

PROSPECTUS COMMITTEE 2022



Prof. Dr. Muhammad Bachal Bhutto



Prof. Dr. Abdul Mubeen Lodhi



Prof. Dr. Imran Khatri



Dr. Habibullah Magsi



Dr. Muhammad Saleem Sarki



Dr. Mansoor Ahmed Samon



Dr. Mukhtiar Memon

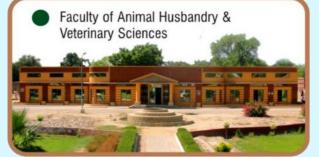


Dr. Irfan Ahmed Shaikh

SINDH AGRICULTURE UNIVERSITY TANDOJAM



Faculty of Crop Protection







Institute of Food Sciences & Technology





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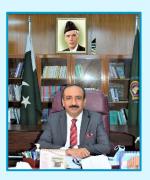








MESSAGE FROM THE VICE CHANCELLOR



On behalf of our faculty, staff and students, welcome to Sindh Agriculture University (SAU) website. In brief, the SAU was established in 1977 through the upgradation of the then Sindh Agriculture College. The university has achieved robust growth over the intervening period while pursuing its mission "Committed to contribute towards self-sufficiency and sustainability in agriculture to ensure food security by producing trained manpower, conducting problem-oriented research and establishing effective linkages with the stakeholders".

By now, SAU has produced over 44000 graduates and postgraduates who have been playing pioneer role in the development of agricultural system and agrobased economy of the country. They are also involved in various national and international services throughout the globe. The university has a current enrollment of over 8000 students. We are home to a community of over 257 distinguished faculty members with regional, national and global connections, who take interdisciplinary approaches to offer 68-degree programs at the undergraduate, master's and PhD levels. I am extremely proud of the rich tradition of providing practical, experience-based agriculture education tailored to market needs. A majority of the programs incorporate experiential learning, community service, and wide-ranging regional, national and global experiences.

Located in an economically and ecologically important agricultural zone of the province, SAU offers unique opportunities for students to engage with farming communities and stakeholders, equip with practical and field-oriented skills through agriculture and livestock farms and well-equipped labs, participate in internship opportunities with local partners and agri-business entities, and prepare for contribution to the agriculture sector in Sindh and the country at large. Another added dimension to the learning environment is that two constituent colleges and a sub-campus of the university are located in diverse agro-ecological zones of Sindh at Dokri, Khairpur and Umerkot. All along, the

students are supported through career counselling services to shape up their careers while at the university and also connect them with relevant organizations for their placement in suitable jobs after graduation.

The SAU enjoys enthusiastic backing from alumni, businesses, professionals and the surrounding community. I wish to recognize and thank SAU Alumni and Friends for their continued support for growth of the university and in making it highly relevant to clientele needs. The university also benefits from its location at Tandojam, a center of agriculture industry and trade that places a high value on ingenuity and entrepreneurship.

As Vice Chancellor and alumnus of SAU my mission is to take out alma mater to the next level of excellence where all can feel pride. I am honored to have some of the very best in the faculty. I am also fortunate to have very experienced officers and staff in the university. Similarly, the student body of our university has all the potential to excel with sheer hard work and commitment. Let us all pledge together to champion the principles of scholarship, research, professionalism, and diligence. Let us commit ourselves to excellence in teaching, learning, research, and administration. Let us make our generations proud of ourselves. I would like to cordially invite all of you who are interested in expanding your knowledge and enriching your careers to explore SAU further either online or through a visit to campus.

Regards,

Prof. Dr. Fateh Muhammad Marri Vice Chancellor, Sindh Agriculture University Tandojam, Sindh, Pakistan.

THE UNIVERSITY



Sindh inherits the fertile Indus Valley, which is well known for its glorious past. The

excavations at Moen-Jo-Daro speaks about the prosperity of Sindh to produce agricultural commodities. Sindh was the breadbasket and a net exporter of food supplies to the entire sub-continent during the nineteenth century. Located in the extreme south of Pakistan as one of the five provinces. Sindh presents a variety of soil and climatic conditions compatible for growing various cereal, fruits, and vegetable crops and maintenance of a large livestock population.

With the construction of the Sukkur Barrage in Sindh Province (1932), the need for education and training in agricultural professions was realized and translated in the form of the establishment of King George-V Institute of Agriculture at Sakrand, District Shaheed Benazir Abad (Nawab shah) in 1939. Initial 02-year Diploma course was offered, later converted to a three-year B.Sc. Degree. The institute was shifted to its present site in 1954 and was named Sindh Agriculture College Tandojam with specializations in various fields of Agriculture and Animal Sciences.

The college was able to promote agricultural education steadily in the province paving the way for raising the status of the college to the full-fledged university named Sindh Agriculture University, Tandojam established under the Sindh Assembly Act on 1st March 1977, with the

main objective of providing the qualified manpower in Agriculture, Engineering and Animal and Veterinary Sciences, well equipped with academic as well as problem-oriented research and capable enough to extend latest agricultural technology to the doorstep of farmers eventually leading to increased agricultural production.

MISSION

The university is committed to inculcate among students a sense of discipline, organization, refinement of their vision and skills, and help them graduate with maturity, distinction, and confidence to be useful citizens of society, to realize the dream of sustainability in agriculture for food security and safety.

LOCATION



The university is in Tandojam town which is 180 KM North-East of Karachi, the largest city of Pakistan, and 15 KM East of Hyderabad city on Hyderabad-Mirpurkhas Dual Carriageway, Tandojam. Karachi & Hyderabad are the closest airports. However, it is interconnected with all major cities of Pakistan through road, rail, and wire. The climate of Tandojam is arid & sub-tropical. Summers are moderately hot, and winters are cool.

ADMINISTRATIVE/ACADEMIC HEADS			
Syed Murad Ali Shah Chief Minister Sindh/Chancellor	Prof. Dr. Allah Wadhayo Gandahi Principal Shaheed Z. A. Bhutto Agricultural College, Dokri	Mr. Anwar Hussain Khanzada Director Sports	
Mr. Muhammad Ismail Rahu Minister of Agriculture, Supply & Price Department, Government of Sindh/Pro-Chancellor	Prof. Dr. Aijaz Hussain Soomro Director, Institute of Food Sciences & Technology	Mr. Ahmed Khan Mangi Director Admissions	
Prof. Dr. Fateh Muhammad Marri	Prof. Dr. Abdul Mubeen Lodhi	Mr. Manzoor Hussain Lakhair	
Vice Chancellor, SAU Tandojam	Director, Advanced Studies	Controller of Examination	
Prof. Dr. Jan Muhammad Mari Pro-Vice Chancellor, SAU Sub-Campus Umerkot	Dr. Mir Sajjad Hussain Talpur Director, Information Technology Centre	Engr. Riaz Ahmed Soomro Project Director	
Prof. Dr. Qamaruddin Chachar	Mr. Riasat Ali Kubar	Mr. Gulsher Lochi	
Dean, Faculty of Crop Production	Director QEC, SAU Tandojam	Public Relation Officer	
Prof. Dr. Aijaz Ali Khooharo	Dr. Khadim Hussain Wagan	Mr. Ghulam Hyder Joyo	
Dean, Faculty of Agricultural Social Sciences	Hostel Provost	Librarian	
Prof. Dr. S. Muhammad Ghiasuddin Rashdi Dean, Faculty of Animal Husbandry & Veterinary Sciences	Dr. Abdul Wahid Baloch Director Students Affairs	Mr. Manzoor Ali Magsi Director Transport	
Prof. Dr. Altaf Ali Siyal	Prof. Dr. Tehmina Mangan	Dr. Faisal Ansari	
Dean, Faculty of Agricultural Engineering	Director ORIC	Medical Officer	
Prof. Dr. Manzoor Ali Abro	Prof. Dr. Muhammad Ismail Kumbhar	Mr. Silahuddin Shaikh	
Dean, Faculty of Crop Protection	(SAU) Director, University Advancement & Financial Assistance	Resident Auditor	
Prof. Dr. Abdullah G. Arijo	Mr. Ghulam Mohiuddin Qureshi	Mr. Fawaz Ahmed Shaikh	
Advisor (Academics) to Vice-Chancellor	Registrar,	Purchase & Store Officer (PSO)	
Prof. Dr. Zia-ul-Hassan Shah	Mr. Aneel Kumar	Mr. Mukhtiar Seelro	
Advisor (P&D) to Vice-Chancellor	Director Finance	Colony Welfare Officer	
Prof. Dr. Muhammad Ibrahim Keerio	Engr. Mumtaz Ahmed Jakhro	Mr. Suhrab Gul Thaheem	
Principal, KCAET, Khairpur Mir's	Director Farms	Incharge, Computerization, and Networking Section	

POSTGRADUATE DEGREE PROGRAMS

Sindh Agriculture University, Tandojam started Postgraduate Program in 1977 in different disciplines of agriculture through the Directorate of Advanced Studies. Currently, the following postgraduate programs are offered in different departments/institutes of various faculties of SAU Tandojam.

