr. Ali Haider
	Mr Ahmad Raza		

# PROGRAMMES OFFERED

# 1. BBA (Hons.)

A minimum of eight semesters duration programme after Intermediate or equivalent.

# ADMISSION ELIGIBILITY:

# Minimum Academic Requirements:

- (i) A person (male/female) holding Intermediate Certificate, A-level or equivalent certificate from any recognized Institute with at least 45% marks shall be eligible for admission to BBA (Hons.) programme.
- (ii) Admission will be on open merit basis; based on marks obtained in last degree.

# ACADEMIC STANDING:

- (i) Grade Point Average:
  - a. Maximum grade point averageb. Minimum grade point average for obtaining the degree2.50
- To remain on the roll of the University a student shall be required to maintain the following minimum CGPA otherwise he / she shall be ceased on the University roll.
- (ii) A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be promoted to the next semester.
- (iii) A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.
- (iv) During the specified minimum duration for completing the degree, a student may repeat those courses of the previous semesters in which he/she had secured the grade "F", provided the course load does not exceed the maximum limit of credit hours in a semester. Repetition of lowest grades will only be allowed in Summer Session.

(iii) Age:

A candidate must not be more than 23 years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

Semester

1st

2nd

3rd

4th

5th

6th

7th

8th

**CGPA** 

0.75

1.25

1.50

1.75

2.00

2.25

2.50

2. MBA:

- a. MBA (3-1/2 Year)
- b. MBA  $(1-\frac{1}{2} \text{ Year})$

# Admission Eligibility:

A candidate seeking admission to the course for the degree of Master of Business Administration in full or partial residence, must meet all the requirements for admission as per rules.

- (i) MBA (3<sup>1</sup>/<sub>2</sub> Year): Must hold a Bachelor degree (14 Years of Education) with minimum 45% marks or equivalent qualification from recognized institution.
- (ii) MBA (1½ Year): Must hold a BBA (Hons.) four years degree with minimum 50% or equivalent qualification in relevant subject from a recognized institution with minimum CGPA of 2.50 out of 4.00.

# Academic Standing:

# (i) Grade Point Average

(a) Maximum grade point average:

4.00

(b) Minimum grade point average for obtaining the degree 2.50 To remain on the roll of the University a student shall be required to maintain the minimum prescribed CGPA.

(ii) During the specified minimum duration for completing the degree, a student may repeat those course of the previous semesters in which he/she had secured the grade "F", provided the course load does not exceed the maximum limit of credit hours in a semester. Repetition of lowest grades will only be allowed in Summer Session.





# 3. MBA (AGRIBUSINESS)

# Admission Eligibility:

Following requirements need to be met to acquire admission in MBA-Agribusiness Degree Programme

Stream I: To be placed in the 1st semester	Somostor	CCP	
BA/B.Sc./B.Com or equivalent gualification with a minimum of	Semester	CGFA	VCGFA
15% marks		MBA	MBA
45 /0 IIIaiks.		Stream I	Stream II
Stream II: To be placed in the 5th semester (Minimum duration of	1st	1.50	2.00
degree is 1-1/2 years)	2nd	1.75	2.25
B.Sc (Hons.) Agriculture 4-years degree.	3rd	2.00	2.50
	4th	2.20	-
Total Credit Hours (in order to complete the degree)	5th	2.30	-
Stream I: 97 Stream II: 45	6th	2.40	-
Academic Standing:	7th	2.50	<u> </u>
(i) Grade Point Average	An	1 2 41	
(a) Maximum grade point average: 4.0	0		
(b) Minimum grade point average for obtaining the degree 2.5	50		

(ii) To remain on the roll of the University a student shall be required to maintain the minimum prescribed CGPA.
(ii) During the specified minimum duration for completing the degree, a student may repeat those course of the previous semesters in which he/she had secured the grade "F", provided the course load does not exceed the maximum limit of credit hours in a semester. Repetition of lowest grades will only be allowed in Summer Session.

# 4. MDM (Masters in Development Management)

# **Duration:**

The duration of the course for the degree of Masters in Development Management in full residence shall not be

- a. Less than 4 semesters and more than 6 semesters for a whole-time student.
- b. Less than 6 semesters and more than 8 semesters for a part-time student.

# Admission Eligibility:

A candidate seeking admission to the course for the degree of Masters in Development Management, in full or partial residence, must meet all the requirements for admission as below:

- a. Must hold a bachelors degree (BA/B.Sc./B.Com. or equivalent) from a recognized institution with a minimum of 45% marks.
- b. Success for admission will be determined on the basis of open merit based on marks obtained in the Bachelors degree.

# Academic Standing:

# **Grade Point Average**

- (a) Maximum grade point average: 4.00
- (b) Minimum grade point average for obtaining the degree 2.50

To remain on the role of the university a student shall be required to maintain the following minimum GPA/CGPA in each semester

# Other Rules:

Rest of the rules and regulations, including tuitions & fees, will be same as

Semester	CGPA/CGPA			
1st	1.50			
2nd	1.75			
3rd	2.00			
4th	2.50			

# 5. MS (MANAGEMENT SCIENCES)

# Admission to the Course:-

MS (Management Sciences) program is offered only to the students who fulfill the following minimum eligibility criteria, minimum requirements for MS in Management Sciences Programs are as follows:

- (i) Sixteen years of schooling with the last degree in Business/Commerce or 4 year business education (minimum 130 credit hours) after HSSC/F.A./F.Sc/or equivalent degree in the relevant field will be required for admission in the MS (Management Science) Program.
- (ii) The minimum CGPA should be 3.0 (out of 4.0 in the Semester System) or First Division (in the Annual System) in the last degree for admission in MS (Management Sciences).

4.00

# **Duration:-**

The duration of the course in full residency shall not be

- a. Less than 3 semesters & more than 5 semesters for a whole time student
- b. Less than 5 semesters & more than 7 semesters for part time student

# Academic Standing:-

- i) Cumulative Grade Point Average
  - (a) Maximum cumulative grade point average:
  - (b) Minimum cumulative grade point average for obtaining MS (Management Sciences) Degree: 2.50
- ii) To remain on the roll of the university a student shall be required to attain the following minimum CGPA in each semester.

# 6. Ph.D (MANAGEMENT SCIENCES)

A minimum of six semesters duration program after MS (Management Sciences) degree or equivalent.

# Admission to the Course:

- 1. Must have passed the MS degree with 1st division or with at least a CGPA of 3.00 out 4.00
- 2. Must have passed University Entrance Test with 70% marks.

Semester	CGPA/CGPA
1st	2.00
2nd	2.50
3rd	2.50

# SCHEME OF STUDIES FOR BBA (HONS.) 4-YEARS PROGRAMME

I SEMESTER			SEMESTER				
S.No.	Course No.	Course Title Cred	it Hours	S.No.	Course No	. Course Title Credit	Hours
1 2 3 4 5 6	SSH-302 MGT-304 MGT-321 MGT-341 MGT-391 MGT-404	Pakistan Studies Social Psychology and Self Development Fundamentals of Accounting IT in Business-I Business Mathematics Business Communication-I	2(2-0) 3(3-0) 3(3-0) 3(3-0) 3(3-0) 3(3-0)	1 2 3 4 5 6	IS-302 MGT-322 MGT-342 MGT-351 MGT-371 MGT-411	Islamic Studies/Ethics* Financial Accounting IT in Business-II Introduction to Marketing Micro Economics Introduction to Management	2(2-0) 3(3-0) 3(3-0) 3(3-0) 3(3-0) 3(3-0)
							/

\* Note: Muslim Students will enroll Islamic Studies and non-Muslim will enroll ethics.

III SEMESTER				IV S	SEMESTER			
	S.No.	Course No	•Course Title C	redit Hours	S.No.	.Course No.	Course Title Credi	t Hours
	1	MGT-405	Business Communication-II	3(3-0)	1	MGT-407	Ethics in Business	3(3-0)
	2	MGT-423	Cost Accounting	3(3-0)	2	MGT-424	Introduction to Business Finance	3(3-0)
	3	MGT-452	Introduction to Marketing Managem	ent 3(3-0)	3	MGT-473	Introduction to Managerial Economics	3(3-0)
	4	MGT-472	Macro Economics	3(3-0)	4	MGT-504	Managerial Accounting	3(3-0)
	5	MGT-492	Business Statistics	3(3-0)	5	MGT-515	Introduction to Human Resource	3(3-0)
	6	MGT-512	Introduction to Organizational Beha	viour 3(3-0)			Management	
					6	MGT-594	Introduction to Logic	3(3-0)

# Scheme of Studies for Different Programmes

# **V SEMESTER**

### S.No. Course No. Course Title

Credit Hours

1	MGT-513	Corporate Law	3(3-0)
2	MGT-514	Introduction to Project Management	3(3-0)
3	MGT-525	Introduction to Financial Management	3(3-0)
4	MGT-526	Money and Banking	3(3-0)
5	MGT-580	Strategic Management	3(3-0)
6	MGT-595	Statistical Inference	3(3-0)

# **VII SEMESTER**

5.No.	Course No.	Course Title	Credit Hours
1	MGT-616	Total Quality Management	3(3-0)
2	MGT-644	Introduction to E-Commerce	3(3-0)
3	MGT-699	Project	3(0-6)
4		Elective-III	3(3-0)
5		Elective-IV	3(3-0)

# VIII SEMESTER

S.No.	Course No.	Course Title Cred	Credit Hours	
1	MGT-617	Entrepreneurship	3(3-0)	
2	MGT-618	Contemporary issues in Management	3(3-0)	
3	MGT-698	Internship	3(0-6)	
4		Elective-V	3(3-0)	
5		Elective-VI	3(3-0)	

# **VI SEMESTER**

S.No.	Course No.	Course Title	Credit Hours
1	MGT-493	Business Research Methods	s 3(3-0)
2	MGT-543	Introduction to Management Information System	t 3(3-0)
3	MGT-574	International Business	3(3-0)
4	MGT-696	Introduction to Production Operations Management	3(3-0)
5		Elective-I	3(3-0)
6		Elective-II	3(3-0)



# **ELECTIVE COURSES FOR THE SPECIALIZATIONS OFFERED IN BBA (Hons.)**

# MARKETING

S.No.	Course No.	Course Title	Credit Hou
1	MGT-560	Consumer Behavior	3(3-0)
2	MGT-561	Advertising and Promotion	3(3-0)
3	MGT-562	Sales Management	3(3-0)
4	MGT-663	Services Marketing	3(3-0)
5	MGT-664	Product and Brand Managemer	nt 3(3-0)
6	MGT-665	Global Marketing	3(3-0)
7	MGT-666	Marketing Research	3(3-0)
8	MGT-667	Marketing Channels	3(3-0)
9	MGT-668	Strategic Marketing Planning	3(3-0)
10	MGT-669	Seminar in Marketing	3(3-0)



S.No.	Course No.	Course Title Credit	Hours
1	MGT-530	Investment Banking	3(3-0)
2	MGT-531	Analysis of Financial Statements	3(3-0)
3	MGT-631	Securities Analysis and Portfolio	3(3-0)
		Management	
4	MGT-632	Investment and Security Analysis	3(3-0)
5	MGT-633	Corporate Finance	3(3-0)
6	MGT-634	Credit Management	3(3-0)
7	MGT-635	Islamic Banking	3(3-0)
8	MGT-636	Portfolio Management	3(3-0)
9	MGT-637	Financial Institutions	3(3-0)
10	MGT-638	International Finance	3(3-0)
11	MGT-639	Money and Capital Markets	3(3-0)



# HUMAN RESOURCE MANAGEMENT

S.No.	Course No.	Course Title Credit	Hours
1	MGT-581	Leadership	3(3-0)
2	MGT-582	Organizational Development	3(3-0)
3	MGT-683	Human Resource Development	3(3-0)
4	MGT-684	Learning and Management Development	3(3-0)
5	MGT-685	Collective Bargaining and Wage Policy	3(3-0)
6	MGT-686	International Human Resource Management	3(3-0)
7	MGT-687	Strategic Human Resource Management	3(3-0)
8	MGT-688	Seminars in Human Resource Management	3(3-0)

# COURSES OF STUDY FOR MBA (3-1/2 Years) PROGRAMME

# **I SEMESTER**

S.No.	Course No.	Course Title	Credit Hours
1	MGT-700*	Principles of Economics	NC
2	MGT-701	Principles of Marketing	3(3-0)
3	MGT-702	Principles of Accounting	3(3-0)
4	MGT-703	Principles of Management	3(3-0)
5	MGT-706	Business Communication	3(3-0)
6	MGT-734	IT in Business	3(3-0)
*Principl	es of Economic	s is a non credit, compulsory	<u>15</u>

\*Principles of Economics is a non-credit, compulsory deficiency course for those students who have not studied Economics in their Bachelor Degree.