Program	Faculty/Institute	Discipline
1. M.Sc. (Agri.) Hons 2. Ph.D.	Crop Production	Agronomy, Horticulture, Crop Physiology, Soil Science, Biotechnology, Plant Breeding & Genetics
	Crop Protection	Entomology, Plant Pathology, Plant Protection
	Agricultural Social Sciences	Agricultural Economics, Agricultural Education, Extension, Statistics, Rural Sociology
	Institute of Food Science & Technology	Food Sciences and Technology
MSIT (Hons)	Information Technology Centre	Software Engineering & Information System, Communication System and Networking
MS (Hons)	Agricultural Social Sciences	Agribusiness Management

1. M.E. 2. Ph.D.	Agricultural Engineering	Farm Power Machinery, Irrigation and Drainage, Farm Structures, Land & Water Management, Energy and Environment
1. M.Phil 2. Ph.D.	Animal Husbandry & Veterinary Sciences	Animal Products Technology, Livestock Management, Poultry Husbandry, Animal Nutrition, Veterinary Physiology & Biochemistry, Veterinary Pharmacology, Veterinary Parasitology, Veterinary Microbiology, Veterinary Pathology, Animal Reproduction, Veterinary Medicine, Surgery and Obstetrics

ACADEMIC CALENDAR

Academic year begins in January and consists of two semesters (Spring and Fall) in all faculties, Information Technology Center & Institute of Food Sciences & Technology of this University. The duration of each semester is 22 weeks distributed as 02 weeks for registration, 14 weeks of actual teaching, 02 weeks for examination preparation, while the remaining 04 weeks are meant for the conduct of semester examinations.

STUDENTS COUNSELING AND PLACEMENT SERVICES

Students counseling and placement center is responsible for guiding and counseling the students of the Faculty of AHVS and AE for getting admission in postgraduate degree programs of their choice depending upon the availability of seats and other related factors. The center is also responsible to fetch the jobs for the university graduates in various public and private organizations. In context, the center will maintain the record of addresses/contact numbers of passing out graduates to keep them well informed of their proper placement in various jobs commensurate with their qualifications. It will also monitor the market demand of our graduates and will guide them to start their career in the disciplines, where they can seek suitable jobs immediately after their graduation. It will also be responsible for solving the day-to-day problems of university students.

DIRECTORATE OF STUDENT AFFAIRS

The directorate facilitates the local and foreign students in seeking admission to this university, accommodation, local problems, visa facilities, etc.

BANK

A full-fledged branch of Habib Bank Pvt. Limited is situated adjacent to the Administration Block which provides all sorts of banking facilities to the staff members and students.

POST AND TELEGRAPH SERVICES

University has a well-staffed post office at the Campus that provides all necessary facilities, including telegraph services.

COMPUTING, INTERNET, AND INTRANET FACILITIES.

Information Technology Center (ITC) was established in 2002 to impart degree programs, postgraduate diploma, short term diploma and short courses of varying duration to the students at this university and the youth of the province of Sindh in general. More than 100 latest computers are available along with all necessary peripherals. The faculty and students particularly the postgraduate students are provided the internet and intranet facility for the

literature search. The facility for data analysis is also provided to the postgraduate students and the faculty. The Higher Education Commission (HEC) has provided internet connectivity under Pakistan Educational and Research Network (PERN). The University has its website. The address is given at the end of this prospectus, where all the information regarding the university is displayed. The email facility is also available for the students, staff, and faculty.

Under the Mega Project "Computerization and Networking Enhancement Project of SAU" all the faculties, departments, library, administration, directorates have been interconnected together through intranet and further integrated with the existing internet facility at the ITC. More than 150 pcs are procured for the faculties and departments to establish computer labs in each faculty, library, DAS, QEC, and administration block to provide internet access to all of them at their doorstep for postgraduates and researchers.

CAMPUS SECURITY

To address security concerns of the staff and students residing on campus, a security system operates round the clock through highly skilled manpower under the supervision of Director Campus Security to provide a secure environment at the campus.

UNIVERSITY PUBLICATIONS.

Sindh Agriculture University publishes biannually the Pakistan Journal of Agriculture, Agricultural Engineering and Veterinary Sciences (PJAAEVS), a yearly Sarang student magazine, SAUNI Newsletter, and Seerat-Un-Nabi Islamic magazine for spiritual inspirations of students. Research papers, popular articles, and significant writings of the faculty and students are published in these periodicals.

FINANCIAL AID

The deserving students are awarded scholarships, free ships, or cash grants by the university. Some scholarships are also allocated by the Directorates of Education. The District Education Boars of Sindh also provide some scholarships every year to meritorious students of their districts. The

Government of Sindh also grants scholarships to deserving students on a poverty cum merit basis. Financial Assistance is also provided from Bait-Ul-Mal.

The scholarships, free ships, etc. are awarded for one academic year. The continuation of the financial aid, however, is subject to a student's satisfactory performance each year. Scholarships to the students of the province of Baluchistan, KPK, and Gilgit Baltistan are awarded by their respective governments through their Directorates of Agriculture and Animal Husbandry. Banks and other financial institutions also grant loans to meritorious students on very soft terms of payment.

In addition to the above provisions, scholarships are also granted on a poverty basis under the HEC-USAID and HEC-JAICA need-based scholarship programs. These scholarships cover almost the entire expenditure of students including tuition fees, hostel fees, transportation, books, and other expenses.

JOB OPPORTUNITIES FOR THE GRADUATES OF THE UNIVERSITY

The prime motive behind the establishment of the University is to promote rapid transfer of technology to the farming community through a continued output of graduates and postgraduates. The graduates disseminate the modern technological know-how to the farmers to boost up agricultural productivity.

The main job opportunities are as under:

- Agricultural graduates and postgraduates may be taken up to work as: Farm managers in Agricultural Estates.
- Specialists in various disciplines of agriculture and allied sciences in
 public and private sector organizations, autonomous and semiautonomous bodies viz. Zarai Taraqiati Bank (ZTBP) of Pakistan,
 Pakistan Agriculture Research Council (PARC), Pakistan Council
 for Research on Water Resources (PCRWR), WAPDA, Fruit
 Preservation, and Grading Industries, Veterinary Pharmaceuticals,
 Animal Feed Industries, etc.

• Their services can also be utilized in provincial and federal departments of Agricultural Extension, Research, Teaching, Fisheries, Forestry, Cooperatives, Animal Husbandry Extension Services, Veterinary Research institutes, Poultry Research Institutes, Agricultural Engineering, Plant Protection, Plant and Animal Quarantine, Pakistan Central Cotton Committee, Public Parks and Gardens, Agricultural Tools and Machines, Seed Corporations, EPA, SCARP, BOM, Drainage Research Centers, PLAC, Sindh Sugar Corporation, Pakistan Atomic Energy Commission and other departments.

They may be taken up as agriculture teachers/subject specialists to teach agriculture and agro-technical courses in High Schools and other vocational institutes of education departments.

The job-oriented graduates can share the business and management or agro-based industries like fertilizers, pesticides, fungicides, herbicides, sugar and jute mills, cotton factories, feed mills (livestock and poultry) veterinary pharmaceuticals, milk, and meat processing plants, etc.

They can also find access to the departments of Agricultural Census, Agricultural marketing, Pakistan Broadcasting and other corporations, commercial Banks, Agro-Economic Research, and Social Welfare Department.

Job opportunities may also be availed for the graduates of this university in various special projects sponsored by agencies like the National Planning Commission, USAID, FAO, LEAD, Ford Foundation, National Talent Pool, and agriculture consultancy firms.

Postgraduate agricultural degree holders may seek employment in foreign countries, especially the less developed countries with ongoing agricultural development activities. In this connection, the university is also engaged in the training of students from developing countries.

Besides, the graduates of Sindh Agriculture University, Tandojam are eligible to apply for competitive examinations held by the Provincial and Federal Public Service Commissions for the administrative, secretariat, and other superior services of Pakistan.

MSIT (Hons) postgraduates of ITC have adequate opportunities to work in software development, teaching, education and training, offices, banks and other financial organizations, research organizations, management, health care, commerce and industry, military, police, railway, air traffic, communication, and transport service, telecommunication corporations, networking, and database management. Graduates of Information Technology can join as a software engineer, programmer, lecturer, computer engineer, system analyst, system administrator, network administrator, network engineer, network manager, scientific officer, research officer, administrative officer, database administrator, etc.

CATERING

Any group of students not less than 20 and not more than 60 or the number as may be fixed by the Hostel Provost depending on a particular situation in the hostel, who may wish to run their mess shall obtain prior permission on prescribed form from the provost and intimate the name of the manager, who shall be one of the resident students of the hostel.

The manager shall produce the list of the residents, who will be catered in his/her mess along with full identification, which will be subject to official scrutiny through appropriate agencies, Provost/Deputy Provost may refuse to allow any person to work on staff or any mess without assigning any reason.

The manager shall on his responsibility certify that the cooks and other staff members engaged in the mess are of good character and are not criminals, history convicts, assigned to him/her, or acquired or engaged by him on account of any political association or afflictions.

If at any time the certificate given by a manager is found incorrect. The manager shall be liable to disciplinary action as a hostel resident as well as a student at the university.

Students who may not join the mess can have their meals in the hostel canteen only. Any student found cooking meals in the rooms shall be liable for disciplinary action.

CODE OF CONDUCT

The Students of the University Shall

- Devote the wholeheartedly in acquiring the knowledge imparted by the teachers with the help of prescribed books, published literature, and experimental work in laboratories and fields during their studies at the University.
- Be regular in attending classes and shall maintain at least 75% attendance in the classes.
- maintain the notes and list of the lectures delivered by the teachers in the class.
- Maintain and preserve in good condition the books and literature received by them from the University Libraries.
- Handle with care and caution the equipment, instruments, tools, and machines available in the laboratories at the research or demonstration farms, livestock, and poultry experiment stations, and veterinary clinics of the University.
- Extend cooperation and response to the teachers as could be conducive to the attainment of more and more knowledge and learning.
- Show to the teachers utmost undivided respect, obedience, and recognition as would be considered in terms of morality, obligatory on the part of son or child towards his parents and elders in the family.
- To participate fully and wholeheartedly in sports, games, and extracurricular activities with the object of developing a healthy body for a healthy mind.
- To encourage activities that may create a sense of brotherhood and affinity among the students.

- Maintain identity as a student at the University and oneness among all students by wearing the gown and identity badges on the chest as may be prescribed by the University.
- Contribute actively to the development of national ideology and Islamic mode of life.
- Implicit obedience and follow the rules, instructions, guidelines issued by the University authorities from time to time.
- Show due respect and regards to all leaders of national fame, scholars, and religious leaders without distinction.
- And generally, do all acts and deeds as would be, conducive for elevating the image of the University in the society and raising the prestige of the University as proud students thereof.

The Students of the University Shall Refrain From

- Indulging into activities against the Islamic and Pakistan Ideology or National solidarity.
- Indulging into activities promoting/invoking violence or hatred or contempt.
- Indulging into rising of slogans or words spoken or written against any group, classes or individuals or the University authorities.
- Promoting or propagating any regional group, linguistic or sectarian conflicts.
- Using any part of the University Campus for holding political or sectarian gatherings.
- indulging in foul or malpractices at the examinations.
- using pressure tactics or political or personal influence in seeking academic promotions, the award of financial benefits, or other

matters concerning academic or administrative functions of the University authorities.

- Resorting to using coercive/oppressive or bullying tactics.
- Inviting or allowing entry within the University premises of expelled students, anti-social elements, or other persons whose presence on the university campus may cause conflict among the students or whose presence might create an unhealthy atmosphere.
- Bringing within the University campus, consuming or encouraging consumption of narcotics, or indulging in criminal activities or acts involving moral turpitude.
- Bringing with University premises, keeping/using different kinds of weapons.
- Concealing from the University authorities any act or omission of any student or group of students as might be against the norms of good conduct.
- Using or occupying any room or part of the building or the University campus unauthorized.
- Taking our procession or holding meeting within university campus without prior permission from the competent authority.
- Damaging university buildings, properties, lawns, orchards, experimental farms/stations, research farms, gardens, etc.
- Generally, from all such acts and deeds might lead to bringing disgrace and bad name to the university.

Violation of Conduct and Discipline Regulations

 Any student found to have violated the norms of conduct prescribed above shall be deemed to be guilty of the breach of conduct and discipline regulations of the University and shall be liable to a penalty under the student conduct and discipline regulations. On admission to the privilege of being a Hostel Resident, he/she undertakes to abide by the following code of conduct. That he/she follows the rules and regulations framed by the University for Administration of University hostels from time to time.

- That he/she shall not allow any guests in the room after sunset.
- He/She shall not knowingly give refuge or protection to any criminal or any other person who has committed any other recognizable offense or is a fugitive from the law, shall not aid or abet any person in his/her criminal activities.
- That he/she shall not bring, keep, store, or permit anyone to keep, hide or store, any weapon even licensed, in the University Hostels; and that he/she shall sign the hostel register on arriving in the hostel after closing hours; giving name, room number, time of arrival and other particulars required in the register maintained for the purpose in the hostel entry room.

Grounds of Penalty

- If the competent authority believes that the defaulting student has committed any of the acts herein mentioned shall consider the same as grounds for imposing a penalty on the student.
- Misconduct
- Committing of acts of violence or use of force, intimidation, arms, or inciting other students for the same purpose.
- Causing destruction of or damage to the University property or inciting students for the same purpose.
- Making undesirable speeches, raising slogans, shouting and writing, publishing or circulating material derogatory to Pakistan, Islamic Ideology, and the prestige of the University of maligning the University authorities or the University Teachers/officers and impairing the sanctity of the University.

- Use of unfair means and malpractices in the examinations.
- Consumption, use, sale, and distribution of alcohol, liquor, or other intoxicating drugs within hostels or campus of the University or being an addict to any intoxicant.
- Making collections or prompting collection of donations, subscriptions, etc. in cash or kind as pecuniary assistance for or on behalf of the University or organizations or a department of the University, except following the instructions issued by the university authorities.
- Committing any act or omission involving moral turpitude which in the opinion of the authority is disgraceful for a university student; and
- Any act or omission on the part of a student even though committed outside the University campus, which in the opinion of the competent authority has exposed the University to bad name and defamation.

Penalties

• The competent authority may impose upon a defaulting student any of the following penalties.

Minor Penalties

- Warning in writing.
- A fine not exceeding Rs. 500/-
- Withholding result of examination for a period not exceeding 6 months.
- Withholding of a certificate of good moral character.
- Fine commensurate with nature/extend of misconduct.

- Withdrawal of financial concessions for a period not exceeding three months.
- Expulsion from attending classes for a period not exceeding three months.

Major Penalties

- Cancellation of the examination result.
- Removal from the hostel.
- Deprivation from University privileges i.e. scholarships
- Rustication or expulsion from the university for a specific period.
- Disqualifying for a period not exceeding three years for an appearance in any University Examinations.
- Rustication and ban on entry in the premises of the University for a period up to three years or more.

Procedure for Imposing Penalty

- The following procedure shall be followed for imposing a penalty on defaulting students.
- Orders of the Vice-Chancellor shall be final. The right of review shall also vest in him/her.
- Any orders imposing penalty may be withdrawn and misconduct pardoned with such conditions as may be considered necessary by the Vice-Chancellor, if at any time, after passing such orders, Vice-Chancellor is satisfied that penalized student has exhibited genuine repentance over his past conduct and promises to demonstrate improved conduct in future.

- It is coming to the notice of the Students Advisor that a student has
 conducted himself in a manner invoking anyone or more of the
 grounds of penalty enumerated in regulations he/she shall
 immediately bring the matter to the notice of the competent authority
 and under his instructions shall hold a preliminary inquiry by
 recording statements of witnesses and if necessary, of the defaulting
 students.
- In case of urgency requiring immediate preliminary inquiry, the Student Advisor may forthwith record the statement to the witness and if necessary, of the defaulting student before reporting the matter to the competent authority. Provided that if the incident has directly come to the notice of competent authority, he/she may direct a preliminary inquiry to be held by the Student Advisor.
- The Student Advisor shall place the matter together with his/her report before the Competent Authority.
- The competent authority on scrutiny of the preliminary inquiry and the report of the Students Advisor may direct a show-cause notice to be issued to the defaulting student and refer the matter to the Discipline Committee of the University.
- That the Competent Authority shall not be debarred from imposing a minor penalty on the defaulting student without reference to the Discipline Committee after giving a personal bearing to the defaulting student.
- The Discipline Committee shall on the date fixed after receipt of a reply to the show-cause notice to the defaulting student hold a meeting at which the witnesses and the defaulting student shall be heard, and the matter considered.
- It shall be discretionary of the Discipline Committee to orally confirm statements recorded at the preliminary inquiry necessary to the witnesses and defaulting student during the hearing.
- The Discipline Committee may, if necessary, grant time till the following meeting to witnesses and defaulting students to produce

- such evidence as may be unavoidably necessary for the determination of the issue before the Committee.
- On completion of the proceeding, the Discipline Committee shall forward the matter to the Competent Authority with its opinion proposing a penalty to be imposed upon the defaulting student.
- On receiving the opinion from the Discipline Committee, the Competent Authority may impose any penalty on the defaulting student.

Appeal

 A defaulting student can file an appeal against the order of the imposition of the penalty to the Academic Council within one month of the decision of penalty on him/her.

Other Penalties

• Without prejudice to the grounds of penalty and penalties enumerated in regulation No. 5.1 (a) and (b) have the authorities mentioned below may impose penalties shown against each for acts or omissions not covered by Regulations.

Officers Authorized to Impose Penalty

- The Teacher Incharge Expulsion from the classroom, laboratories, workshop, or fieldwork for the period concerned (Maximum Four consecutive classes or one week).
- President Gymkhana/Ex-officio, Expulsion from the game for not more than one week.
- The Chairman Library Committee. Expulsion from the library for a period not exceeding one month.

- The Dean of a Faculty. Expulsion from all or any class in the faculty for a period not exceeding one month.
- The Hostel Provost. Expulsion from the residence in the hostel for a period not more than four months.
- The Students Advisor, Hostel Provost, President Gymkhana, Dean & Librarian fine not exceeding Rs. 500/-.
- The President Gymkhana. Suspension or removal from a position of authority in University Sports.
- The Students Advisor, Suspension, or removal from a position of authority in the student union.
- The Dean of a Faculty. Withholding or cancellation of free ship of university.

RULES AND REGULATIONS GOVERNING POSTGRADUATE DEGREE PROGRAMS OF SINDH AGRICULTURE UNIVERSITY TANDOJAM (EFFECTIVE FROM THE ACADEMIC YEAR 2021)

GENERAL REGULATIONS

1.1 TITLE

These rules and regulations shall term "SAU Postgraduate Degree Programs Regulations 2021" and onward under Semester System"

1.2 COMMENCEMENT

These rules and regulations will come into force from the academic year 2021 and onward. The Academic Council on the recommendations of the Board of Advanced Studies & Research shall resolve issues emerging during the implementation of these regulations.