# **III SEMESTER**

S	.No.	Course No.	Course Title	Credit	Hours
	1	MGT-711	Operations Management		3(3-0)
	2	MGT-712	Financial Management		3(3-0)
	3	MGT-713	Human Resource Managem	ent	3(0-0)
	4	MGT-730	Business Law		3(3-0)
	5		Elective-I		3(3-0)
					15

# **II SEMESTER**

S.No. Course No. Course Title Credit H					
	1	MGT-705	Economic Theory	3(3-0)	
	2	MGT-709	Statistical Methods in Business	3(3-0)	
	3	MGT-710	Organizational Behaviour	3(3-0)	
	4	MGT-719	Consumer Behaviour	3(3-0)	
	5	MGT-763	Managerial Accounting	3(3-0)	
				15	

# **IV SEMESTER**

S.No.	Course No.	Course Title	Credit	Hours
1	MGT-716	Strategic Business Manager	ment	3(3-0)
2	MGT-777	Research Methods		3(3-0)
3		Elective-II		3(0-0)
4		Elective-III		3(3-0)
5		Elective-IV		3(3-0)
				15

# SEMESTER-V

**ELECTIVE COURSES for the Specializations offered in MBA** (Any nine courses to be enrolled from the respective area of specialization)

S.No.	Course No.	Course Title Cred	it Hours
1	MGT-755	Supply Chain Management	3(3-0)
2	MGT-756	Data Analysis and Decision Makin	g 3(3-0)
3		Elective-V	3(3-0)
4		Elective-VI	3(3-0)
			12

# SEMESTER-VI

S.No.	Course No	. Course Title C	redit Hours
1	MGT-757	Project Management	3(3-0)
2	MGT-758	Managing Groups and Te	rms 3(3-0)
3		Elective-VII	3(3-0)
4		Elective-VIII	3(3-0)
			<u>12</u>

# SEMESTER-VII

S.No.	Course No.	Course Title	Credit Hours
1	-	Elective-IX	3(3-0)
2	MGT-798	Project	6(0-12)

# MARKETING

S.No.	Course No.	Course Title Cred	dit Hours
1	MKT-701	Marketing Research	3(3-0)
2	MKT-702	Promotion and Advertising	3(3-0)
3	MKT-702	Strategic Marketing Planning	3(3-0)
4	MKT-704	Seminar In Marketing	3(3-0)
5	MKT-705	Marketing Channels	3(3-0)
6	MKT-706	Sales Management	3(3-0)
7	MKT-707	Contemporary Issues in Marketing	3(3-0)
8	MKT-708	Customer Relation Management	t 3(3-0)
9	MKT-709	E-Marketing	3(3-0)
10	MKT-710	Social Marketing	3(3-0)

### 2

9

1

# FINANCE

#### S.No. Course No. Course Title

### **Credit Hours**

1	FIN-701	International Business Finance	3(3-0)
2	FIN-702	Corporate Finance	3(3-0)
3	FIN-703	Commercial & Investment Banking	3(3-0)
4	FIN-705	Security Analysis & Portfolio Management	3(3-0)
5	FIN-709	Islamic Banking	3(3-0)
6	FIN-710	Economic Analysis & Policies	3(3-0)
7	FIN-704	Taxation	3(3-0)
8	FIN-706	Monetary Theory and Policy	3(3-0)
9	FIN-707	Financial Modeling and Risk Analysis	3(3-0)
10	FIN-708	Financial Derivatives	3(3-0)
11	FIN-711	Behavioral Finance	3(3-0)
12	FIN-712	Financial Risk Management	3(3-0)

# Scheme of Studies for Different Programmes

**SEMESTER II** 

# HUMAN RESOURCE MANAGEMENT

S.No.	Course No.	Course Title Credit	Hours
1	HRM-701	Recruitment and Selection	3(3-0)
2	HRM-702	Leadership	3(3-0)
3	HRM-703	Organizational Development	3(3-0)
4	HRM-704	Human Resource Development	3(3-0)
5	HRM-705	Learning & Management Development	3(3-0)
6	HRM-706	Collective Bargaining & Wage Policy	3(3-0)
7	HRM-707	International Human Resource Management	3(3-0)
8	HRM-708	Strategic Human Resource Management	3(3-0)
9	HRM-709	Seminar in Human Resource Management	3(3-0)
10	HRM-710	Compensation Management	3(3-0)
11	HRM-711	Performance Management	3(3-0)
12	HRM-712	Conflict and Negotiation Management	3(3-0)
13	HRM-713	Change Management and Human Resources	3(3-0)
14	HRM-714	Training and Development	3(3-0)

# Courses of Study for MBA (1-1/2-Year) Programme

# SEMESTER I

3

S.No	. Course No	Credit Hours	
1	MGT-755	Supply Chain Management	3(3-0)
2	MGT-756	Data Analysis and Decision Makir	ng 3(3-0)
3		Elective-I	
4		Elective-II	

S.No	. Course No	. Course Title	Credit Hours
1	MGT-757	Project Management	3(3-0)
2	MGT-758	Managing Groups and Tea	ims 3(3-0)
3		Elective-III	
4		Elective-IV	
	SEMEST	ER III	
S.No	. Course No.	Course Title	Credit Hours
1		Elective-V	3(3-0)
2	MGT-798	Project	6(0-12)



#### **ELECTIVE COURSES for the Specializations offered in MBA (1-1/2-Year)**

1		FINANCE	
S.No.	Course No.	Course Title Credit	Hours
1	FIN-701	International Business Finance	3(3-0)
2	FIN-702	Corporate Finance	3(3-0)
3	FIN-703	Commercial & Investment Banking	3(3-0)
4	FIN-704	Taxation	3(3-0)
5	FIN-705	Security Analysis & Portfolio Management	3(3-0)
6	FIN-706	Monetary Theory and Policy	3(3-0)
7	FIN-707	Financial Modeling and Risk Analysis	3(3-0)
8	FIN-708	Financial Derivatives	3(3-0)
9	FIN-709	Islamic Banking	3(3-0)
10	FIN-710	Economic Analysis & Policies	3(3-0)
11	FIN-711	Behavioral Finance	3(3-0)
12	FIN-712	Financial Risk Management	3(3-0)
13	FIN-717	Analysis of Financial Statements	3(3-0)
14	FIN-718	Money Market and Capital Market	3(3-0)

#### 2 MARKETING S. No. Course No. **Course Title** Credit Hours 1 MKT-701 Marketing Research 3(3-0) Promotion and Advertising 2 MKT-702 3(3-0)Strategic Marketing Planning 3(3-0) 3 MKT-703 MKT-704 Seminar in Marketing 3(3-0) 4 Marketing Channels 5 MKT-705 3(3-0) Sales Management 6 MKT-706 3(3-0)Contemporary Issues in Marketing MKT-707 3(3-0) 7 8 MKT-708 Customer Relationship Management 3(3-0) E-Marketing 9 MKT-709 3(3-0) MKT-710 Social Marketing 3(3-0) 10

#### COURSES OF STUDY FOR MBA (AGRIBUSINESS) 3-1/2 YEARS

### **SEMESTER-I**

S.No.	Course No.	Course Title	<b>Credit Hours</b>
1	BIO-701	Biology	2(2-0)
2	AGB-701	General Agriculture	3(3-0)
3	ICT-701	IT in Business-I	3(3-0)
4	ENG-701	Functional English	2(2-0)
5	MGT-720	Introduction to Busines	s 3(3-0)
			12
GEM	етер ІІ		<u>13</u>
SEM	STER-II		<u>13</u>
SEME S.No.	ESTER-II Course No.	Course Title	Credit Hours
<b>SEM</b> <b>S.No.</b> 1	ESTER-II Course No. MTH-701	Course Title Business Mathematics	Credit Hours 3(3-0)
<b>SEMI</b> <b>S.No.</b> 1 2	STER-II Course No. MTH-701 ECO-701	<b>Course Title</b> Business Mathematics Micro Economics	Credit Hours 3(3-0) 3(3-0)
<b>SEM</b> <b>S.No.</b> 1 2 3	STER-II Course No. MTH-701 ECO-701 ICT-702	<b>Course Title</b> Business Mathematics Micro Economics IT in Business-I	Credit Hours 3(3-0) 3(3-0) 3(3-0)

ENG-702 Communication Skills 4 5 AGB-702 Introduction to Horticulture 3(3-0)

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### 3

# HUMAN RESOURCE MANAGEMENT

5. No.	<b>Course No</b>	.Course Title Cred	it Hours
1	HRM-701	Recruitment and Selection	3(3-0
2	HRM-702	Leadership	3(3-0
3	HRM-703	Organizational Development	3(3-0
4	HRM-704	Human Resource Development	3(3-0
5	HRM-705	Learning & Management Development	3(3-0
6	HRM-706	Collective Bargaining & Wage Policy	3(3-0
7	HRM-707	International Human Resource Manageme	nt 3(3-0
8	HRM-708	Strategic Human Resource Management	3(3-0
9	HRM-709	Seminar in Human Resource Manageme	nt 3(3-0
10	HRM-710	Compensation Management	3(3-0
11	HRM-711	Performance Management	3(3-0
12	HRM-712	Conflict and Negotiation Management	3(3-0
13	HRM-713	Change Management and Human Resource	es 3(3-0
14	HRM-714	Training and Development	3(3-0
## Scheme of Studies for Different Programmes

#### SEMESTER-III

S.No.	Course No.	Course Title Cr	edit Hours
1	PSY-701	Social Psychology & Self Develop	oment 2(2-0)
2	MTH-702	Introduction to Logic	3(3-0)
3	ECO-702	Macro Economics	2(2-0)
4	AGB-703	Agri Entrepreneurship	3(3-0)
5	MGT-709	Statistical Methods in Busine	ess 3(3-0)
			<u>13</u>

## SEMESTER-V

S.No.Course No. Co	ourse Title
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<u>15</u>

1	MGT-701	Principles of Marketing	3(3-0)
2	MGT-702	Principles of Accounting	3(3-0)
3	MGT-703	Principles of Management	3(3-0)
1	MGT-706	Business Communication	3(3-0)

ECO-704 Production Economics in Agriculture 3(3-0) 5

## SEMESTER-VII

S.No.	Course No.	Course Title Credi	t Hours
1	AGB-707	Agri Credit Management	3(3-0)
2	MGT-712	Financial Management	3(3-0)
3	MGT-713	Human Resource Management	3(3-0)
4	MGT-716	Strategic Business Management	3(3-0)
5AG	B-7 37/MGT-7 98	Internship/Project	3(0-6)

<u>15</u>

## SEMESTER-IV

S.No.	Course No.	Course Title Credit	Hours
1	ECO-703	Agricultural Economics	2(2-0)
2	AGB-704	Food Processing, Preservation & Packaging	g 3(3-0)
3	AGB-705	Livestock & Dairy Development	2(2-0)
4	MGT-730	Business Law	3(3-0)
5	MGT-777	Research Methods	3(3-0)

#### SEMESTER-Vi

S.No	.Course No	Credit Hours	
1	AGB-706	Agri Marketing Management	3(3-0)
2	MGT-710	Organizational Behavior	3(3-0)
3	MGT-711	Operations Management	3(3-0)
4	MGT-729	Project Management	3(3-0)
5	MGT-763	Managerial Accounting	3(3-0)



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#### SCHEME OF STUDIES FOR Masters in Development Management (MDM) **Two Years (Evening Programme)**

S.No.	Course No.	Course Title C	redit Hours
1	DTM-701	Introduction to Sociology	3(3-0)
2	ENG-702	Communication Skills	3(3-0)
3	MGT-794	Training and Development	3(3-0)
4	DTM-732	Theories & Models of Development	3(3-0)
5	DTM-714	Development Economics	3(3-0)
6	DTM-731	Development Finance	3(3-0)
7	MGT-712	Financial Management	3(3-0)
8	DTM-721	Governance and Development	3(3-0)
9	MGT-713	Human Resource Management	3(3-0)
10	DTM-737	Internship	3(3-0)
11	MGT-781	Leadership	3(3-0)
12	DTM-733	Poverty Alleviation & Role of International	3(3-0)
		Financial Institution in Development	
13	DTM-712	Participatory Development	3(3-0)
14	MGT-702	Principles of Accounting	3(3-0)
15	MGT-700	Principles of Economics	3(3-0)
16	MGT-703	Principles of Management	3(3-0)
17	MGT-701	Principles of Marketing	3(3-0)
18	DTM-713	Sustainable Development	3(3-0)
19	DTM-757	Project Management	3(3-0)
20	DTM-752	Public Policy Issues and Analysis	3(3-0)
21	MGT-777	Research Methods	3(3-0)
22	DTM-743	Social Entrepreneurship & Enterprise Developr	nent 3(3-0)
23	DTM-741	Social Impact Assessment	3(3-0)
24	DTM-709	Statistical Methods in Social Sciences	3(3-0)
25	DTM-742	Strategic Management for Development	3(3-0)

#### **SCHEME OF STUDIES FOR MS (MANAGEMENT SCIENCES) 1-1/2 years**

#### **SEMESTER I**

S.No. Course No. Course Title Cru			
1	MGT-750	Business Research Methodology	3(3-0)
2	MGT-751	Management, Organizational Policy and Practices	s 3(3-0)
3		Elective-I	3(3-0)
4		Elective-II	3(3-0)

#### **SEMESTER II**

S.No. Course No. Course Title	Credit Hours
1 MGT-752 Advanced Analytical Techniq	ques 3(3-0)
2 MGT-753 Trends in Global Business	3(3-0)
3 Elective-III	3(3-0)
4 Elective-IV	3(3-0)

#### SEMESTER III

S.No. Course No. Course Title			Credit Hours
1	MGT-799	Research Thesis	10(0-20)
A stud	ent may study	two elective courses i	n lieu of Research Thesis

#### **ELECTIVE COURSES FOR THE SPECIALIZATIONS OFFERED IN MS(MANAGEMENT SCIENCES)**

1		MARKETIN	NG
S. No.	Course No.	Course Title Credit	Hours
1	MKT-701	Marketing Research	3(3-0)
2	MKT-703	Strategic Marketing Planning	3(3-0)
3	MKT-705	Marketing Channels	3(3-0)
4	MKT-707	Contemporary Issues in Marketing	3(3-0)
5	MKT-708	Customer Relationship Managemen	t 3(3-0)
6	MKT-709	E-Marketing	3(3-0)
7	MKT-710	Social Marketing	3(3-0)

## Scheme of Studies for Different Programmes

2		FINA	ANCE
S.No.	Course No	. Course Title C	redit Hours
1	FIN-704	laxation	3(3-0)
2	FIN-706	Monetary Theory and Policy	3(3-0)
3	FIN-707	Financial Modeling and Risk Analysi	s 3(3-0)
4	FIN-708	Financial Derivatives	3(3-0)
5	FIN-709	Islamic Banking	3(3-0)
6	FIN-710	Economics Analysis and Policies	3(3-0)
7	FIN-711	Behavioral Finance	3(3-0)
8	FIN-712	Financial Risk Management	3(3-0)
9	FIN-713	Advanced Corporate Finance	3(3-0)
10	FIN-714	Contemporary Issues in Finance	3(3-0)
11	FIN-715	Stock Market Efficiency	3(3-0)
12	FIN-716	Advances in International Finance	3(3-0)