1.3 DEFINITIONS

These rules and regulations, unless otherwise stated:

- a. "Higher Education Commission" (HEC) means Higher Education Commission, Pakistan.
- b. "University" means Sindh Agriculture University, Tandojam.
- c. "Vice-Chancellor" means Vice-Chancellor of Sindh Agriculture University, Tandojam.
- d. "Dean" means Dean of Faculty of Sindh Agriculture University, Tandojam.

- e. "Chairperson" means Chairperson of an Academic Department of Sindh Agriculture University, Tandojam.
- f. "Director Advanced Studies" (DAS) means Director Advanced Studies of Sindh Agriculture University, Tandojam.
- g. "**Registrar**" means Registrar of Sindh Agriculture University, Tandojam.
- h. "Controller of Examinations" means Controller of Examinations of Sindh Agriculture University, Tandojam.
- "Postgraduate Coordinator" (PGC) means Postgraduate Coordinator of a Faculty of Sindh Agriculture University, Tandojam.
- j. "Board of Faculty" (BoF) means Faculty Board of Studies approved by Academic Council of Sindh Agriculture University, Tandojam.
- k. "Board of Advanced Studies & Research" (BASAR) means Board of Advanced Studies & Research of Sindh Agriculture University, Tandojam.
- "Board of Studies" (BoS) means Departmental Board of Studies approved by Academic Council of Sindh Agriculture University, Tandojam.
- m. "Academic Year" means the Academic Year of the University corresponding to the Calendar Year.
- n. "Semester" means a period of continued 22 weeks duration including examination.
- o. "Semester Examination" means the Mid-semester and Final Examination held during each semester.
- p. **"Equivalence Committee"** means Equivalence Committee of Sindh Agriculture University, Tandojam.

1.4 PRE-ADMISSION EVALUATION CRITERIA

- 1.7.1. All applicants seeking admission in postgraduate programs shall be required to appear in a GRE-type Pre-admission Test (conducted by the University) or qualified in GRE (Subject)/GRE (General) administrated by Education Testing Services (ETS)
- 1.7.2. Final merit list of the candidates shall be prepared according to the marks adjusted by the following formula:

	WEIGHTAGE	
EXAMINATION	M.Sc./ MS/ M.E./ MSIT/ M.Phil.	PhD
Statement of Purpose or Concept Paper*	10 points	10 points
B.Sc / B.E/ D.V.M	40 points	10 points
M.Sc / ME / MS / MPhil		20 points
Pre-Admission Test**	50 points	60 points

^{*&#}x27;Statement of Purpose or Concept Paper' shall be part of the Pre-Admission Test.

1.7.3. In the case of degrees and examinations, the points shall be awarded on the overall percentage of marks obtained during an examination (e.g., Intermediate) or a degree (e.g., M.Sc.) for examination, if a student secures 78% marks in Intermediate, he/she shall be awarded 7.8 points. Similarly, an aggregate percentage of 70 shall earn 07 points for the graduate degree.

- 1.7.4. Concerned department in consultation with Dean of the Faculty shall develop a 'Written Test' for the subject of opted specialization.
- 1.7.5. Postgraduate Coordinators/Chairperson/Dean of the concerned Faculty shall organize and conduct the 'Written Test'.
- 1.7.6. The permission to appear in the to entry test shall be based on admit card and proper identification (e.g., CNIC).
- 1.7.7. A candidate must secure 50% marks to be eligible for the competition to seek admission to M. Sc/MS/M. E/ M. Phil degree program.
- 1.7.8. A candidate must secure 60% marks to be eligible for the competition to seek admission in the Ph.D. degree program.

1.5. SEMESTERS

- 1.5.1. There shall be two regular semesters (fall and spring) each of 22 weeks duration (including examination) in an 'Academic Year' in synchronization with the 'Academic Calendar' of the University.
- 1.5.2. A 12 weeks 'Summer Semester' (as part of Academic Year) to cover failing and/or deficiency courses or to improve poor grades shall be offered.
- 1.5.3. The Controller of Examinations shall announce the results at the end of the semester.
- 1.5.4. The credit hours shall accommodate during the summer semester at par with regular semesters

SCHEDULE OF ACTIVITIES IN A REGULAR SEMESTER		
Activity	Duration	
Registration	02 weeks	
Teaching Session	14 weeks	

^{***}Pre-Admission Test' shall consist of 100 questions. Out of 100, 70 are from relevant subjects, and 30 will be from general knowledge, reasoning, or analytical type.

Exam preparation	02 week
Final Semester Exam	04 weeks
Summer Semester (Optional)	
Registration	01 week
Teaching Session	08 weeks
Exam preparation	01 week
Semester Exam	02 weeks

1.6. REGULATIONS FOR THE CONDUCT OF EXAMINATIONS

These regulations shall cover the conduct of theory and practical examinations including the appointment and responsibilities of the examiners and remain effective until modified.

1.7. SETTING OF QUESTION PAPER FOR THEORY FINAL EXAMINATION

- 1.7.1. The teacher/examiner shall set the question paper from the full syllabus of the course in the 'Final Examination'.
- 1.7.2. The paper shall contain at least 40% objective and 60% descriptive-type questions.
- 1.7.3. The choice shall be limited to 25% from the descriptive type of section in line with the guidelines provided by Higher Education Commission.
- 1.7.4. The student must attempt all questions in the objective type of section.

1.7.4.1 MARKS DISTRIBUTION FOR THEORY

Activity	y	Weightage (%)
(i)	Attendance	10
(ii)	Assignments	10
(iii)	Mid-semester examination	20
(iv)	Final examination	60
Total		100

1.7.4.2 MARKS DISTRIBUTION FOR PRACTICAL

Activity	Weightage (%)
(i) Attendance	10
(ii) Journal	10
(iii) Viva voce	80
Total	100

1.8. ELIGIBILITY FOR APPEARING IN EXAMINATIONS

A student who fulfills the following minimum requirements shall be allowed to appear in the examinations:

- He/ she must be enrolled in a specific semester and have paid all the necessary fees including the examination fee of the University.
- ii. He/ she must have at least **75%** average **attendance**.
- iii. He/ she is not **debarred** from taking the examination.

1.9. ASSESSMENT OF ANSWER COPIES

The appointed internal examiner shall assess the answer copies. The 'Award Lists' of theory and practical (in duplicate) showing grades and grade points along with 'Attendance Sheets' shall be submitted

under sealed cover to the 'Controller of Examinations' within a specified period i.e., **two weeks**' **time** after the date of examination.

1.10. EXAMINATION GRADING

- 1.10.1. The performance of a student is to be measured in a letter grade (A, A-, B+, B, B-, C+, C, C-, D+, D, D- and F Grade). These letters carry weightage from the lower of 1 to the highest of 4 points per credit hour of a course. The semester system warrants for home assignments and partial examinations to be conducted and assessed by the concerned Teacher / Examiner.
- 1.10.2. The grading of candidates for each examination shall be as under:

Range of Marks (%)	Grade Points	Grade	Achievements	
=>80	4.00	A	Excellent	
73-79	3.67	A ⁻	Very Good	
66-72	3.33	\mathbf{B}^{+}		
60-65	3.00	В	Good	
56-59	2.67	B-		
53-55	2.33	C ⁺	G .: C .	
50-52	2.00	С	Satisfactory	
46-49	1.67	C-	D. I	
43-45	1.33	D^+	Below average	
40-42	1.00	D	Poor	
<40	0.00	F	Fail	

1.10.3. Calculation of G.P.A. (Grade Point Average): It is an expression for the average performance of the student in the courses he/she has taken during one or two semesters or at the end of the entire course of study.

1.10.4. Multiply 'Grade Point' with the 'Credit Hours' in each course, add up the 'Cumulative Grade Points', and divide by the 'Total Number of Credit Hours' to get the G.P.A per semester.

G. P.
$$A = \sum Q.P / \sum C.H.$$

Where:

- **Q. P.** (**Quality Point**) = Grade points multiplied by credit hours (Theory and Practical)
- \sum **Q. P** = Sum of all the Quality Points of courses offered in the semester
- \sum **C.H** = Sum of all credit hours of courses offered in the semester

1.11. REPEATING COURSES

- 1.11.1. Whenever a candidate fails or gets less than a 'C' grade, he/she is required to register himself/herself in that subject when offered, attend the classes regularly, and reappear in the examinations
- 1.11.2. A student will only have one chance to improve his / her grades during a previous semester. However, after the completion of the specified degree period student would not have any chance to improve any course after the thesis defense seminar.
- 1.11.3. Upon improving the subject, if one gets a grade less than the previous, the previous grade will be counted.
- 1.11.4. If any student remained absent in a mid-semester / final examination for any reason, no separate examination would be held of that semester. Absentee can appear in the immediate next session in the respective semester when the examination for those course(s) would be conducted.

1.11.5. A student should not be allowed to submit a thesis until he/she successfully passes all courses.

1.12. GRIEVANCES/ ANOMALY COMMITTEE

- 1.12.1. Anomaly Committee shall address the grievances of students in the evaluation of the assignments, tests, and examinations.
- 1.12.2. Anomaly Committee shall authorize to recount paper/test/ assignment marks if a student complains in writing that injustice has been done to him/her in the assessment /evaluation.
- 1.12.3. The committee shall settle the complaints regarding research and thesis writing by the teacher against students and vice versa.

The Committee shall comprised of:

Sr. No.	Committee	Status
i)	Chairperson/Dean of the concerned Department	Chairman
ii)	One Senior Teacher other than the concerned Teacher from the concerned Department.	Member
iii)	Concerned Teacher	Member
iv)	Any other Teacher from the concerned Faculty to be appointed by the Vice Chancellor, not below the rank of Assistant Professor	Member

1.13 THESIS REJECTION

1.13.1. All the cases of these rejections shall be dealt by BASAR through the 'Anomaly Committee' or especially constituted a committee under specific circumstances when

- the BASAR receives a complaint about the misconduct, ethical breach, and data-stealing during the thesis completion.
- 1.13.2. The decision of the 'Anomaly Committee' shall be final.

 The student shall not re-admit to any program of the University.
- 1.13.3. A student may, however, appeal against such a decision to the Syndicate.

1.13.4. ANOMALY COMMITTEE

- 1.13.4.1 All Deans (Dean of the concerned Faculty shall act as Chairman/ Convener of the Committee)
- 1.13.4.2 Director Advanced Studies (Member / Secretary)

1.14 DECLARATION OF POSITION (FOR MASTERS PROGRAM)

- 1.14.1. A candidate who passes all the courses of a program in regular examination and completes degree requirements (announcement of thesis viva-voce examination result by the Controller of Examinations) within the prescribed time limits.
- 1.14.2. He/she shall qualify for the award of position (First, Second and Third) for each academic year based on marks secured in the regular semester examination.
- 1.14.3. The candidate must complete his / her all thesis requirements and submit his / her final bound thesis along with the thesis viva-voce examination result before the end of the 5th semester to the DAS.
- 1.14.4. A candidate seeking extension beyond the 5th semester shall not qualify for the position.

1.15 AWARD OF DEGREES AND MEDALS

- 1.15.1. At the end of each academic year, the Controller of Examinations shall submit the list of successful candidates before the Academic Council for the award of various Degrees and Medals, The Academic Council shall, in turn, send its recommendation to the Syndicate to confer the Degrees / Medals upon successful candidates who are otherwise eligible.
- 1.15.2. Controller of examinations shall issue Degrees and Marks/ Pass Certificates to candidates as per approved format by the Academic Council.
- 1.15.3. The Academic Council shall approve the nomenclature of various Degrees awarded by the University.

MASTER'S DEGREE PROGRAM

2.1 DEGREES NOMENCLATURE

- (a) Master of Science (Agriculture) Honors = M.Sc. (Agri.)
 Hons in ______ (Field of specialization)

 (b) Master of Science (Honors) = M.Sc. (Hono) in
- (b) Master of Science (Honors) = M.Sc. (Hons) in _____ (Field of specialization)
- (c) Master of Engineering = M.E. in _____ (Field of specialization)
- (d) Master of Science (Hons) = in Information Technology
 _____(Field of specialization)
- (e) Master of Science (Hons) = MS (Hons) in _____ (Field of specialization)
- (f) Master of Philosophy = (M.Phil) _____ (Field of specialization)

2.2 PRE-REQUISITE QUALIFICATION (ELIGIBILITY)

Eligibility			
B. Sc. (Agri.) Hons. in the subject of specialization or equivalent with overall marks not less than 50% in various subjects of Agriculture/ Statistics shall be eligible for admission to M. Sc. (Hons.) in the respective field of study for the Faculties of FCPD, FCPT, and FASS.			
B. Sc. Hons. in Food Science & Technology or equivalent with overall marks not less than 50% shall be eligible for admission to M. Sc. (Hons.) in Food Science &			
Field of specialization Required Degree			
Energy and Environment	B.E. (Agri.) / B.E. (Energy & Environmental, Mining, Civil, Chemical & Industrial Engineering) or equivalent		
Farm Structure	B.E. (Agri.) / B.E (Civil)		
Irrigation and Drainage	B.E. (Agri.) / B.E (Civil)		
Farm, Power, and Machinery	B.E. (Agri.) / B.E (Mechanical)		
Land and Water Management	B.E. (Agri.) / B.E (Civil)		
B.E in the subjects of spe	ecialization recognized by PEC		
_	ss than 50% shall be eligible for		
admission to M.E in the same subjects of specialization for the Faculty of Agricultural Engineering			
			BSIT/ B.E / M.Sc. in Information Technology, Computer
Science, Telecommunication, Electronics, Software			
Engineering, and related fields or equivalent shall be eligible for admission to MSIT (Hons.) in the subject of			
specialization in Information Technology			
	B. Sc. (Agri.) Hons. in the equivalent with overall masubjects of Agriculture/admission to M. Sc. (Hostudy for the Faculties of B. Sc. Hons. in Food Sciewith overall marks not less admission to M. Sc. Technology Field of specialization for M.E Energy and Environment Farm Structure Irrigation and Drainage Farm, Power, and Machinery Land and Water Management B.E in the subjects of specialization to M.E in the second for the Faculty of Agriculted BSIT/ B.E / M.Sc. in Info Science, Telecommunic Engineering, and related eligible for admission to		

MS (Hons.) Agri. Business Management	B.Sc (Agri.) Hons. / B.E. (Agri.) / B.Sc (Hons.) in Food Sciences and Technology/DVM or BBA/BS/BSc in Agri. Business or equivalent (16 years standard education) with overall marks not less than 50% shall be eligible for admission to MS (Hons.) Agri. Business Management.
M.Phil	DVM/ B.Sc. (AH) recognized by PVMC with overall marks not less than 50% shall eligible for admission to M.Phil in Faculty of Animal Husbandry and Veterinary Sciences

Note: The 'Equivalence Committee' of 'Sindh Agriculture University Tandojam' shall evaluate Candidates possessing degrees other than specified above.

2.3 DURATION

Minimum: 02 years (04 semesters)

Maximum: 03 years (06 semesters)

(Extension after the expiry of the limit of the maximum period may be granted by BASAR if recommended with reasons and justification by Supervisory Committee, Chairperson of the Department and Dean of the Faculty concerned).

2.4 COURSE WORK

- 2.4.1. Candidate must undertake a course work of 24 credit hours in addition to 10 credit hours for thesis research work. However, any deficiency course(s) recommended by the 'Supervisory Committee' shall not count toward a total of 34 credit hours.
- 2.4.2. No course shall be more than 4 credit hours.
- 2.4.3. Approximately two/three courses should be from a major field while $1/3^{rd}$ from the minor field of study.
- 2.4.4. Minor fields may either be one or two but not exceed three in any case.

- 2.4.5. In the case of extra credits (more than the required 34 credits), the ratio does not apply to extra credits.
- 2.4.6. A student must obtain at least a GPA of 2.0 in the first semester to be promoted to the second semester.
- 2.4.7. A student must maintain a CGPA of 2.0 and have also passed at least 50% of courses in the second semester to be eligible for admission to the third semester. Failure to any of the above two conditions shall lead to the cancellation of his / her admission.
- 2.4.8. An overall 2.5 CGPA shall be the minimum requirement for eligibility of candidacy for a master's degree.
- 2.4.9. A student, who obtained a CGPA of 2.0 but less than 2.5 upon the completion of the entire course work, may be allowed once in spring and once in fall to take/ repeat the courses of the previous semesters in which he/she has obtained the lower grades (with GPA of < 2.5), to improve the CGPA to obtain the minimum of 2.5 for all semesters. Failure shall lead to the cancellation of his / her admission.

2.5 SUPERVISORY COMMITTEE

- 2.5.1. Supervisory Committee shall be comprised of the teachers/scientists recognized by the 'BASAR' in the field of study.
- 2.5.2. The committee shall consists of three members approved by the 'BASAR' on the recommendations of concerned 'BoS' and 'BoF'.
- 2.5.3. The committee shall consists of two members from a major field of study within the department and one from outside of the department having expertise in a relevant field.
- 2.5.4. Faculty members of SAU Tandojam or constituent Colleges/ Sub-campus (who are already recognized as

'Supervisor' in their respective field) shall be eligible to become Co-supervisors in other departments.

2.6 SYNOPSIS

- 2.6.1. The synopsis shall reach the Directorate of Advanced Studies at the beginning of the 3rd semester for approval by BASAR.
- 2.6.2. Students shall submit the synopsis on the prescribed format of the proposed research duly signed and approved by his / her proposed 'Supervisory Committee' to the 'Chairperson' of the concerned department for approval of 'Departmental Board of Studies.
- 2.6.3. After the approval of the 'Departmental Board of Studies, the 'Postgraduate Coordinator' shall check the synopsis.
- 2.6.4. After the endorsement of 'Postgraduate Coordinator', the student is required to submit requisite copies of synopsis and summary page to 'DAS' through the concerned Chairperson, forwarded by the Dean of the Faculty.
- 2.6.5. The 'DAS' shall place all synopsis before the 'BASAR' for approval.
- 2.6.6. After 'BASAR' approval, in case of any change felt necessary by the 'Supervisory Committee', the abovegiven process shall be followed.

2.7 THESIS

- 2.7.1. Only those students shall be qualified to submit the thesis, who completed their course work as well as their synopsis already approved by the BASAR.
- 2.7.2. Students can submit a plagiarism-free (<19%) unbound thesis to 'Directorate of Advanced Studies through the concerned 'Chairperson' in the fourth semester subject to the completion of course work with at least a CGPA of 2.5 for assessment.