3

#### HUMAN RESOURCE MANAGEMENT

S. No.	Course No	.Course Title Credi	t Hour
1	HRM-701	Recruitment and Selection	3(3-0
2	HRM-708	Strategic Human Resource Management	3(3-0
3	HRM-710	Compensation Management	3(3-0
4	HRM-711	Performance Management	3(3-0
5	HRM-712	Conflict and Negotiation Management	3(3-0
6	HRM-713	Change Management and Human Resources	3(3-0
7	HRM-714	Training and Development	3(3-0
8	HRM-715	Contemporary Issues in human Resources	s 3(3-0
		Management	

#### SCHEME OF STUDIES FOR **Ph.D (MANAGEMENT SCIENCES)**

#### **CORE COURSES**

S.No. Course No. Course Title Credit Hours			
1	MGT-771	Management Thoughts and Philosophy	3(3-0)
2	MGT-772	Advanced Research Techniques	3(3-0)
3	MGT-773	Special Topics in Management Sciences	3(3-0)

#### **ELECTIVE COURSES FOR THE SPECIALIZATIONS OFFERED IN Ph.D (MANAGEMENT SCIENCES)**

#### MARKETING S. No. Course No. Course Title **Credit Hours** MKT-701 Marketing Research MKT-703 Strategic Marketing Planning

MKT-707 Contemporary Issues in Marketing 3 3(3-0) 4 MKT-711 Theories and Practices in Marketing 3(3-0) 5 MKT-712 Business to Business Marketing 3(3-0)6 MKT-713 Integrated Marketing Communications 3(3-0) 7 MKT-714 Relationship Marketing, Theory and Practice 3(3-0)

2

1

2

#### FINANCE

3(3-0)

3(3-0)

#### S.No. Course No. Course Title Credit Hours Monetary Theory and Policy FIN-706 3(3-0) 1 Financial Modeling and Risk Analysis 2 FIN-707 3(3-0) 3 FIN-708 **Financial Derivatives** 3(3-0) 4 FIN-709 Islamic Banking 3(3-0) 5 FIN-710 Economics Analysis and Policies 3(3-0) FIN-711 Behavioral Finance 6 3(3-0) 7 FIN-712 Financial Risk Management 3(3-0) 8 FIN-713 Advanced Corporate Finance 3(3-0) FIN-714 Research Paradigms in Finance 9 3(3-0) 10 FIN-715 Stock Market Efficiency 3(3-0) FIN-716 Advances in International Finance 3(3-0) 11 3(3-0) 12 FIN-717 Financial Intermediation

#### HUMAN RESOURCE MANAGEMENT

#### S. No. Course No. Course Title

3

#### **Credit Hours**

1	HRM-705	Learning & Management Development	3(3-0)
2	HRM-708	Strategic Human Resource Management	3(3-0)
3	HRM-711	Performance Management	3(3-0)
4	HRM-713	Change Management and Human Resources	3(3-0)
5	HRM-715	Contemporary Issues in Human Resources Management	3(3-0)
6	HRM-716	Research Issues in Human Resources	3(3-0)
7	HRM-717	Cross-Cultural Management	3(3-0)
8	HRM-718	Career Management	3(3-0)
9	HRM-719	Industrial Psychology	3(3-0

## UniversityInstituteof Information Technology

Keeping in view the importance of Computer Science & Information Technology the University has established University Institute of Information Technology (UIIT).

UIIT is offering BS (CS), BS(IT), MCS, MIT, MS(CS) & Ph.D (Computer Science).

Director	Dr. Mobushir Riaz Khan
Deputy Director	Mr. Ghulam Mustafa
Assistant Directors	Mr. Azhar Manzoor
	Mr. Saud Altaf
Assistant Professors	Dr. Mamoona Humayun
	Mr. Yasir Hafeez
	Mr. Nasir Mehmood Minhas
	Ms. Rubina Ghazal
	Syed Mushhad Mustazhar Gilani
	Mr. Saif ur Rehman
	Mr. Saleem Iqbal
	Rana Saqib Majeed
Lecturers	Ms. Aisha Umair
	Mr. Muhammad Shabbir Hassan
	Ms. Bushra Hamid
	Ms. Sarfraz Bibi
	Mr. Tariq Ali
	Mr. Ehtasham Azhar
	Mr. Asif Nawaz
	Mr. Muhammad Jafer
	Mr. Kashif Sattar
	Mr. Muhammad Jamal
	Mr. Aakash Ahmad Abbasi
	Ms. Qurat-ul Ann Farooq
	Ms. Irum Rubab



#### **DEGREES OFFERED**

#### BS(CS)/BS(IT)

A minimum of eight semesters duration programme after Intermediate or equivalent.

#### Admission and Registration:-

- (i) Minimum Academic Requirements for BS (CS) A person holding Intermediate Certificate, A-level or an equivalent certificate from any recognized Institute with at least 45% marks shall be eligible to apply for admission.
- (ii) Admission will be on open merit basis.
- (iii) Students with Computer Science background will be given preference.
- (iv) Students with F.Sc. Pre-Engineering will be eligible to transfer to BCE degree program from BS (CS) degree program. Academic Standing:-
- (i) Grade Point average
  - (a) Maximum grade point average 4.00
  - (b) Minimum grade point average for obtaining the Degree 2.50
- (ii) To remain on the roll of the university a student shall be required to maintain the following minimum CGPA in each semester:
- (iii) A student who does not meet the above requirement for promotion shall cease to be on the university roll. However, he/she may repeat the whole semester only once.
- (iv) The course grades that a student earns in the repeated Semester shall replace the previously earned course grades.
- (v) In the 8th semester, if a student fails to achieve the 2.5 CGPA, he /she shall have to repeat the course/ courses with lowest grades, so as to make CGPA of 2.5 within the maximum time period allowed for the degree.

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

#### MCS/MIT

A minimum of four semesters duration programme after Bachelor's degree in Engineering/Mathematics/Physics/Electronic/Economics or in any other relevant subject.

#### Admission to the Course:-

- (i) Must have passed the Bachelor Degree Examination with at least 45% Marks from a recognized University, in Mathematics, Physics, Chemistry, Engineering, Computer Science, Commerce, Statistics, Economics, and Business Administration.
- (ii) Admission will be on open merit basis.

## Academic Standing:-

Acat	enne standing		
(i)	Grade Point Average (a) Maximum grade point average: 4.00	Semester	CGPA
(ii)	(b) Minimum grade point average for obtaining Master's Degree: 2.50	1st	1.50
(iii)	maintain the following minimum CGPA in each semester:	2nd	1.75
()	shall cease to be on the university roll. However, he / she may repeat the whole semester only once.	3rd	2.00
(iv)	A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work or minimum residency,	4th	2.50
	may be allowed to repeat the courses of the previous semesters in which he/she had obtained the lowest grades, in order to improve the CGPA so		
	as to obtain the minimum of 2.50.		

## MS(CS)

A minimum of four semesters duration program after MCS/MIT/BCS (Hons.) BS(CS)/BS(IT) (four years program) degree or equivalent.

#### Admission to the Course:

- 1. Must have passed the MCS/ MIT or BCS (Hons.)/ BS(CS)/BS(IT) degree with 45% marks or 2.50 CGPA out of 4.00.
- 2. Admission will be on open merit basis.

4.00

2.50

#### Academic Standing:-

- i. Grade Point Average
  - a. Maximum grade point average:
  - b. Minimum grade point average for obtaining the degree:
- ii. To remain on roll of the University a student shall be required to maintain the following minimum CGPA in each semester.

Semester	CGPA
1st	1.50
2nd	1.75
3rd	2.00
4th	2.50

## Ph.D (Computer Science)

A minimum of six semesters duration program after MS(CS/IT) degree or equivalent.

## Admission to the Course:

- 1. Must have passed the MS(CS/IT) degree with 1st division or with at least a CGPA of 3.00 out 4.00
- 2. Must have passed University Entrance Test with 70% marks.

## SCHEME OF STUDIES FOR BACHELOR OF SCIENCE IN COMPUTER SCIENCES

#### Computing- Core Courses (39/136)

S. No.	Code	Pre-Req	Course Title	<b>Credit Hours</b>
1	CS-323		Programming Fundamentals	4 (3-2)
2	CS-423	CS-323	Object Oriented Programming	4 (3-2)
3	CS-443	CS-323	Data Structures and Algorithms	4 (3-2)
4	CS-430		Digital Logic Design	3 (2-2)
5	CS-582		Operating System Concepts	3 (2-2)
6	CS-400		Database Systems	3 (2-2)
7	CS-452	CS-323	Software Engineering-1	3 (3-0)
8	CS-576		Computer Communications and Networks	3 (2-2)
9	CS-699		Software Project	6(0-12)
10	CS-685	CS-301	Human Computer Interaction	3 (2-2)
11	CS-335		Discrete Structures	3 (3-0)
			CS Core Courses (18/136)	
12	CS-530	CS-430	Computer Organization and Assembly Language	3 (2-2)
13	CS-536	CS-335	Theory of Automata and Formal Languages	3 (3-0)
14	CS-542	CS-443	Analysis of Algorithms	3 (3-0)
15	CS-632		Artificial Intelligence	3 (2-2)
16	CS-532	CS-430	Computer Architecture	3 (3-0)
17	CS-636	CS-536	Compiler Construction	3 (2-2)
			Supporting Courses (09/136)	
18	MTH-315	MTH-310	Multivariable Calculus	3 (3-0)
19	MTH-415	MTH-310	Differential Equations	3 (3-0)
20	CS-572	MTH-310	Numerical Analysis	3 (2-2)
			Computer Science- Supporting Courses (12/136)	
21	MTH-310		Calculus and Analytical Geometry	3 (3-0)
22	MTH-435	MTH-310	Linear Algebra	3 (3-0)
23	ELE-401		Basic Electronics	3 (2-2)
24	STT-500		Statistics and Probability	3 (3-0)
			University Electives Courses (18/136)	
25	MGT-322		Financial Accounting	3 (3-0)
26	MGT-351		Introduction to Marketing	3 (3-0)
27	MGT-411		Introduction to Management	3 (3-0)
28	MGT-515		Introduction to Human Resource Management	3 (3-0)
29	MGT-525	MGT-322	Introduction to Financial Management	3 (3-0)

## Scheme of studies for Different Programmes

<u>S. No.</u>	<u>Code</u>	Pre-Req	Course Title	Credit Hours
30	MGT-512		Introduction to Organizational Behaviour	3 (3-0)
31	PSY-600	11111	Psychology	3 (3-0)
32	ECON-30	1	Introduction to Economics	3 (3-0)
33	SSH-304		International Relations	3 (3-0)
34	SSH-305		Foreign Languages	3 (3-0)
35	SSH-306		Introduction to Philosophy	3 (3-0)
36	MGT-543		Introduction to Management Information Systems	3 (3-0)
			General Education Courses (19/136)	· · ·
37	ENG-305		English Comprehension	3 (3-0)
38	ENG-315		Technical and Business Writing	3 (3-0)
39	ENG-325		Communication Skills	3 (3-0)
40	SSH-303		Professional Ethics	3 (3-0)
41	IS-302		Islamic Studies	2 (2-0)
42	SSH-302		Pakistan Studies	2 (2-0)
43	CS-301		Introduction to Computing	3 (2-2)
			Computer Science- Electives Courses (21/136)	
44	CS-432	CS-423	Modern Programming Languages	3 (2-2)
45	CS-471		Mobile Computing	3 (2-2)
46	CS 476		Communication Technologies	3 (3-0)
47	CS-525		Multimedia Technologies	3 (2-2)
48	CS-552	CS-452	Software Engineering-II	3 (3-0)
49	CS-553	CS-452	Object Oriented Analysis and Design	3 (3-0)
50	CS-565		Web Design and Development	3 (2-2)
51	CS-575	CS-323	Computer Graphics	3 (2-2)
52	CS-579	CS-323	Introduction to Digital Image Processing	3 (3-0)
53	CS-600	CS-400	Distributed Database Systems	3 (2-2)
54	CS-633	CS-632	Introduction to Pattern Recognition	3 (2-2)
55	CS-634		Introduction to Artificial Neural Networks	3 (3-0)
56	CS-635	CS-400	Advanced Database Management Systems	3 (2-2)
57	CS-637	MTH-310, MTH-435	Introduction to Operations Research	3 (3-0)
58	CS-638	MTH-310	Introduction to Simulation and Modeling	3 (2-2)
59	CS-666	CS-565	Web Engineering	3 (2-2)
60	CS-667	CS-400	Introduction to Data Warehousing	3 (2-2)
61	CS-682	CS-530, CS-582	System Programming	3 (2-2)
62	CS-684	CS-576	Network Management & Security	3 (2-2)
63	CS-692	CS-423	Visual Programming	3 (2-2)

#### SCHEME OF STUDIES FOR BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

# Pre-ReqComputing - Core Courses (39/136 Credit Hours)Pre-ReqCourse Title<br/>Programming FundamentalsCredit Hours<br/>4(3-2)CS-323Object Oriented Programming<br/>Discrete Structure4(3-2)