- 2.7.3. The thesis shall be compiled and formatted as per the approved "Thesis Manual" of the University.
- 2.7.4. The 'DAS' shall send the thesis to the concerned 'Postgraduate Coordinator' for plagiarism and checking.
- 2.7.5. The 'Postgraduate Coordinator' shall review the draft as well as carry out checking of similarity index with the help of 'Anti-Plagiarism Cell' (overall <19% and from individual source <5%). In case of a similarity index in the approved limit, 'PGC' shall ask the concerned 'Chairperson' for further process. Otherwise, 'PGC' shall ask for revision and resubmission of soft copy of thesis for checking plagiarism for the second time.
- 2.7.6. On receiving approval from 'PGC', the 'Chairperson' shall organize the 'Thesis Defense Seminar'. Concerned 'Chairperson' shall ensure wide circulation of the seminar with date and time under intimation to the 'Directorate of Advanced Studies. The seminar shall be presided either by the concerned 'Chairperson' or by the 'Dean of Faculty.
- 2.7.7. After the incorporation of suggestions given in the seminar, the 'Chairperson' shall submit the panel of viva-voce examiners along with checked and fair copies of the thesis.

 Dean shall endorse the panel of examiners for the thesis viva-voce examination and send the documents to DAS.
- 2.7.8. After approval from DAS, the unbound thesis shall be submitted to the 'Controller of Examinations along with a panel of examiners proposed by the 'Chairperson' of the concerned Department and forwarded by Dean of the concerned Faculty to obtain approval of 'Vice Chancellor'.

2.8 THESIS EXAMINATION

2.8.1. A panel of 02 examiners (one external and one major Supervisor to act as internal examiner) shall examine the thesis and conduct a viva-voce examination

- 2.8.2. Vice-Chancellor shall appoint external examiner from a panel of three examiners proposed by concerned Chairperson through Dean of the concerned Faculty addressed to the Controller of Examinations.
- 2.8.3. Supervisory Committee shall ensure that the suggestions made by examiners are duly incorporated before the final binding of the thesis.
- 2.8.4. Two soft copies of the final thesis in MS-Word or pdf format shall submit to DAS.
- 2.8.5. Four copies of the final bound thesis, (one each for Central Library, Controller of Examinations, Directorate of Advanced Studies, and Faculty Library), the result of the *viva voce* examination shall be submitted to the Controller of Examinations for the declaration of result.
- 2.8.6. The thesis *viva-voce* examination shall consider successful if the examiners found it Satisfactory for the award of degree.
- 2.8.7. Each Examiner shall entitle to get remuneration for conduct of Examinations at following rate:
 - i. External Rs. 5000/-
 - ii. Internal Rs. 5000/-
- 2.8.8 Supervisor is entitled to get Rs. 15,000/- thesis guidance or as per HEC criteria of M.Sc./ME/MPhil thesis.
- 2.8.9 The Internal and External Examiner shall evaluate the thesis on prescribed proforma.

Ph.D. DEGREE PROGRAM

3.1 SCRUTINY COMMITTEE

The admission is made through the Scrutiny Committee, which is comprised of:

- i. Dean of the Faculty
- ii. Director Advanced Studies
- iii. Chairperson of the Department
- iv. Postgraduate Coordinator

3.2 PRE-REQUISITE QUALIFICATION (ELIGIBILITY)

Degree Program	Eligibility
PhD	M.Sc. (Agri.) Hons/M.Sc. (Hons) in Food Sciences & Technology/M.E./M. Phil in the subject of specialization or equivalent with CGPA of 3.0 or 60% marks in master's degree and research component in master's degree shall be eligible for admission to PhD in the respective field of study.
Pre-Requisi	te Qualification for FAHVS

- 3.2.1. Candidates possessing M.Sc. (Hons.)/M. Phil in different disciplines of Veterinary Sciences (Veterinary Microbiology, Veterinary Pathology, Veterinary Parasitology, Veterinary Pharmacology, Veterinary Physiology & Biochemistry, Veterinary Medicine, Animal Reproduction, Surgery & Obstetrics, & Anatomy & Histology) shall be eligible for admission to Ph. D in any one of the above-mentioned programs of Veterinary Sciences by taking necessary deficiency course(s).
- 3.2.2. Candidates possessing M.Sc. (Hons.)/M. Phil in different disciplines of Animal Sciences/Animal Husbandry (Animal Nutrition, Livestock Management, Poultry Husbandry, Animal Product Technology & Animal Breeding and Genetics) shall be eligible for admission to PhD in any one of the above-mentioned programs of Animal Sciences/Animal Husbandry by taking necessary deficiency course(s).

- 3.2.3. The Equivalence Committee constituted by Sindh Agriculture University Tandojam shall evaluate candidates possessing degrees other than specified above.
- 3.2.4. The prior degree must be M.Sc./ME/MS/M.Phil. (or equivalent).
- 3.2.5. Candidates possessing master's degrees in the respective discipline or closely related discipline(s) as identified and already recommended by the Board of Studies of concerned Departments shall qualify to seek admission in the PhD program, with the condition to take necessary deficiency course(s) during a program (not more than two in one semester). If recommended by the Supervisory Committee and /or concerned chairperson.

3.3 DURATION

Minimum: 03 years (06 semesters)

Maximum: 05 years (10 semesters)

(After expiry of maximum period, the extension may be granted by BASAR, if recommended with sound reasons and justification by Supervisory Committee, concerned Chairperson and Dean of the Faculty).

3.4 TESTING REQUIREMENT

A candidate secured 60% marks in the GRE Type Pre-Admission Test (Conducted by the University) shall be eligible to compete for admission to PhD Degree Program.

3.5 STATEMENT OF PURPOSE

Candidates Candidates shall write a 'Statement of Purpose or Concept Paper' of 2-3 pages during the Pre-Admission Test/Entry Test.

3.6 RESIDENCY REQUIREMENT

- 3.6.1. There shall be a residency requirement for at least two years.
- 3.6.2. In-service candidates shall submit the NOC from their parent organization along with the admission form.
- 3.6.3. After qualifying for admission to the Ph.D. program, the inservice candidates shall submit the 'Study Leave' from their parent organization at the time of registration.

3.7 COURSE WORK

- 3.7.1. The candidate must undertake a course work of 26 credit hours in addition to 20 credit hours for thesis research work. However, any deficiency course(s) shall not count towards 46 credit hours recommended by the 'Supervisory Committee'.
- 3.7.2. No course shall be more than 4 credit hours
- 3.7.3. Approximately 2/3rd of courses shall be from a major field while 1/3rd from the minor field of study.
- 3.7.4. Minor fields may either be one or two but not exceed three.
- 3.7.5. In the case of extra credits (more than the required), the ratio does not apply to extra credits.
- 3.7.6. There shall be no compulsory courses. However, if the Committee considers it necessary then the student may be advised to take one or more compulsory courses as deficiency course (s).
- 3.7.7. A student shall not be allowed to take more than 16 and less than 12 credits in one semester.
- 3.7.8. The special problem course and seminar shall count as one credit each.

- 3.7.9. A student can earn 02 credits one each for the seminar and special problems.
- 3.7.10. Must obtain a CGPA of 3.0 at the end of the Ph.D. program.
- 3.7.11. However, a CGPA of 2.5 to < 3.00 will qualify him/her for enrollment to next semester but this will only be allowed once in a program with a warning to improve his / her CGPA. If he/she fails to obtain a CGPA of 3.00 in the next semester, his / her admission shall stand canceled.
- 3.7.12. After completion of course work, a student with CGPA between 2.50 and < 3.00 will be given one opportunity to improve CGPA for that semester by taking the course in which he/she obtains lower grades.

3.8 SUPERVISORY COMMITTEE

- 3.8.1. Supervisory Committee shall be constituted from the Teacher / Scientists recognized by the 'BASAR' in the field of study.
- 3.8.2. The committee shall consists of three members approved by the 'BASAR' on the recommendations of concerned 'BoS' and 'BoF'.
- 3.8.3. The committee shall consists of two members from a major field of study within the department and one from outside of the department having expertise in a relevant field.
- 3.8.4. Faculty members of SAU Tandojam or constituent Colleges/ Sub-campus (who are already recognized as 'Supervisor' in their respective field) shall be eligible to become Co-supervisors in other departments.
- 3.8.5. All HEC approved Ph.D. Supervisors shall also be eligible to become Co-supervisor in their relevant fields.
- 3.8.6. An additional member may be opted if necessary and justified for the proposed research work.

3.9 COMPREHENSIVE EXAMINATION

- 3.9.1. The 'Comprehensive Examination' shall be held in the 3rd semester only (once a year) of all the students of the respective department.
- 3.9.2. A candidate shall take 'Comprehensive Examination' after successful completion of course work during the 3rd semester.
- 3.9.3. The candidate shall apply to the concerned Chairperson for the arrangement/ organization of 'Comprehensive Examination'.
- 3.9.4. The examination shall cover the entire field of study and shall consist of a 'written part' and an 'oral part'.
- 3.9.5. The examiners shall measure students' knowledge and intellectual maturity and ability to integrate and assimilate the knowledge obtained from the course and other independent studies. Student can only appear in oral part if he/she passes the 'written part' (with at least 65%).
- 3.9.6. The 'Vice Chancellor' shall appoint two external examiners for 'Comprehensive Examination' from the panel of 06 examiners proposed by 'Departmental BoS'.
- 3.9.7. Each external examiner shall entitle to Rs.5000/- as remuneration for the conduct of the examination.
- 3.9.8. Students shall be required to obtain ≥65% in written and oral parts separately. 'Chairperson' of the department for information and record shall send the result.
- 3.9.9. In case of failure as a whole or part of the examination, he/she shall give one more opportunity. He/she can reappear not earlier than one semester and later than four semesters.

3.10 SYNOPSIS

- 3.10.1. The synopsis shall reach the Directorate of Advanced Studies at the beginning of the 3rd semester for approval by BASAR.
- 3.10.2. Students shall submit the synopsis on the prescribed format of the proposed research duly signed and approved by his / her proposed 'Supervisory Committee' to the 'Chairperson' of the concerned department for approval of 'Departmental Board of Studies.
- 3.10.3. After the approval of the 'Departmental Board of Studies, the 'Postgraduate Coordinator' shall check the synopsis.
- 3.10.4. The candidate shall defend the synopsis in an open seminar headed by the 'Dean' of the faculty. 'Dean Office' shall issue the necessary circular. After the seminar, the concerned 'Chairperson' through 'Dean' shall submit the attendance and minutes of a seminar to 'DAS'.
- 3.10.5. After the incorporation of the suggestions given in the seminar and endorsement of 'Postgraduate Coordinator', the student is required to submit requisite copies of synopsis and summary page to 'DAS' through concerned 'Chairperson', forwarded by the 'Dean' of the faculty.
- 3.10.6. The 'DAS' shall place all synopsis before the 'BASAR' for approval.
- 3.10.7. After 'BASAR' approval, in case of any change felt necessary by the 'Supervisory Committee', the above-given process shall be followed.

3.11 THESIS

3.11.1. Only those students shall be eligible to submit the thesis, who completed their course work and passed the comprehensive examination as well as their synopsis already approved by the BASAR.

- 3.11.2. Students can submit a plagiarism-free (<19%) unbound thesis to 'Directorate of Advanced Studies through the concerned 'Chairperson' in the six semesters or later subject to the completion of course work with at least a CGPA of 3.0 for assessment.
- 3.11.3. The thesis shall be compiled and formatted as per the approved "Thesis Manual" of the University.
- 3.11.4. The 'DAS' shall send the thesis to the concerned 'Postgraduate Coordinator' for plagiarism and checking.
- 3.11.5. The 'Postgraduate Coordinator' shall review the draft as well as carry out checking of similarity index with the help of 'Anti-Plagiarism Cell' (overall <19% and from individual source <5%). In case of a similarity index in the approved limit, 'PGC' shall ask the concerned 'Chairperson' for further process. Otherwise, 'PGC' shall ask for revision and resubmission of soft copy of thesis for checking plagiarism for the second time.

3.12 THESIS EVALUATION

- 3.12.1. After thesis checking by PGC and clearance from Anti-Plagiarism Cell, the concerned Chairperson shall send the 'Penal of Experts' endorsed by the Dean of the Faculty for thesis evaluation as per HEC policy adopted by the university.
- 3.12.2. In addition to the Supervisory committee members, the Ph.D. dissertation must be evaluated by at least two external experts who may be either (i) Pakistan-based Distinguished National Professors, Meritorious Professors, or Tenure Track Professors, or (ii) Ph.D. experts from academically advanced countries (See HEC-approved list of academically advanced countries for evaluation of Ph.D. Dissertation); provided, however, that if the Ph.D. candidate publishes his or her dissertation research in a peer-reviewed journal that is classified by the HEC as

- category "X" or "W", the Ph.D. dissertation will only require evaluation by one external expert (for details see HEC new Ph.D. Policy).
- 3.12.3. After getting approval from Vice-Chancellor, the thesis shall be sent to expert(s) (as the case may be according to the HEC policy) for evaluation on the prescribed proforma.
- 3.12.4. The reports of the expert(s) received by the DAS shall review in the meeting of BASAR.
- 3.12.5. After the compliance of decisions taken by the BASAR and subsequent approval, DAS shall initiate the process for 'Thesis Defense Seminar' as well as 'Viva voce Examination'.
- 3.12.6. The foreign External Evaluator must be paid US \$200/- or Rs. 10,000/- (in case of National Evaluator).

3.13 THESIS DEFENSE SEMINAR & VIVA VOCE EXAMINATION

- 3.13.1. After the successful compliance and approval of BASAR decisions, the Supervisory Committee shall submit the request for conducting a *viva voce* examination and thesis defense seminar to DAS.
- 3.13.2. Candidate shall be examined by two External Examiners to be appointed by the Vice-Chancellor from a panel of six examiners (preferably Senior faculty members/eminent Scientists) proposed by concerned Departmental Board of Studies through Dean of the concerned Faculty and complete supervisory committee which serves as internal examiners.
- 3.13.3. DAS with the permission of the Competent Authority (VC) shall schedule the *viva voce* examination and thesis defense seminar.

- 3.13.4. Controller of Examination shall issue the authority letter for *viva voce* examination after approval by the Vice-Chancellor.
- 3.13.5. Two subject experts (*viva voce* examiners) shall be invited for the thesis defense seminar and *viva voce* exam.
- 3.13.6. The two external examiners shall evaluate the scholar during or after the seminar and hand over the results to the concerned Chairperson.
- 3.13.7. The Supervisory Committee shall incorporate the suggestions of viva-voce examiners (if any). The concerned Chairperson and Dean shall endorse the compliance of suggestions given by *viva voce* examiners before the final binding of the thesis.
- 3.13.8. Two soft copies of the final thesis in MS-Word or pdf format must be submitted to DAS.
- 3.13.9. Four copies of the final bound thesis, (one each for Central Library, Controller of Examinations, Directorate of Advanced Studies, and Faculty Library), the result of the *viva voce* examination shall be submitted to the Controller of Examinations for the declaration of result.
- 3.13.10. Upon the satisfactory completion of all requirements, the Controller of Examinations will issue the notification for the award of a Ph.D. degree.
- 3.13.11. Each Examiner (External & Internals) shall be entitled to receive Rs. 10,000/- as remuneration for *viva voce* examination.
- 3.13.12. The Supervisor shall receive honorarium of 75,000/- for PhD thesis guidance.
- 3.13.13. The *viva voce* examiners shall evaluate the thesis/candidate on the prescribed Performa.

3.14 RESEARCH PUBLICATION

All Ph.D. scholars shall be required to get at least one research paper published as the first author, during their doctoral studies in a HEC recognized "Y" category (or above) journal for the award of a Ph.D. degree.

3.15 ADDITIONAL DECLARATION/UNDERTAKING CERTIFICATE

Following three declarations/undertaken/certificate shall attach with all copies of the final bound thesis:

- i. Author's Declaration
- ii. Plagiarism Undertaking
- iii. Certificate of Approval







PROF. DR. QAMARUDDIN CHACHAR PHD (WALES-UK), POST-DOC (ENGLAND-UK) DEAN, FACULTY OF CROP RPODUCTION EMAIL: DEANFCPD@SAU.EDU.PK | PH: +92-22-2765870 EXT; 390-351 |

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FACULTY OF CROP PRODUCTION

The Faculty of Crop Production emerged after the bifurcation of the Faculty of Agriculture in 1987. The restructuring was done to streamline academic and research activities and to effectively address the issues and solutions of problems related to crop production. As such, it is committed to academic excellence in graduate and postgraduate education and research in broad-spectrum disciplines of agriculture. The faculty conducts diverse programs in education, research, and other ecosystem services and provides advisory services to the farming community.

The faculty happens to be the largest faculty of the university comprising of six departments (Soil Science, Agronomy, Horticulture, Plant Breeding & Genetics, Biotechnology, Crop Physiology) and one institute (Institute of Food Sciences & Technology). All departments and the institute offer both graduate and post-graduate level degree programs. The faculty imparts practical training to the students and enriches its research endeavors through experimental farms (Latif and Malir, Agronomy Student's Farm and Horticulture Garden) and advanced computer labs, with internet facilities. The laboratory facilities possess basic and highly advanced equipment located at different departments and institutes. An internship program is being included in the curriculum of the undergraduate degree program which is a great component of curricula for the training of students. The teaching staff is highly qualified and trained through local and overseas training programs. The faculty, over time, has trained many undergraduate and postgraduate students in various disciplines of agriculture.

MISSION STATEMENT

The graduates and postgraduates will have immense opportunities in various disciplines of agriculture and allied sciences in public and private sector organizations, autonomous and semi-autonomous bodies viz, Zarai Tarqiati Bank of Pakistan (ZTBP), Pakistan Agricultural Research Council (PARC), Pakistan Council for Research in Water Resources (PCRWR), Water and Power Development Authority (WAPDA), Fruit Preservation and Food Industries. Their services can also be utilized in provincial and federal departments of Agricultural Extension, Research, Teaching, Forestry, Pakistan

Central Cotton Committee, Federal Seed Certification and Registration Department (FSCRD), Public Parks and Gardens, Seed Corporations, Environmental Protection Agency (EPA), Sindh Sugar Corporation, Pakistan Atomic Energy Commission (PAEC) and other public and private organizations.

Pakistan Broadcasting, other corporations and commercial banks, National Planning Commission, USAID, FAO, LEAD, Fertilizer Industries, National Talent Pool, INGOs and other NGOs, Agriculture consultancy firms are some of the alternatives, where they can excel with the talent they have harnessed.

The Faculty of Crop Production is committed to the preparation of students for life in the global community through research and educational programs for supporting sustainable agriculture systems that foster viable communities, a diversified economy, and a healthy living environment.