	68-323		Programming Fundamentals	4(3-2)
2	CS-423	CS-323	Object Oriented Programming	4(3-2)
3	CS-335		Discrete Structures	3(3-0)
4	CS-443	CS-323	Data Structures and Algorithms	4(3-2)
5	CS-430		Digital Logic Design	3(2-2)
6	CS-582		Operating System Concepts	3(2-2)
7	CS-400		Database Systems	3(2-2)
8	CS-452	CS-323	Software Engineering-1	3(3-0)
9	CS-576		Computer Communications and Networks	3(2-2)
10	CS-685	CS-301	Human Computer Interaction	3(2-2)
11	CS-699		Software Project	6(0-12)
			Computing Supporting Courses (15/136 Credit Hours)	
12	MTH-310		Calculus and Analytical Geometry	3(3-0)
13	MTH-315	MTH-310	Multivariable Calculus	3(3-0)
14	STT-500		Statistics and Probability	3(3-0)
15	MTH-435	MTH-310	Linear Algebra	3(3-0)
16	ELE-401		Basic Electronics	3(3-0)
			Computing General Education (19/136 Credit Hours)	
17	ENG-305		English Comprehension	3(3-0)
18	ENG-315		Technical and Business Writing	3(3-0)
19	ENG-325		Communication Skills	3(3-0)
20	IS-302		Islamic Studies	2(2-0)
21	SSH-302		Pakistan Studies	2(2-0)
22	CS-301		Introduction to Computing	3(2-2)
23	SSH-303		Professional Ethics	3(3-0)
			IT University Electives (18/136 Credit Hours)	
24	MGT-322		Financial Accounting	3(3-0)
25	MGT-351		Introduction to Marketing	3(3-0)
26	MGT-411		Introduction to Management	3(3-0)
27	MGT-515		Introduction to Human Resource Management	3(3-0)
28	MGT-525	MGT-322	Introduction to Financial Management	3(3-0)

S. No. Code

## Scheme of studies for Different Programmes

<u>S. No.</u>	<u>Code</u>	Pre-Req	Course Title	Credit Hours
29	MGT-512		Introduction to Organizational Behaviour	3(3-0)
30	SSH-304		International Relations	3(3-0)
31	SSH-305		Foreign Languages	3(3-0)
32	PSY-600		Psychology	3(3-0)
			IT Core Courses (18/136 Credit Hours)	- ( )
33	CS-565		Web Design and Development	3(3-0)
34	CS-666	CS-565	Web Engineering	3(3-0)
35	CS-584	CS-301	Systems Administration	3(3-0)
36	CS-684	CS-576	Netwrok Management and Security	3(3-0)
37	CS-525		Multimedia Technologies	3(2-2)
38	CS-552	CS-452	Software Engineering-II	3(3-0)
			IT Supporting Sciences (6/136 Credit Hours)	
39	CS-686		Technology Management	3(2-2)
40	CS-665		E-Commerce	3(2-2)
			IT Electives Courses (21/136 Credit Hours)	- ()
41	CS-432	CS-423	Modern Programming Languages	3(2-2)
42	CS-542	CS-443	Analysis of Algorithms	3(3-0)
43	CS 476		Communication Technologies	3(3-0)
44	CS-471		Mobile Computing	3(2-2)
45	CS-692	CS-423	Visual Programming	3(2-2)
46	CS-558		Software Quality Assurance	3(3-0)
47	CS-567		Software Testing	3(3-0)
48	CS-553	CS-452	Object Oriented Analysis and Design	3(3-0)
49	CS-600	CS-400	Distributed Database Systems	3(2-2)
50	CS-575	CS-323	Computer Graphics	3(2-2)
51	CS-667	CS-400	Introduction to Data Warehousing	3(2-2)
52	CS-652	CS-452	Software Project Management	3(3-0)
53	CS-568	CS-452	Design Patterns	3(3-0)
54	CS-635	CS-400	Advanced Database Management Systems	3(2-2)
55	CS-637	MTH-310, MTH-435	Introduction to Operations Research	3(3-0)
56	CS-632	,	Artificial Intelligence	3(2-2)
57	CS-532	CS-430	Computer Architecture	3(3-0)
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#### SCHEME OF STUDIES FOR MASTER OF COMPUTER SCIENCE

The MCS students are required to take the following 21 courses to earn 72 credit hours. These courses are designed to meet the HEC requirements as proposed by National Curriculum Revision Committee meeting.

S.No.	Code	Pre-Req	Course Title	Credit Hours
1	CS-701	-	Programming Fundamentals	4(3-2)
2	CS-704		Database Systems	3(2-2)
3	CS-708		Discrete Structures	3(3-0)
4	CS-709		Web Design and Development	4(3-2)
5	CS-724		Software Engineering-I	3(3-0)
6	CS-727	CS-701	Object Oriented Programming	4(3-2)
7	CS-729	CS-708	Theory of Automata & Formal Languages	3(3-0)
8	CS-733		Artificial Intelligence	3(2-2)
9	CS-737	CS-701	Computer Organization & Assembly Language	4(3-2)
10	CS-745	CS-701	Data Structures and Algorithms	4(3-2)
11	CS-772		Operating System Concepts	3(2-2)
12	CS-771		Computer Communication and Networks	3(2-2)
13	CS-723	CS-709	Web Engineering	3(2-2)
14	CS-782	CS-772	System Programming	3(2-2)
15	CS-783	CS-727	Visual Programming	4(3-2)
16	CS-784	CS-704	Distributed Database Systems	3(2-2)
17	CS-793	CS-727	Modern Programming Languages	3(2-2)
18	CS-763		Digital Logic Design	3(2-2)
20	CS-798		Software Project	6(0-12)
				(66/72)
Suppo	orting Course	es		
21	ENG-705		English Comprehension	3 (3-0)
22	ENG-715	ENG-705	Technical and Business Writing	3 (3-0)
			_	(6/72)

#### SCHEME OF STUDIES FOR MASTER OF INFORMATION TECHNOLOGY

The MIT students are required to take the following 21 courses to earn 72 credit hours. These courses are designed to meet the HEC requirements as proposed by National Curriculum Revision Committee meeting.

S.No.	Code	Pre-Req	Course Title	<b>Credit hours</b>
1	CS-701		Programming Fundamentals	4(3-2)
2	CS-704		Database Systems	3(2-2)
3	CS-709		Web Design and Development	4(3-2)
4	CS-724		Software Engineering-I	3(3-0)
5	CS-727	CS-701	Object Oriented Programming	4(3-2)
6	CS-745	CS-701	Data Structures and Algorithms	4(3-2)
7	CS-772		Operating System Concepts	3(2-2)
8	CS-773		Systems Administration	4(3-2)
9	CS-771		Computer Communication and Networks	3(2-2)
10	CS-783	CS-727	Visual Programming	4(3-2)
11	CS-784	CS-704	Distributed Database Systems	3(3-2)
12	CS-789	CS-773	Network Management and Security	3(3-0)
13	CS-723	CS-709	Web Engineering	3(2-2)
14	CS-798		Software Project	6(0-12)
				(51/72)
Requi	red Manageme	ent Courses		
15	MGT-703		Principles of Management	3(3-0)
16	MGT-701		Principles of Marketing	3(3-0)
17	MGT-702		Principles of Accounting	3(3-0)
18	MGT-713	MGT-703	Human Resource Management	3(3-0)
19	MGT-712	MGT-702	Financial Management	3(3-0)
				(15/72)
Supp	orting Courses	5		
20	ENG-705		English Comprehension	3(3-0)
21	ENG-715	ENG705	Technical and Business Writing	3(3-0)
				(6/72)

#### POST-GRADUATE DIPLOMA IN INFORMATION TECHNOLOGY (PGD-IT) REQUIREMENT

The PGD-IT students are required to take the following 11 courses to earn 33 credit hours.

## **Computer Science Core Courses**

<b>S</b> .	No	. Code	Course Title Cre	edit Hours	
	1	CS-702	Computer Programming	3(2-2)	
	2	CS-707	Introduction to Algorithms	3(3-0)	
	3	CS-710	Data Base System Fundament	tals 3(2-2)	
	4	CS-711	Operating Systems	3(3-0)	
	5	CS-712	Essentials of Computer Netwo	rks 3(3-0)	
	6	CS-713	E-Commerce Fundamentals	3(3-0)	



S.No.	Code	Course Title Credit	Hours
7	CS-714	Information System Development	3(2-2)
8	CS-715	Web Applications-Design and Development	3(2-2)
9	CS-716	Principles of Software Engineering	3(3-0)
10	CS-717	Telecommunication Technologies	3(3-0)
11	CS-749	Software Project	3(0-9)
			(33/33)

#### POST-GRADUATE DIPLOMA IN COMPUTER SCIENCE (PGD-CS) REQUIREMENT

The PGD-CS students are required to take the following 11 courses to earn 33 credit hours.

## **Computer Science Core Courses**

S.No.	Code	Course Title	Credit Hours
1	CS-702	Computer Programming	3(2-2)
2	CS-705	E-Commerce and Hyper Media System	3(2-2)
3	CS-706	Operating Systems and Computer Organizati	on 3(2-2)
4	CS-710	Data Base System Fundamentals	3(2-2)
5	CS-730	Computer Networks	3(3-0)
6	ENG-700	Writing and Communication Skills	3(3-0)
7	CS-722	Data Structures	3(2-2)
8	CS-725	Programming Languages	3(2-2)
9	CS-735	Data Bases System Programming	3(2-2)
10	CS-740	Software Engineering	3(3-0)
11	CS-749	Software Project	3(0-9)
			(33/33)

## SCHEME OF STUDIES FOR MS(CS)

#### **Program Structure**

Description	Thesis Program	Non Thesis Program
	Credi	t Hours
3 Core Courses	9	9
5 Specialized Courses (Major)	15	15
Research Thesis	10	9 (3 courses)
Seminar-I	-	<u>1</u>
Total	34	34

## Core Courses

S.No.	Course No.	Course Title Cre	dit Hours
1	CS-718	Theory of Computation	3(3-0)
2	CS-719	Advanced Operating System	ns 3(3-0)
3	CS-721	Advanced Algorithm Analysi	s 3(3-0)
4	CS-797	MS Thesis	10(0-20)
5	CS-720	Seminar-I	Ì(1-0)
			, ,

#### Software Engineering

S.No	.Course No.	Course Title Credit	Hours
1	CS-726	Advanced Software Engineering	3(3-0)
2	CS-728	Advanced Topics in Software Engineering	3(3-0)
3	CS-731	Object Oriented Modeling	3(3-0)
4	CS-732	Object Oriented Software Engineering	3(3-0)
5	CS-734	Formal Software Specification and Development	nt3(3-0)
6	CS-736	Software Quality Assurance	3(3-0)
7	CS-738	Software Requirements Engineering	3(3-0)
8	CS-739	Software Engineering Process	3(3-0)
9	CS-741	Model & Specification-based Software Testing	3(3-0)
10	CS-742	Software Project Management	3(3-0)
11	CS-743	Trends in Software Engineering	3(3-0)
12	CS-744	Software Analysis and Design Patterns	3(3-0)
13	CS-746	Topics on Object Oriented Analysis and Design	3(3-0)
14	CS-747	Software Fault Tolerance	3(3-0)
15	CS-748	Software Architecture	3(3-0)

## **Networks and Communication**

S.No.	Course No.	Course Title C	redit Hour
1	CS-750	Advanced Computer Networks	3(3-0)
2	CS-751	Network Security	3(3-0)
3	CS-752	Wireless Networks	3(3-0)
4	CS-753	Network Performance Evaluation	3(3-0)
5	CS-754	Network Programming	3(3-0)
6	CS-755	Integrated Services Over Packet Netwo	ork 3(3-0)
7	CS-756	Network Transfer Protocol	3(3-0)

## Database Systems

S.No.	Course No.	Course Title Cred	it Hour
1	CS-776	Advanced DBMS	3(3-0)
2	CS-777	Data Warehousing	3(3-0)
3	CS-778	<b>Object Oriented Databases</b>	3(3-0)
4	CS-779	Web-Based DBMS	3(3-0)
5	CS-780	Topics in DBMS	3(3-0)

## Scheme of studies for Different Programmes

## Artificial Intelligence/Data Mining/Image Precessing/Computer Graphics

S.No.	Course No.	Course Title Credit	Hours
1	CS-757	Pattern Recognition	3(3-0)
2	CS-758	Decision Support Systems	3(3-0)
3	CS-759	Advanced Topics in AI Programming	3(3-0)
4	CS-760	Design of Intelligent Systems	3(3-0)
5	CS-761	Machine Learning	3(3-0)
6	CS-762	Neural Networks	3(3-0)
7	CS-764	Computer Vision	3(3-0)
8	CS-765	Data Mining	3(3-0)
9	CS-766	Digital Image Processing	3(3-0)
10	CS-767	Advanced Topics in Artificial Intelligence	3(3-0)
11	CS-768	Multi Agent Systems	3(3-0)
12	CS-769	Multimedia Databases	3(3-0)
13	CS-770	Advanced Computer Graphics	3(3-0)
14	CS-775	Advanced Data Mining	3(3-0)

## General Computer Science Electives

S.No.	Course No.	Course Title	Credit	Hours
1	CS-790	Parallel Processing		3(3-0)
2	CS-791	Simulation and Modeling		3(3-0)
3	CS-792	Advance Topics in Programmir	ng	3(3-0)
4	CS-794	Research Methods		3(3-0)

## SCHEME OF STUDIES FOR Ph.D(CS)

#### Program Structure

Course Title	Credit Hours
6 Courses	18
Research Thesis	50
Seminar - I	1
Seminar - II	1
Total	70



#### **Computer Science Education**

S.No.	Course No.	Course Title Credit	Hours
1	CS-781	Educational Technology	3(3-0)
2	CS-785	Computer Aided Instructions	3(3-0)
3	CS-786	Web Based Education Systems	3(3-0)
4	CS-787	Measurement of Learning	3(3-0)
5	CS-788	<b>Topic in Computer Science Education</b>	3(3-0)

Core	Courses

S.No.	Course No.	Course Title	Credit Hours
1	CS-799	Ph.D Thesis	50(0-100)
2	CS-720	Seminar - I	1(1-0)
3		Seminar - II	1(1-0)

#### **General Courses**

S.No.	Course No.	Course Title Credit	Hours
1	CS-718	Theory of Computation	3(3-0)
2	CS-719	Advanced Operating System	3(3-0)
3	CS-721	Advanced Algorithm Analysis	3(3-0)
4	CS-794	Research Methods	3(3-0)

#### Software Engineering

#### S.No.Course No. Course Title

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1	CS-726	Advanced Software Engineering	3(3-0)
2	CS-728	Advanced Topics in Software Engineering	3(3-0)
3	CS-731	Object Oriented Modeling	3(3-0)
4	CS-732	Object Oriented Software Engineering	3(3-0)
5	CS-734	Formal Software Specification and Development	3(3-0)
6	CS-736	Software Quality Assurance	3(3-0)
7	CS-738	Software Requirements Engineering	3(3-0)
8	CS-739	Software Engineering Process	3(3-0)
9	CS-741	Model and Specification-based Software Testing	3(3-0)
10	CS-742	Software Project Management	3(3-0)
11	CS-743	Trends in Software Engineering	3(3-0)
12	CS-744	Software Analysis and Design Patterns	3(3-0)
13	CS-746	Topics in Object Oriented Analysis and Design	3(3-0)
14	CS-747	Software Fault Tolerance	3(3-0)
15	CS-748	Software Architecture	3(3-0)

#### **Networks & Communication**

S.No.	Course No.	Course Title Credit	Hours
1	CS-750	Advanced Computer Networks	3(3-0)
2	CS-751	Network Security	3(3-0)
3	CS-752	Wireless Networks	3(3-0)
4	CS-753	Network Performance Evaluation	3(3-0)
5	CS-754	Network Programming	3(3-0)
6	CS-755	Integrated Services Over Packet Networks	3(3-0)
7	CS-756	Network Transfer Protocol	3(3-0)

#### Artificial Intelligence/Data Mining/Image Precessing/Computer Graphics

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S.No.	Course No.	Course Title Credit	Hours
1	CS-757	Pattern Recognition	3(3-0)
2	CS-758	Decision Support Systems	3(3-0)
3	CS-759	Advanced Topics in AI Programming	3(3-0)
4	CS-760	Design of Intelligent Systems	3(3-0)
5	CS-761	Machine Learning	3(3-0)
6	CS-762	Neural Networks	3(3-0)
7	CS-764	Computer Vision	3(3-0)
8	CS-765	Data Mining	3(3-0)
9	CS-766	Digital Image Processing	3(3-0)
10	CS-767	Advanced Topics in Artificial Intelligence	3(3-0)
11	CS-768	Multi Agent Systems	3(3-0)
12	CS-769	Multimedia Databases	3(3-0)
13	CS-770	Advanced Computer Graphics	3(3-0)
14	CS-775	Advanced Data Mining	3(3-0)

## Database Systems

S.No.	Course No.	Course Title Cred	it Hour
1	CS-776	Advanced DBMS	3(3-0)
2	CS-777	Data Warehousing	3(3-0)
3	CS-778	<b>Object Oriented Databases</b>	3(3-0)
4	CS-779	Web-Based DBMS	3(3-0)
5	CS-780	Topics in DBMS	3(3-0)

## Supervisory Courses

S.No.	Course No.	Course Title	Credit Hour
1	CS-795	Special Topics in CS-	l 3(3-0)
2	CS-796	Special Topics in CS-	II 3(3-0)

Throughout the academic year, the Education Division runs a variety of programs/courses of part time, open studies courses in which any person can enroll. The short courses such as propagation and maintenance of indoor plants, preservation and processing of food products, drafting, cutting and sewing, flower making and arrangement, stain glass painting and Spoken English are also being started.

Education Division has also initiated Computer Training programs especially for the ladies of the area. The Institute is also working for the uplift and empowerment of the women folk in particular.

The Education Division offers Ph.D (Education), M.Phil (Education), M.Sc (Education), B.Ed, M.Ed and Weekend Programs.

Director	Dr. Muhammad Imran Yousuf
Assistant Professors	Dr. Qaisara Parveen
	Dr. Almas Kiani
	Dr. Muhammad Arshad Dahar
	Dr. Wajiha Kanwal
Lecturers	Ms. Sumaira Kayani
	Ms. Tehsin Ehsan



#### **REGULAR/WEEKEND PROGRAMS OFFERED**

B.Ed - Regular/Weekend	A minimum of two semesters duration program after Bachelor's Degree or Equivalent.		
M.Ed - Regular/Weekend	A minimum of two semesters duration program after B.Ed. Degree.		
M.Sc (Education) - Regular/Weekend	A minimum of four semesters duration program after B.A/B.Sc Degree or Equivalent.		
M.Phil (Education) - Regular/Weekend	A minimum of four semesters duration program after M.Sc/M.A (Education)/M.Ed		
	degree or Equivalent.		
Ph.D (Education) - Regular	A minimum of six semesters duration program after MS/M.Phil (Education).		

#### WEEKEND PROGRAMS

Alongwith B.Ed, M.Ed, M.Sc Education and M.Phil Education following weekend programs are programs.

#### Associate Degree in Education (ADE) In-service

A minimum of eight semesters duration program after F.A/F.Sc.

#### Montessori Teacher Training Diploma

A minimum of two semester duration program after Bachelor's Degree or Equivalent.

#### Diploma in Education Planning and Management (EPM)

A minimum of two semester duration program after Bachelor's Degree or Equivalent.

## **B.Ed.** Admission and Registration:

- (i) Minimum Academic Requirements: A person holding B.A/B.Sc or equivalent degree from a recognized University with at least second division or overall 45% marks, shall be eligible for admission to B.Ed. program.
- (ii) Admission will be on open merit basis.
- (iii) If you are an experienced teacher, even then you have to do teaching practice (Internship) at the schools allotted by the University.

#### **Academic Standing**

- (i) Grade Point average
  - (a) Maximum grade point average: 4.00
  - (b) Minimum grade point average for obtaining the Degree: 2.50
- (ii) To remain on the roll of the University a student shall be required to maintain the following CGPA otherwise he / she shall be ceased on the University roll. However, he/she may repeat the whole semester once only.

Semester	CGPA
1st	1.50
2nd	2.50

If a student fails to obtain CGPA 2.50 in the 2nd semester he / she may repeat the courses of lowest grades to make CGPA 2.50 within maximum time for the degree otherwise he/she shall be ceased to University rolls.

## M.Ed.

#### Admission & Registration:

- i. Minimum Qualification: A person (male/female) with B.Ed. or equivalent degree from a recognized University in at least second division or overall 45% marks shall be eligible for admission.
- ii. Teaching experience will be added advantage.
- iii. Admission will be on open merit basis.

#### **Academic Standing:**

- i. Grade Point average
  - a. Maximum grade point average 4.00
  - b. Minimum grade point average 2.50 for obtaining Master's Degree



ii. To remain on the rolls of the University a student shallbe required to maintain the following minimum CGPA:

Semester	CGPA
1st	1.50
2nd	2.50

- iii. A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work or minimum residency, may be allowed to reappear in the courses of the previous semesters in which he/she had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he/she shall be ceased to the University roll.
- iv. A student will be required to repeat those courses of the previous semesters in which he/she had failed, at the first available opportunity, provided that his/her maximum workload, including the courses being repeated by him/her, will not exceed the normal workload.

## **M.Sc Education**

#### Admission and Registration:

#### (1) Admission to the Course:-

A candidate seeking admission to the Course for the Degree of Master of Science in full and partial residence:

- (i) Must have passed the Bachelor Degree Examination in aggregate with CGPA of 2.50 or its equivalent for M.Sc. Education, and 45% marks or its equivalent from a recognized institution, with the subjects related to the subject he/she desires to take up;
- (ii) Admission to M.Sc. Education will be on open merit basis.
- (iii) The nominees of different Departments/Organizations with minimum of 2nd division or its equivalent in Bachelor degree will be eligible.

#### Academic Standing:-

- (i) Grade Point Average
  - (a) Maximum grade point average: 4.00
  - (b) Minimum grade point average for 2.50 obtaining Master's Degree:
- (ii) To remain on the roll of the University a student shall be required to maintain the following minimum GPA/CGPA in each semester:
- (iii) A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work, may be allowed to repeat the courses of the previous semesters in which he had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he/she shall cease to be on the roll.

CGPA
1.50
2.00

## **M.Phil (Education)**

#### Admission & Registration:

- i. A candidate seeking admission to the course for the degree of M. Phil in Education must have passed the M.Sc/ M.A (Edu) / M.Ed Examination in aggregate with CGPA of not less than 2.50 or with 45% marks secured under annual examination system or its equivalent in the field of study or related disciplines from Higher Education Commission, Islamabad recognized institutions.
- ii. Admission will be on open merit basis.

#### 2. Academic Standing:

- i. Grade Point Average: Grade point will be as follows: A for 4, B for 3, C for 2 and F for failure (that is zero).
  - a) Maximum grade point average 4.00
  - b) Minimum grade point average for obtaining M.Phil degree 2.50
- ii. To remain on the rolls of the University a student shall be required to maintain the following GPA/CGPA in each sem
- iii. A student, who obtains CGPA of 2.00 or above but less than 2.50 upon the completion of entire approved course work, may be allowed to repeat once the course of the previous semester in which he/ she had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he/ she shall cease to be on the roll.
- iv. A student will be required to repeat the courses of the previous semesters in which he/ she had failed at the first available opportunity, provided that his/her maximum workload, including the courses being repeated by him/her will not exceed the normal workload. (Other rules & regulations are same as those for M.Sc.)



Semester	CGPA
1st	1.50
2nd	1.75
3rd	2.00
4th	2.50

## Diploma in Educational Planning and Management (EPM) - One Year

#### Admission and Registration:

#### (1) Admission to the Course:-

A candidate seeking admission to the Course for the Diploma in Educational Planning and Management (EPM) in full and partial residence:

- (i) Must have passed the Bachelor Degree Examination in aggregate with CGPA of 2.50 or its equivalent for Diploma in Educational Planning and Management (EPM), and 45% marks or its equivalent from a recognized institution;
- (ii) Admission to Diploma in Educational Planning and Management (EPM) will be on open merit basis.

#### Academic Standing:-

(b)

- (i) Grade Point Average
  - (a) Maximum grade point average:
    - Minimum grade point average for Diploma in Educational Planning and Management (EPM): 2.50
- (ii) To remain on the roll of the University a student shall be required to maintain the following minimum GPA/CGPA in each semester:
- (iii) A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work, may be allowed to repeat the courses of the previous semesters in which he had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he/she shall cease to be on the roll.

Semester	CGPA
1st	1 . 5 0
2nd	2 . 5 0

4.00

## Montessori Teacher Training Diploma - One Year

#### Admission and Registration:

#### (1) Admission to the Course:-

A candidate seeking admission to the Course for the Montessori Teacher Training Diploma in full and partial residence:

- (i) Must have passed the Bachelor Degree Examination in aggregate with CGPA of 2.50 or its equivalent for Montessori Teacher Training Diploma, and 45% marks or its equivalent from a recognized institution;
- (ii) Admission to Montessori Teacher Training Diploma will be on open merit basis.

#### Academic Standing:-

- (i) Grade Point Average
  - (a) Maximum grade point average:
  - (b) Minimum grade point average for obtaining Montessori Teacher Training Diploma: 2.50
- (ii) To remain on the roll of the University a student shall be required to maintain the following minimum GPA/CGPA in each semester:
- (iii) A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work, may be allowed to repeat the courses of the previous semesters in which he had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he/she shall cease to be on the roll.

Semester	CGPA	
1st	1.50	
2nd	2.50	

4.00

## Associate Degree in Education (ADE) - Two Years

#### Admission and Registration:

#### (1) Admission to the Course:-

A candidate seeking admission to the Course for the Associate Degree in Education (ADE) in full and partial residence:

- (i) Must have passed the Bachelor Degree Examination in aggregate with CGPA of 2.50 or its equivalent for Diploma in Educational Planning and Management (EPM), and 45% marks or its equivalent from a recognized institution;
- (ii) Admission to Diploma in Educational Planning and Management (EPM) will be on open merit basis.

#### Academic Standing:-

- (i) Grade Point Average
  - (a) Maximum grade point average:
  - (b) Minimum grade point average for Diploma in Educational Planning and Management (EPM): 2.50
- (ii) To remain on the roll of the University a student shall be required to maintain the following minimum GPA/CGPA in each semester:
- (iii) A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work, may be allowed to repeat the courses of the previous semesters in which he had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he/she shall cease to be on the roll.

CGPA	
1.50	
1.75	
2.00	
2.50	

4.00

#### SCHEME OF STUDIES BACHELOR OF EDUCATION (B.Ed)

#### **Part-I Core Courses**

S.No.	Code	Course Title	Credit Hours
1	EDU-501	Functional English	3(3-0)
2	EDU-502	Functional Urdu	3(3-0)
3	SSH-501	Pakistan Studies	2(2-0)
4	IS-502	Islamic Studies	2(2-0)
5	EDU-503	Perspectives of Education in Pakistan	3(3-0)
6	EDU-504	School Organization & Classroom Managem	ent 3(3-0)
7	EDU-505	Human Development & Learning	3(3-0)
8	EDU-506	Measurement and Evaluation	3(3-0)
9	EDU-507	Research Techniques & Individual Projects	3(3-0)
10	EDU-508	Curriculum Development & Teaching Metho	ds 3(3-0)

#### Part-II (Any one Group) (06 Credits) (a) Humanities group (any two courses)

EDU-509	Teaching of English	3(2-2)
EDU-510	Teaching of Urdu	3(2-2)
EDU-511	Teaching of General Science	3(2-2)
EDU-512	Teaching of Pakistan Studies	3(2-2)
EDU-513	Teaching of Islamiyat	3(2-2)
EDU-514	Teaching of Agriculture	3(2-2)
	EDU-509 EDU-510 EDU-511 EDU-512 EDU-513 EDU-514	EDU-509Teaching of EnglishEDU-510Teaching of UrduEDU-511Teaching of General ScienceEDU-512Teaching of Pakistan StudiesEDU-513Teaching of IslamiyatEDU-514Teaching of Agriculture

#### (c) Teaching Skills Development

1	EDU-520	Teaching Practice and Observation	6(0-12)
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#### (b) Science group (any two courses)

1 2	EDU-515 EDU-516	Teaching of Mathematics Teaching of Physics	3(2-2) 3(2-2) 3(2-2)
3 4 5	EDU-518 EDU-519	Teaching of Biology Teaching of Computer Skills	3(2-2) 3(2-2) 3(2-2)

ARID AGRICULTURE UNIVERSITY RAWAEPINDI

Schedule to be celebrated on 7th March Directorate of Student Affairs

S DAY 2014

WORLD WOMEN

#### SCHEME OF STUDIES MASTER OF EDUCATION (M.Ed.)

#### **CORE COURSES**

S.No.	Course No.	Course Title Cred	lit Hours
1	EDU-701	Curriculum Development	4(4-0)
2	EDU-702	<b>Educational Planning and Management</b>	4(4-0)
3	EDU-703	Educational Psychology and Guidance	4(4-0)
4	EDU-704	Educational Measurement and	4(4-0)
		Evaluation	
5	EDU-705	Advanced Methods of Teaching	4(4-0)
6	EDU-706	Techniques of Research and Statistics	4(4-0)
7	EDU-707	Philosophy of Education	4(4-0)
8	EDU-708	Computer in Education	3(2-2)



## **NON-THESIS GROUP**

Candidates opted for thesis program would select Research Thesis and those opted for non-thesis program will read **one compulsory** course (EDU-711) and one of the optional courses from the optional list.

EDU-711	Research Planning and Report Writing
Optional List:	
EDU-709	Elementary Education in Pakistan
EDU-710	Secondary Education in Pakistan
EDU-712	Teacher Education in Pakistan
EDU-713	Women Education in Pakistan
EDU-714	Adult and Continuing Education
EDU-715	Special Education

## **THESIS GROUP**

EDU-716

**Research Thesis** 



6(0-12)

#### SCHEME OF STUDIES MASTER OF EDUCATION (M.Sc)

## A) Core Courses

S.No.	Code	Course Title Credi	t Hours
1	EDU-718	Functional English	3(3-0)
2	EDU-719	Special Problem	1(1-0)
3	EDU-720	Seminar	1(1-0)
4	EDU-735	Critical Thinking and Reflective Practices	3(3-0)
5	EDU-781	Curriculum and Instruction	3(3-0)
6	EDU-782	Child Development and Learning	3(3-0)
7	EDU-783	Classroom Assessment	3(3-0)
8	EDU-784	Fundamental Principles of Pedagogy	3(3-0)
9	EDU-785	Educational Research	3(3-0)
10	EDU-786	Application of Research in Education	3(3-0)
11	EDU-787	Perspectives and Development of Education	3(3-0)
12	EDU-788	Educational Technology and Communication	3(3-0)
13	EDU-789	Classroom Management	3(3-0)
			35

#### **B)** Professional Electives

Candidates will select two courses from the following, subject to their availability

S.No.	Code	Course Title	Credit Hours
1	EDU-709	Elementary Education in Pakistan	3(3-0)
2	EDU-710	Secondary Education in Pakistan	3(3-0)
3	EDU-712	Teacher Education in Pakistan	3(3-0)
4	EDU-713	Women Education	3(3-0)
5	EDU-714	Adult and Continuing Education	3(3-0)
6	EDU-715	Special Education	3(3-0)
7	EDU-717	Higher Education in Pakistan	3(3-0)
8	EDU-737	Environmental Education	3(3-0)
9	EDU-721	Population Education	3(3-0)
			<u>3+3=6</u>

#### **C) METHODS OF TEACHING SPECIALIZATION**

Candidates will select two subjects from any one of the following groups

#### **Arts Group**

- EDU-722 Teaching of Urdu 1
- 2 EDU-723 Teaching of Social/Pakistan Studies 3(2-2)
- EDU-728 Teaching of English (Compulsory) 3(2-2) 3 3(2-2)
- 4 EDU-729 Teaching of General Science

#### **D) TEACHING PRACTICE**

EDU-730 Teaching Practice 6(0-12) 1

#### **Science Group**

3(2-2)

1	EDU-724	Teaching of Mathematics	3(2-2)
2	EDU-725	Teaching of Physics	3(2-2)
3	EDU-726	Teaching of Chemistry	3(2-2)
4	EDU-727	Teaching of Biology	3(2-2)

#### **E) THESIS/NON THESIS COURSES**

Candidates will select thesis or non thesis courses

#### **Thesis Group**

The Students who opt for Research Thesis will select it as below:

#### **Non Thesis Group**

The Students who opt for Non Thesis program will take one compulsory course (EDU-711) and two of the optional courses from the given list.

1 EDU-799 Research Thesis	10(0-20)	1	EDU-711 Research Planning and Report Writing	3(1-4)
		Cano	lidates will select two courses from the following, subject to the a	availability
		1 2 3 4 5	EDU-731 Introduction to Sociology of Education EDU-732 Contemporary Issues and Trends in Education EDU-733 Inclusive Education EDU-734 Comparative Education EDU-736 Islamic System of Education	3(3-0) 3(3-0) 3(3-0) 3(3-0) 3(3-0)

#### SCHEME OF STUDIES OF M.PHIL IN EDUCATION

A) Core Courses				B) Specialization Courses			
S.No.	S.No. Code Course Title Credit Hours				dates will sel	lect <b>three courses</b> from the following, subject to their	availability
1	EDU-741	Foundations of Education	4(4-0)	S.No.	Code	Course Title Cree	dit Hours
2	EDU-742	Curriculum Development and Design	4(4-0)	1	EDU-746	Instructional Technology and Teaching Techniqu	ies 3(3-0)
3	EDU-743	Advanced Methods of Research in Social Sciences	4(3-2)	2	EDU-747	Education and Development	3(3-0)
4	EDU-744	Advanced Statistics in Social Sciences	4(3-2)	3	EDU-748	Teacher Education in Comparative Perspective	3(3-0)
5	EDU-745	Educational Planning	4(4-0)	4	EDU-749	Education in Transitional Societies	3(3-0)
6	EDU-719	Special Problem	1(1-0)	5	EDU-750	Economics of Education	3(3-0)
7	EDU-720	Seminar-I	1(1-0)	6	EDU-751	Higher Education in Comparative Perspective	3(3-0)
	EDU-720	Seminar-II	1(1-0)	7	EDU752	Educational and Psychological Testing	3(3-0)
			23				<u>3+3+3=9</u>

C)

#### SCHEME OF STUDIES OF PH.D IN EDUCATION

#### A) Core Courses

S.No.	Code	Course Title	<b>Credit Hours</b>
1	EDU-761	Qualitative and Quantitative Research Design in I	Education 3(3-0)
2	EDU-762	Educational Studies	3(3-0)
3	EDU-725	Applied Statistics in Education	3(3-0)
4	EDU-763	Global Challenges in Education	3(3-0)
5	EDU-720	Seminar-I	1(1-0)
6	EDU-720	Seminar-II	1(1-0)
			14

#### Educational Leadership and Management

S.No.	Code	Course Title Credit	Hours
1	EDU-767	Educational Policy and Planning	3(3-0)
2	EDU-768	Instructional Leadership and Supervision	3(3-0)
3	EDU-769	Human Resource Management in Education	3(3-0)

#### Curriculum Development

S.No.	Code	Course Title C	redit Hours
1	EDU-773	Curriculum Applications and Chan	ge 3(3-0)
2	EDU-774	Curriculum Theories and Models	3(3-0)
3	EDU-775	Curriculum and Instruction	3(3-0)

**C)** 

EDU-799 Research Thesis 50(0-100)

#### **B) Specialization Courses**

Candidate will select two courses from any one Specialization of the given areas

#### Early Childhood Education (ECE)

S.No.	Code	Course Title Credit	Hours
1	EDU-764	Evolution of Early Childhood Education	3(3-0)
2	EDU-765	Planning, Management and Instruction in	3(3-0)
		Early Childhood Education	
3	EDU-766	Growth and Developing of Children	3(3-0)

#### **Educational Assessment**

S.No.	Code	Course Title Credi	t Hours
1	EDU-770	Modern Assessment and Evaluation	3(3-0)
2	EDU-771	Test Theories and Designs	3(3-0)
3	EDU-772	Test Construction and Standardization	3(3-0)



#### SCHEME OF STUDIES OF DIPLOMA IN EDUCATIONAL PLANNING AND MANAGEMENT (EPM)

S.No.	Code	Course Title	Credit Hours
1	EPM-701	Basic Concept of Educational Planning and Managemer	nt 3(3-0)
2	EPM-702	Development Education	3(3-0)
3	EPM-703	Financing and Budgeting of Education	3(3-0)
4	EPM-704	Plan Implementation and Management	3(3-0)
5	EPM-705	Planning and Management of Human Resources	3(3-0)
6	EPM-706	Curriculum Planning and Evaluation	3(3-0)
7	EPM-707	Research and Statistics in Planning and Management	3(3-0)
8	EPM-708	Educational Leadership and Management	3(3-0)
9	EPM-709	School Mapping and Micro Planning	3(3-0)
10	EPM-710	Tem Paper	3(3-0)
			<b>30 Credit Hour</b>

#### SCHEME OF STUDIES OF MONTESSORI TEACHER TRAINING DIPLOMA

Code	Course Title	Credit Hours
MON-701	Exercise of Practical Life (EPL)	3(2-2)
MON-702	Mathematics	3(2-2)
MON-703	Culture	3(2-2)
MON-704	Language	3(2-2)
MON-705	Sensorial	3(2-2)
MON-706	Teaching Practice/Internship/Seminar/Workshop	3(0-3)
	Code MON-701 MON-702 MON-703 MON-704 MON-705 MON-706	CodeCourse TitleMON-701Exercise of Practical Life (EPL)MON-702MathematicsMON-703CultureMON-704LanguageMON-705SensorialMON-706Teaching Practice/Internship/Seminar/Workshop

## SCHEME OF STUDIES OF ASSOCIATE DEGREE IN EDUCATION (ADE)

#### **SEMESTER - I**

S.No.	Code	Course Title	Credit Hours
1	ENG-301	Functional English (Compulsory)	3(3-0)
2	IS-302	Islamic Studies/Ethics (Compulsory)	2(2-0)
3	EDU-301	Child Development (Foundation)	3(3-0)
4	EDU-302	Functional Urdu/Regional Languages	3(3-0)
5	EDU-303	General Science (Content)	3(3-0)
6	EDU-304	Instructional Methods	3(3-0)
			<u>17</u>





#### **SEMESTER - II**

S.No.	Code	Course Title	Credit Hours
1	ENG-302	Communication Skills	3(3-0)
2	CS-301	Introduction to Computing	3(3-0)
3	EDU-305	Classroom Management (Foundation)	3(3-0)
4	MATH-I	Mathematics-I	3(3-0)
5	SSH-301	Pakistan Studies	2(2-0)
6	EDU-306	Teaching of Islamic Studies (Professiona	l) 3(2-2)
			<u>17</u>

#### **SEMESTER - III**

S.No.	Code	Course Title Credit	Hours
1	EDU-401	Teaching Literacy Skills (Professional)	3(3-0)
2	EDU-402	Art, Crafts and Calligraphy (Content)	3(3-0)
3	EDU-403	Teaching of Urdu (Professional)	3(2-2)
4	EDU-404	Teaching of General Science (Professional)	3(2-2)
5	EDU-405	Instructional and Communication Technology (ICT) in Education	2(2-0)
6	EDU-406	Teaching Practice (Short Term)	3(0-3)
			17



#### **SEMESTER - IV**

S.No.	Code	Course Title	Credit Hours
1	EDU-407	Classroom Assessment (Foundation)	3(3-0)
2	EDU-408	Teaching of English (Professional)	3(2-2)
3	EDU-409	Teaching of Mathematics (Professional)	3(2-2)
4	EDU-410	School, Community and Teacher (Foundation	tion) 3(3-0)
5	EDU-411	Teaching of Social Studies (Professional)	2(2-0)
6	EDu-412	Teaching Practice	3(0-3)
			<u>17</u>

## SCHEDULE OF TEACHING

Fall Semester: October - February

## Spring Semester: March - July SUBMISSION OF APPLICATIONS

Applications on the prescribed forms for admission to the degree courses at the PMAS-Arid Agriculture University, Rawalpindi (as detailed below) complete in all respect, must be submitted either in person or by registered post in accordance with the notification by the University as follows:

S.#	NAME OF COURSE	APPLICATION TO BE SUBMITTED IN THE OFFICE OF
1	B.Sc. (Hons.) Agriculture	Dean, Faculty of Crop & Food Sciences
2	DVM	Dean, Faculty of Veterinary & Animal Sciences
3	BS (Forestry)	Dean, Faculty of Forestry & Range Management & Wildlife
4	B.Sc Agricultural Engineering	Dean, Faculty of Agricultural Engineering & Technology
5	BS (BCH & Economics)	Dean, Faculty of Sciences
6	BBA (Hons.)	Director, University Institute of Management Sciences
7	BS (CS & IT)	Director, University Institute of Information Technology
8	B. Ed	Director, Division of Continuing Education, Home Economics and Women Development
9	PGD (IT)	Director, University Institute of Information Technology
10	M.Sc. (Hons.) Agriculture	Dean, Faculty of Crop & Food Sciences
11	M.Sc. (Hons.) Poultry Science	Dean, Faculty of Veterinary & Animal Sciences
12	M.Sc.	Dean, Faculty of Sciences/ Faculty of Forestry & Range Management & Wildlife
13	M.Phil	Dean, Faculty of Sciences/ Faculty of Forestry & Range Management & Wildlife
14	MCS, MIT, MS	Director, University Institute of Information Technology
15	MBA (all programmes), MS	Director, University Institute of Management Sciences
16	M.Ed/M.Sc (Edu.)	Director, Division of Continuing Education, Home Economics and Women Development
17	M.Phil (Education)	Director, Division of Continuing Education, Home Economics and Women Development
18	Ph.D. (In all disciplines)	Director Advanced Studies

#### Note:

- i. No application shall be accepted after the due date even if dispatched by post.
- ii. Incomplete applications will be rejected without any prior notice.
- iii. All certificates and testimonials should be duly attested and attached as required. Candidate must write in the application form his/her name, father's name, date of birth as given / spelled in the matric certificate.
- The candidate who had been a registered student of this
   University in the past must write his/her previous registration
   number allotted by the University.
- v. The candidates who did their prerequisite degrees from other Universities must submit their Migration Certificates from the respective universities (in original) otherwise they will not be considered for admission.



vi. Number of seats in different programs: As approved by the Academic Council.

#### **Admission of International Students**

The credentials of an applicant who holds a foreign nationality and who wishes to attend the University are evaluated in accordance with the general regulations governing admission of foreign nationals as approved by the Ministry of Foreign Affairs and the Ministry of Education, Government of Pakistan. Candidates from foreign countries should send their applications through the Embassies of their countries in Islamabad, and these must be routed through the Ministries of Foreign Affairs and Education, Government of Pakistan. No foreign student will be admitted in the University unless his/her admission after due scrutiny of his / her application, is confirmed by the University.
## Housing

The PMAS-AAUR has residential facilities for boys and girls on the campus. Housing and food services are available to about 40% of students' population. Residential facilities and related food services are normally organized and administered by students with proper guidance from the University administration.

# **Application for Housing**

Students intending to live on campus have to apply on the application form. However, allocation of rooms in dormitories is made on the basis of space available and on merit basis.

# **Sanction of Leave**



Leave to undergraduate students is sanctioned by the Tutor/Senior Tutor up to 7 days, and for period exceeding 7 days by the Dean/Director of the concerned Faculty, Institute, Division, on the recommendation of the Tutor/Senior Tutor. For postgraduate students the authority for sanction of leave is vested in the Chairman on the recommendation of the Supervisor concerned, for a period not exceeding 7 days and the Dean/Director on the recommendation of the Chairman exceeding this period. Sanction of leave, however, is at the discretion of the competent authority and is not counted towards the requirement of lecturer shortage .The University normally conforms to the schedule of holidays observed by the Government of the Punjab. The Vice Chancellor can grant holidays up to a maximum of six days in an academic year on special occasions.

### **Directorate of Students Affairs**

The purpose of Director Students Affairs is to act as advisor of students, to consult and work with individual students and student groups. The Director also coordinates with other University offices to create a sense of community at the PMAS-AAUR. Assistance is available all the time during office hours and beyond that for some very urgent affairs. A few of the services available with the Directorate are:

Processing of applications for withdrawal from the University;

- / Consulting or problem solving for students;
- Co-coordinating Conduct Discipline action;
- / Hearing students grievances and appeals; and
- Providing general information or assistance.

### **University Health Service**

The PMAS-AAUR maintains a small health unit with a qualified Doctor-in-Charge and supporting para-medical staff. The service provides first aid and preliminary diagnostic facilities with appropriate medication. Plans are underway to expand this service in such a way that a test laboratory and X-ray facilities are provided.

### **Sports**

Athletics play an important role in the extra-curricular activities of the University, which maintains facilities for all major sports such as cricket, football, volleyball, basketball and track & field. The University Teams participate in various national and inter-varsity games.



## **Quality Enhancement Cell**

The Quality Enhancement Cell (QEC) has been established at the university with the objective of significant enhancement of quality in higher learning and international compatibility. The major functions of QEC are to:

- > review quality standards and the quality of teaching and learning in each subject area.
- > promote public confidence that the quality and standards of the award of degrees are enhanced and safeguarded.
- > define lucid and explicit standards as points of reference to the reviews to be carried out. It should also help the employees to know as to what they could expect from candidates.
- > develop qualifications framework by setting out the attributes that can be expected from the holder of qualification.
- > develop quality assurance processes and methods of evaluation to affirm that the quality of provision and the standard of awards are being maintained and to foster curriculum, subject and staff development.
- > develop procedures for approval of new programs, monitoring and evaluation, departmental review, student feedback,

# ARID AGRICULTURE UNIVERSITY RESEARCH FARMS CHAKWAL ROAD

Agriculture is the backbone of Pakistan economy. More than 70% of population of the country is engaged in agro based enterprises for their livelihood. The increasing population and constant land use demands increased farm productivity to feed and fulfill the rising demands of rural community.

The existing acreage was neither sufficient to undertake the diversified research activities by increasing number of postgraduate students and faculty members, nor represents the Pothowar region. University authorities made vigorous effort to purchase a compact piece of land for research farm of an area of 188 Kanals at Mandra-Chakwal Road in tehsil Gujjar Khan, District Rawalpindi for On-Farm Research activities. The financial assistance of Higher Education Commission worth 343 million is greatly acknowledged who enabled to develop one administration block, two students hostels, one veterinary hospital, eight field laboratories for different disciplines, three glasshouses, one green house, one farming tunnel, one fish farm, two farm machinery sheds and number of staff residences. The **OBJECTIVE** of the farm are as below:-

The provision of better education, research, teaching and demonstration in general and agriculture in particular especially oriented to rainfed areas in particular.

To extend the faculty specialization in the field for the benefits of farming community by their higher knowledge and expertise.

To promote qualities of national integration, discipline, punctuality and hard work among the student community as well as faculty.

To establish and strengthened the research facilities of University and improve the research skills to address the problems of farming community and thus to contribute in the scientific advancement of agriculture in the country.

**MISSION OF FARM:** To produce graduates who are equipped with advanced practical knowledge of farm & farmers and can play their role in national economy.

VISION OF FARM: To improve the livelihood of resources poor farmers through skilled manpower.

The Farm is meant to address the intricate and complex nature of problems associated with farming community. It was absolutely necessary to consider needs, socio-economic and agro ecological conditions of resource poor farmers while addressing the ever emerging agriculture issues of farm. University on-farm research consider following steps to recommend the technologies to farming community.

Diagnosis of researchable issues based on review of secondary data

Planning and prioritization of researchable issues and to design on-farm experiments.

# UNIVERSITY SUB-CAMPUS KHUSHAB

Agricultural Potential and specific ecological conditions of the region led to the establishment of PMAS-AAUR Sub-Campus Khushab in 2007. Sub-Campus is situated 2 Km away in the west side of Khushab and 3 km in east side of Jauharabad. The renovation of Campus building was started in 2007. Two academic blocks for Veterinary Sciences, Agriculture and Management Sciences/Computer Sciences have been renovated. Moreover, construction of other academic blocks and Administration Block are in progress. Two hostels (one for boys and one for girls) have been renovated and now accommodation facilities for 60 male students and 40 female students are available at sub-campus Khushab.

The Campus is offering F.Sc (Pre-Agriculture) two years program, Livestock Assistant Diploma (LAD) of two years and Diploma in Agricultural Sciences (DAS) of three years, BS(Dairy Technology), BBA (Hons.), MCS and MIT.

# UNIVERSITY SUB-CAMPUS ATTOCK

Providing affordable qulaity education at doorstep, Mian Muhammad Shahbaz Sharif, worthy Chief Minister Punjab on the recommendation of Sheikh Aftab Ahmed, MNA, NA-57 Attock-1/ Minister of State for Parliamentary Affairs, Government of Pakistan has approved Establishment of Sub-Campus of PMAS-Arid Agriculture University Rawalpindi at Attock during 2014. About 80% of the population of district Attock is engaged with agriculture directly or indirectly. Attock district is spread over an area of 6857 square Kilometers and comprises the six tehsils i.e Attock, Jand, Fateh Jang, Pindi Gheb, Hazro, Hassanabdal. District Attock is situated at the border of KPK and road way to Northern area through Shara-i-Rehsam.



The Campus is oferring F.Sc (Pre-Agriculture) and B.Sc (Hons.) Agriculture alongwith short courses, trainings and diplomas. The Campus is working under the super vision of Project Director.

# HYDROPONIC PROJECT (FARMERS MARKET Pvt. Ltd.)

Farmers Market (Pvt.) Ltd (FMP) is an R&D Project of Arid Agriculture University Rawalpindi (Pakistan), for Hydroponic production of vegetable over an area of 13.51 acres which is located at village Kalyam Mughal on G.T Road, 7 km short of Mandra, District Rawalpindi.

FMP which is ISO 9001:2000 and 22000 certified, is producing Hydroponically grown pesticide free vegetables especially Tomatoes in 3 different varieties and Capsicum in 3 different colours. Besides, R&D, the project is now in position export Tomatoes abroad to Middle Eastern Countries and thus earning foreign exchange, and adding to the Revenue of Pakistan.



### Examination & Evaluation

### 1. Evaluation:-

(i) The minimum pass marks for each course shall be 40% for undergraduate and Master degree, PGD (CS) and PGD (IT) and 50% for Ph.D. in Theory & Practical Separately.

The marks / grade required to pass a deficiency course shall be the same as in the regulations relating to the Examination/course concerned.

(ii) Grade points will be as follows: Remarks Marks Obtained Grade Grade Point 80-100% Excellent А 4 65-79% В 3 Good 50-64% Satisfactory С 2 40-49% D 1 Pass Below F Fail 0



- (iii) The grade point will be worked on the basis of percentage of marks obtained by a student in each course separately according to conversion table (Quality points table) and not on the percentage of total marks obtained by a student. One credit hour shall carry twenty marks.
- 2. Calculation of GPA/CGPA:-
- (i) GPA/CGPA will be calculated at the end of each semester in accordance to the following formula: GPA/CGPA = <u>SUM OF QUALITY POINTS</u> ÷ <u>SUM OF THE CREDIT HOURS</u>
- (ii) The quality points table given on the next page will be used for calculating the GPA/CGPA:

# QUALITY POINTS TABLE FOR GPA / CGPA

	-	5-Credits <u>100</u> -Marks			4-Credits <u>80</u> -Marks			3-Credits <u>60</u> -Marks				2-Credits <u>40</u> -Marks		1 <u>2</u>	-Credit <u>0</u> -Marks	
D	40	5.00	D	32	4.00	D	24	3.00		D	16	2.00`	D	8	1.00	
	41	5.50		33	4.40		25	3.60			17	2.60		9	1.50	
	42	6.00		34	5.20		26	3.90			18	3.00	С	10	2.00	
	43	6.50		35	5.60		27	4.50			19	3.60		11	2.30	
	44	7.00		36	6.00		28	5.10		С	20	4.00		12	2.70	
	45	7.50		37	6.40		29	5.40			21	4.40	В	13	3.00	
	46	8.00		38	7.20	С	30	6.00			22	4.60		14	3.30	
	47	8.50	_	39	7.60		31	6.30			23	5.00	_	15	3.70	
	48	9.00	С	40	8.00		32	6.60			24	5.40	Α	16	4.00	
_	49	9.50		41	8.40		33	6.90		_	25	5.60				
С	50	10.00		42	8.80		34	7.20		в	26	6.00				
	51	10.50		43	8.80		35	7.50			27	6.40				
	52	10.50		44	9.20		36	8.10			28	6.60				
	53	11.00		45	9.60		37	8.40			29	7.00				
	54	11.50		40	10.00	-	38	8.70			30	7.40				
	55	11.50		41	10.40	в	39	9.00		•	31	7.60				
	20 57	12.00		40	10.80		40	9.30		А	32	8.00				
	57	12.50		49	10.00		41	9.60								
	00 50	12.30		50	11.20		42	9.90	-							_
	59	13.00	P	52	12.00		43	10.20								
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	63	14.50		55	12.40		47	11 70					-			
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	79	19.50														
Α	80	20.00														

#### 3. Examination & Weightage:-

### a) Theory:

In theory paper, student's evaluation shall be done by mid-term examination, assignment / quizzes / term paper & final examination. Both the mid-term & final examinations shall be compulsory; a student who misses the mid term examination, shall not be allowed a make-up examination & shall be awarded zero marks in that examination, however, may appear in the final examination. In case a student does not appear in the final examination of a course, he shall be deemed to have failed in that course.

In theory, weightage to each component of examination, shall be as prescribed here under:

(i) B. Sc (Hons.) Agriculture/BS Agriculture Engineering/ BS (Economics)/ BS (Biochemistry)/ BS(Forestry)/ BS (Human Nutrition & Dietetics)/DVM/ B.Ed/ M.Sc (Hons.) Agriculture/ Poultry Science/ M.Phil/ MS (RS& GIS)/M.Sc/ M.Ed/ Ph.D Agriculture, Biological Sciences, Economics, Education, Forestry & Range Management, Wildlife and Environmental Sciences.

Mid Examination	30 %	
Assignments	10 %	
Final Examination	60 %	

(ii) Programmes of Study in UIMS, UIIT, BIIT

Mid Examination	30 %
Assignments	20 %
Final Examination	50 %



#### b). Practical:

For practical examination (if applicable) 100% weightage will be towards final examination.

### 4. Eligibility for Examination:

- A student shall be eligible to sit for the examination provided that he /she:
- a. has been on the roll of the University during that semester.
- b. has registered himself / herself for the courses of studies.
- c. has attended not less than 75% of the classes in theory and practical / laboratory of each course. Provided that the period of absence in the case of participation in co-curricular / sports activities with the permission of the competent Authority concerned may not be counted.

### 5. Comprehensive Examination:

All students of M.Sc (Hons.)/M.Phil/MS and Ph.D. Shall have to pass the comprehensive examination, after completion of entire approved Course-work, as per university rules.

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# Facilities

#### a. Library

In any educational and research institution the Library department holds the key position being the major source for the inflow of knowledge. For this purpose, the Library department has incorporated 39278 books, textbooks, reference books, project books, thesis, periodicals and research journals, *etc.* As part of the Library facilities, journals related to various disciplines in agriculture, covering the period from 1984-93 on microfilms and microfiche are available. Our library is equipped with modern Library software, INMAGIC for automation.

The services offered by the Library include but not limited to searching of National and International Data Base of the following sources available on compact discs (CDs):

**CAB** Commonwealth Agricultural Bureau Abstracts

**AGRICOLA** Agricultural Information from USDA

**AGRIS** FAO International Information System for Agricultural Sciences and Technology

CATDAIC Pakistan Agriculture

**CATALOG** National Agriculture Research Center, Islamabad, (holdings).

**UNION** Scientific Journals available in various libraries of Pakistan which Including the AAUR Library.

The Library also extends facilities of photo coping service of different type of scientific papers. Moreover, departmental libraries have also been maintained to provide easy access to most of text and reference books as well. The faculty and students are making the best use of these facilities in connection with their respective research projects, preparation of seminars, semester papers and teaching material. It is further added that most of the facilities regarding online of full text and abstracting Journals, which are being determined, subscribe for a modern library by the Higher Education Commission (HEC) are available here through Digital Library.

#### b. Auditorium

The PMAS-AAUR has purposefully built fully air-conditioned auditorium which can accommodate around 500 participants. Various national and international level seminars and workshops are organized by inviting dignitaries and professionals of the field. The auditorium is equipped with modern audio/video facilities.

# Facilities

#### c. University Health Service

The PMAS-AAUR maintains a small health unit with a qualified Doctor Incharge and supporting paramedical staff. The service provides first aid and preliminary diagnostic facility with appropriate medication. Plans are under way to expand this service in such a way that a test laboratory, X-rays facilities, qualified Lady Doctor, Dental Surgeon are provided to students and faculty as well.

#### d. Sports and Extra-Curricular Activities

Athletics play an important role in the extra curricular activities of the university, which maintains facilities for all major sports, such as cricket, football, volleyball, basketball, and other tracks. The university teams participate in various National and Inter varsity games, Keeping in view the importance of extra curricular activities, construction of a stadium in university is underway.

#### e. Accommodation Facility

The university extends accommodation facilities to male and female students. For this purpose, two boys hostels accommodating around 450 students and two girls hostels which can provide accommodation to around 225 female students are at the campus.

#### f. Cafeteria

Campus houses a purposefully erected cafeteria that caters the needs of students. It has ample space to organize student functions. University makes it sure that the food items served at cafeteria are fresh, nutritious as well as economical.

#### g. Transport Facility

Although University campus is located at an accessible place right at main Murree Road, transport facility is available for pick and drop facility and study tours of students.







	FEE STRUCTURE, 2015-16 ADMISSIONS																									
FEE PAYABLE ONE TIME (Rs.)									FEE PAYABLE EACH SEMESTER (Rs.)																	
Discipline	Admission and Processing Fee	University Regd. Fee	University Security	Library Security	Laboratory Security	University I.D. Card	Certificate Verification	Donation to PRCS	Total (A)	Tuition Fee	Medical Fund	Cons. Ch./ Univ. Dev. Fund	Lab. / Research Fund	Library Fund / Fee	Sport Fund / Student Activ.	Co-Operative Soci. Fund	Magazine Fund	Mosque Fund	Poor Boy Fund	Examination Fee	Student Council Fund	Seminar & Workshop	Computer Facility Ch.	Drinking Water Charges	Total (B)	Total(A & B)
B.Sc(Hons)/DVM/BS (Forestry)/B.Sc Ari. Eng./BS Human Nutrition - Morning	4600	1200	2000	2000	2000	400	900	50	13150	3100	400	900	-	600	400	400	400	300	300	1700	300	-	-	600	9400	22550
B.Sc(Hons)/BS Human Nutrition Evening	3700	1200	2000	2000	2000	400	900	50	12250	30000	200	400	-	300	200	200	200	150	150	700	200	-	•	600	33300	45550
B.Sc(Agri. Eng.) Session B/ DVM Evening	3700	1200	2000	2000	2000	400	900	50	12250	60000	350	700	-	500	350	350	350	250	250	1350	350	-	-	600	65400	77650
M.Sc. (Morning)	4100	1200	2000	2000	2000	400	900	100	12700	4600	400	800	1700	600	400	400	400	300	300	1500	400	1500	1300	600	15200	27900
M.Sc.(Hons.)/M.Phil Morning	4900	1200	2000	2000	2000	400	900	100	13500	15200	400	800	1700	600	400	400	400	300	300	1500	400	1500	1300	600	25800	39300
M.Sc(Hons)/M.Sc./ MS(RS&GIS)/M.Phil Evening	5700	1200	2000	2000	2000	400	900	100	14300	25000	400	800	1700	600	400	400	400	300	300	1500	400	1500	1300	600	35600	49900
Ph.D	6500	1200	2000	2000	2000	400	900	100	15100	19900	400	800	2600	2600	400	400	400	300	300	1500	400	1500	1300	600	33400	48500
BBA (Hons.)	9850	1100	2000	2000	2000	350	800	50	18150	17550	350	5000	-	1800	350	350	350	250	250	1900	350	3600	1150	600	33850	52000
MBA/MDM	9850	1100	2000	2000	2000	350	800	100	18200	29150	350	5000	-	1800	350	350	350	250	250	1900	350	3600	4100	600	48400	66600
MBA (Agribusiness)	3650	1100	2000	2000	2000	350	800	100	12000	3800	350	700	1500	500	350	350	350	250	250	1350	350	1350	1150	600	13200	25200
BS(CS&IT)	9850	1100	2000	2000	2000	350	800	50	18150	27500	350	4500	-	1800	350	350	350	250	250	1900	350	-	4100	600	42650	60800
MCS/MIT	9850	1100	2000	2000	2000	350	800	100	18200	27500	350	4500	-	1800	350	350	350	250	250	1900	350	-	4100	600	42650	60850
MS *(Evening)	9850	1100	2000	2000	2000	350	800	100	18200																В	(A+B)
B.Ed.	4100	1200	2000	2000	2000	400	900	50	12650	11100	400	800	-	600	400	400	400	300	300	1500	400	-	-	600	17200	29850
M.Ed.	4100	1200	2000	2000	2000	400	900	100	12700	13500	400	800	-	600	400	400	400	300	300	1500	400	-	-	600	19600	32300
BS(Biochemistry/Microbiology)	4100	1200	2000	2000	2000	400	900	50	12650	23500	400	800	-	600	400	400	400	300	300	1500	400	-	-	600	29600	42250
BS(Economics)	4100	1200	2000	2000	2000	400	900	50	12650	23500	400	800	-	600	400	400	400	300	300	1500	400	-	-	600	29600	42250

\* MS and Ph.D (CS & Mgt. Sci.) Fee Payable each semester (B) will be charged on the basis of Credit Hours enroled. Rs. 5300/- will be charged for one Credit Hours (e.g. 9 Credit Hours fee will be Rs.47700/-) + (Rs. 600 fee payable each Semester on account of Drinking Water Charges)

#### HOSTEL CHARGES

ONE TIM	IE FEES		FEE PAYABLE EACH SEMESTER								
Hostel Security (Refundable)	Charpai Charges	Total (A)	Room Rent	Common Room Fund	Electric Charges	Energy Charges	Sui-Gas Charges	Utencil Charges	Total (B)	Total (A & B)	
2000	3000	5000	2000	600	3000	700	2000	900	9200	14200	
Summer Break Charges @ Rs. 3500/-											

 Cons. Ch.
 Conservancy Charges

 Univ. Dev.
 University Development

 Lab.
 Laboratory

 Activ.
 Activity

 Soci.
 Society

 Exam.
 Examination

(applicable only to those boarders of Spring Semester who are allowed to stay during summer break)

# Fee Structure

The university fee is a mandatory charge received from the student at the time of first admission and then later on at the start of each semester. The payment of fee is an indication that the student is a regular student of university irrespective of the fact whether he/she is taking any course work or not. It entitles a student to such services as library, health, cafeteria, sports and overall campus life except the university hostel/housing. It is the responsibility of the student to pay the university fee and hostel dues at the start of each semester according to the time schedule announced by the Treasurer Office. The fee has to be paid in the bank on the bank challan duly endorsed by the Treasurer office.

# 1.Fee for Foreign Students:-

B.Sc.(Hons) Agriculture/DVM/BS(Forestry)	US\$ 800	MCS	US\$ 1500
BBA (Hons)	US\$ 1600	МІТ	US\$ 1500
BS (CS), BS(IT)	US\$ 1500	MS (CS)	US\$ 1500
M.Sc./M.Sc.(Hons.) Agriculture/Poultry Science/M.Phil	US\$ 200	Ph.D. (Agriculture / Sciences)	US\$ 1600
MBA (All Programmes)	US\$ 1500		
M.Ed.	US\$ 800		

# **Other Charges**

(Applicable in all the programmes and for all students)

Late Enrollment Fee	(Rs.)
Upto 3 days	1100
Upto 4 to 7 days	2200
Re-admission fee	3000
Enrollment fee after minimum residency pe	<u>riod</u>
M.Sc./M.Phil/MS	3700
Ph.D	7400
Provisional Certificate Fee	350
Degree Fee	2200
Duplicate Degree Fee	4400
Urgent Degree Fee	8800

Diploma Fee	1500
Duplicate Diploma Fee	2200
Transcript (DMC) Fee Per Semester	
(i) Within one Week	250
(ii) Within 24 Hours	450
Duplicate Registration Card Fee	350
Duplicate ID card Fee	450
Migration Certificate Fee	1500
Recounting of Answer Book per Course	2200
Employees/Employees Kids Fee	2900
Verification fee for each of: Degree, Diplor	na,
Certificate and Transcript (DMC) etc,	
(i) From Pakistan	300
(ii) From Abroad (US	\$) 9.0
Except Government Departments and Armed	d Forces of
Pakistan	

# Per Course Enrollment Fee

If a student has completed minimum residency period after that enrolls for failed/extra courses would be charged.

As per the following rates for each course enrolled:-

(a)	Regular Students Postgraduate Undergraduate Ph.D	<b>(Rs.)</b> 1700 1500 2400
(b)	Self Supporting Students Postgraduate	6500
	Undergraduate	3700



(c) If credit hours load of the extra enrolled subjects increases to 70% of the semester, Full semester fee will be charged.

#### **Refund of Fee**

- 1. If a freshly admitted student leaves the university and requests in writing to withdraw his/her fee the securities will be refunded in full, whereas, only the tuition fee will be refundable as per the following policy.
  - i. Full (100%) fee refund upto 7th day of convene of classes as announced by the University.
  - ii. Half (50%) fee refund from 8th 15th day of convene of classes as announced by the University.
  - iii. No fee (0%) fee refund from 16th day of convene of classes as announced by the University.
- 2. Refund of Fee and other charges can be made to a continuing student only if all the courses for which he / she was enrolled are not offered by the Department concerned or the university considers the student to be ineligible for enrolment in a semester.
- 3. Refund of hostel charges can be made on the written request of the student as per following policy;
  - 75 % refund if a student applies within 7 days of the allotment of the hostel as announced by the university.
  - 50% refund within two weeks (14 days) of allotment.
  - iii. No refund after two weeks (14 days).
- 4. Refund of fee will be made after two weeks of completion of admissions.
- 5. Refund of security will be made by the Treasurer office to the eligible students (notified as successful by the Controller of Examinations) on the written request alongwith the clearance issued by heads of respective departments. The claim to refund will be valid for a period of six months after passing the programme/course.
- 6. Semester late fee after due dates as notified by the Treasurer Office, will be made on written application by the student after recommendation of their respective Deans/ Directors.

ii

# DIRECTORATE OF STUDENT FINANCIAL ASSISTANCE AND UNIVERSITY ADVANCEMENT

## Vision

Wannable to make Student Financial Assistance and University Advancement as "Resource, Consultation and Placement Hub" catering the economic and non-economic needs of its graduate during and after their academic life.

# Objectives

#### 1. Scholarship & Financial Assistance Management

- a. Management & Implementation of following Scholarship programs:
  - i. Punjab Educational Endowment Fund Scholarship (PEEF)
  - ii. HEC Needs Based Scholarship
  - iii. VC Talent Scholarship
  - iv. (MORA) Ministry of Religious Affairs Assistance out of Zakat Fund
  - v. Government Internal Merit Scholarship
  - vi. HEC Indigenous Scholarship for Ph.D Students
  - vii. Financial Assistance from Bait-ul Mal
  - viii. Fata Secretariat Scholarship
  - ix. Livestock & Dairy Development Scholarship for Students of Balochistan
- b. Liaison with donor agencies for students' scholarships, financial assistance, loans etc.
- c. Monitoring of the academic performance of all scholars.
- d. Financial Management of the above mentioned scholarship programs and timely disbursement of funds.
- e. Correspondence with the Higher Education Commission of Pakistan and Punjab Education Endowment Fund Secretariat.

# 2. <u>Students Counseling</u>

- i. Psychoanalysis of students during their academic pursuits keeping in view their academic and non academic strengths and weakness to match the in-house talent with needs of the market (Selection of subjects, background, conduct, interest, place of living, anticipated place of employment, nature of employment, social factors etc.).
- ii. Actuation/motivation of students towards acquisition traits and polishing their in-born traits to meet the demand of business/research environment. Inculcating the importance of human resources, professional training, managerial skills through human organization models, employee loyalty & national expectations through group discussions and seminars.
- iii. Recommendation of skill enhancement and further studies.

#### 3. Placement Assistance:

- i. Develop linkages among prospective employers and the students/graduates.
- ii. Receipt of vacancy announcement from prospective employers and its dissemination to the graduates through electronic mail.
- iii. Arrange Pre-selection of students (who are about to complete their studies) by arranging get together, seminars, workshops, exhibitions, job fairs etc. with Prospective employers.
- iv. Seek vacation employment contracts to meet the financial hardships of the students.
- v. Serve selectionery centre and confidential interview facilities for the public/private organizations on cost/fee bases.
- vi. Arrangements of the visits of the delegates/Prospective employers and their discussions with faculty and students of relevant departments regarding the emerging needs and training of the students in same direction.
- vii. Arrangements for inculcating the graduate the techniques to develop CV, impart interview and communication skills, etc.
- viii. Compilation of graduates' database according to their subjects, sharing and dissemination of news about employment opportunities/scholarships, events at the campus etc. electronically.

# **Edited & Corrected By:**

Prospectus Committee (All Deans/Directors of the University)

**Designed By:** Muhammad Adnan Riaz

Assistant Registrar



# PIR MEHR ALI SHAH ARID AGRICULTURE UNIVERSITY RAWALPINDI Murree Road, Shamsabad, Rawalpindi, Pakistan Ph: +92-51-90621212, Fax: +92-51-9292124 admissions@uaar.edu.pk www.uaar.edu.pk | www.facebook.com/uaarofficial