DEPARTMENT OF AGRONOMY

Department of Agronomy is engaged in developing a trained human resource base in crop production, conduct basic and applied research in various aspects of crop production and land management under varying agro-ecological conditions. The department is actively involved in planning, conducting, and publishing quality research in well-reputed journals and periodicals. The department has completed several research projects/schemes.

OBJECTIVES

The department is organized and implemented in a manner that enables learners to acquire and develop competencies in crop production management, crop research and research dissemination, and entrepreneurial skills through learning activities and experiences that are based on real agriculture problems with the following specific objectives:

- Disseminate knowledge and skills to students and those involved in crop production.
- Identify technical and socio-economic issue areas constraining farm productivity and find solutions to overcome these problems.

 Develop strategies through pieces of training and demonstrations to promote sound agricultural practices among local farmers for reducing the risk of crop failures and farmer vulnerability.

JOB OPPORTUNITIES

Seed, fertilizer, pesticide companies, CDAs, banks, public and private sectors, NGOs, Government departments, Agriculture Research, Agriculture Extension, Universities, etc.

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
1.	Dr. Aijaz Ahmed Soomro, Professor & Chairman	Ph.D. (China)	Agronomy/Plant Nutrition and Development of Production Tchnology of	
2.	Dr. Mahmooda Buriro, Associate Professor	Ph.D. (SAU)	Agronomy/Seed storage Technology	
3.	Dr. Muhammad Nawaz Kandhro, Associate	Ph.D. (SAU)	Agronomy/Weed Science and Allelopathy	
4.	Dr. Qamaruddin Jogi, Associate Professor	Ph.D. (China)	Agronomy/Organic farming of Agronomic crops	
5.	Dr. Ghulam Mustafa Leghari,	Ph.D. (SAU)	Agronomy/Seed Priming, laboratory experiment techniques	
6.	Dr. Pir Ahmed Naqi Shah, Associate Professor	Ph.D. (SAU)	Agronomy/Field Crop Science and nutrition management	
7.	Dr. Nighat Seema Soomro Associate Professor	Ph.D. (China)	Agronomy/Varietal Development of field crops	
8.	Mr. Muhammad Ali Ansari,	M.Sc. (Agri.) Hons	Agronomy/ Crop Modeling by APSiM/ Farm management and record keeping, advance	
9.	Mr. Habib-u-Rehman Memon,	M.Sc. (Agri.) Hons	Agronomy/Field crop nutrition, Scientific communication in	

10. Dr. Bakht-u-Nisa Mangan, Assistant Professor	Ph.D. (China)	Agronomy/Evaluation of crop varieties under different agro-ecological
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COURSES OFFERED FOR M.Sc (Agri) Hons			
		GHDG	
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
Major-701	Sustainable Agriculture	3 (2+1)	
Major-703	Seed Science and Technology	3 (2+1)	
Major-705	Advanced Irrigation Agronomy	3 (2+1)	
Minor-707	Farming and Cropping Systems	3 (2+1)	
(Minor-I)			
SEMESTER-I	П		
Major-702	Weed Management	3 (2+1)	
Major-704	Modern Concepts of Crop Production	3 (2+1)	
Major-706	Crop Nutrition Management	3 (2+1)	
Minor-708	Arid Zone Agronomy	3 (2+1)	
(Minor-II)			
SEMESTER-II to VI			
Major-710	Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & Viva voce Examination)	10 (0+10)	

COURSES OFFERED FOR PhD			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-	-I		
Major-711	Field Crop Experimentation	3 (2+1)	
Major-713	Advanced Agronomy	3 (2+1)	
Major-715	Special Problem	1(1+0)	
Minor-717 (Minor-I)	Integrated Agriculture	3(2+1)	
SEMESTER:	SEMESTER-II		
Major-712	Allelopathy in Crop Production	3 (2+1)	
Major-714	Crop and Environment	3 (2+1)	
Major-716	Seminar	1(1+0)	
Minor-718 (Minor-II)	Stress Agronomy	3(2+1)	
SEMESTER-III to X			
Major-720	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & Viva voce Examination)	20 (0+20)	

DEPARTMENT OF BIOTECHNOLOGY

Biotechnology relies on the application of scientific and engineering principles to process the materials by biological agents producing goods and services for mankind. There are many applications of biotechnology in the field of the industrial sector, agriculture, pharmaceuticals, healthcare, food, energy, environment, etc.

Department of Biotechnology was established in 1992-93 with a vision to make an impact through research, technology-based training, and innovation. The department offers, graduate and post-graduate courses in biotechnology. It also offers two introductory-level courses of biotechnology to undergraduates of other faculties of the university. In addition to academic programs, the department has laboratories for tissue culture, molecular biology/genetic engineering to cater to the issues of national food security.

The research activities in the Department of Biotechnology are wide-ranging, reflecting the diversity of modern biotechnology. The major research areas include plant genomics, alternate energy, industrial biotechnology, functional genomics, etc. Faculty members are fully committed to train graduates that are absorbed in different research and professional organizations.

OBJECTIVES

- To impart quality education, research, innovation, and technologybased pieces of training.
- To promote and strengthen the area of agricultural biotechnology.
- To develop and apply the basic knowledge of biotechnology for efficient management of environmentally sound and liberal agriculture.
- To expand interaction among agriculture, medicine, environment, fisheries, food processing, renewable energy fuels, etc. which are the common denominators of cells and products derived from them.

ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST
1.	Dr. Muharram Ali, Associate Professor & Chairman	Ph.D. (China)	Molecular Biology / Plant Tissue Culture

2.	Dr. Ghulam Sughra Mangrio, Associate Professor	Ph.D. (US, Pakistan)	Industrial Biotechnology / Cell Culture
3.	Dr. Shahla Karim Baloch, Associate Professor	Ph.D. (China)	Cancer Biotechnology / Cell Culture / Plant Tissue Culture

COURSES OFFERED FOR M.Sc (Agri) Hons			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
BT-701 Major	Plant Molecular Biology	3(2+1)	
BT-703 Major	Advance Plant Cell and Tissue Culture	3(2+1)	
BT-705 Major	Food Biotechnology	3(2+1)	
BT-707 Minor	Bioremediation	3(2+1)	
SEMESTER-II	SEMESTER-II		
BT-702 Major	Commercial Biotechnology	3(2+1)	
BT-704 Major	Plant Genetic Engineering	3(2+1)	
BT-706 Major	Enzymology	3(2+1)	
BT- 708 Minor	Plant and Animal Biotechnology	3(2+1)	
SEMESTER-III to	SEMESTER-III to VI		
Major-710	Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & Viva voce Examination)	10 (0+10)	

	COURSES OFFERED FOR PhD			
CODE	CODE TITLE OF COURSE			
SEMESTER-I				
Biotech-711 Major	Advance in DNA Recombinant Technology	3 (2+1)		
BT-713 Major	Advance in Fermentation Technology	3 (2+1)		
BT-715 Major	Special Problem	1(1+0)		
BT-717 Minor	17 Minor Plant Tissue Culture Technology 3(2+1)			
SEMESTER-II				
BT -712 Major	Plant Transgenic Technology	3 (2+1)		
BT -714 Major	Advances in Microbial Genetics	3 (2+1)		
BT -716 Major	Seminar	1(1+0)		
BT- 718 Minor	Agricultural Biotechnology	3(2+1)		
	SEMESTER-III to X			
BT-720	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	20 (0+20)		

DEPARTMENT OF HORTICULTURE

Horticulture is one of the most important major disciplines of agriculture. The production and returns from horticultural crops are high as compared to other crops. The horticultural crops, fruits, vegetables, and flowers possess the export potential to earn foreign exchange.

The Department of Horticulture imparts quality education to the students of Sindh and Baluchistan provinces and research fruits, vegetables,

flowers, and ornamental plants. The department has 6 subject experts from which 5 Ph.D. teachers are professionally skilled in the field of fruits, vegetables, and floriculture. The Department of Horticulture offers Bachelor, Master, and Doctoral degree programs to meet the trained manpower needs of the province. Apart from this, the department imparts pieces of training in various aspects of horticulture. A program to provide quality fruits, vegetables, and flowers with true-to-type varieties is also ongoing. Seed productions program on flowers and vegetables have been initiated at the department. Post-harvest processing, packaging, and marketing to improve the infrastructure and opportunities for the farmers, breeding of horticultural crops to develop new high yielding varieties and the In-vitro propagation for vegetative multiplication of plants are some of the other steps in line. The department provides advisory services to fruit and vegetable growers. The research on problems faced by the farming community is also going on with the involvement of graduate and postgraduate students.

OBJECTIVES

The main objective is to train both undergraduate and postgraduate students in production, post-harvest techniques improvement, storage, processing, and marketing of horticultural crops produces as well as in landscape and aesthetic environmental impact. The specific objectives are:

- Provide educational opportunities for the pursuit of careers in horticulture.
- Improve the quality, variety, and the availability of horticultural products to achieve global gap certification for export.
- Strengthen the competitive position of Sindh's horticulture industry.
- Popularize high density planting concept for achieving higher & quality production of mango
- Develop technology for production of certified stock and saplings.

	ACADEMIC STAFF			
Sr. No.	NAME & DEISGNATION	QUALIFICATION	RESEARCH INTERESTS	
1	Dr. Saba Ambreen Memon, Professor & Chairperson	PhD (China)	Vegetable Physiology	
2		PhD (SAU)	Post harvest	
3.	Dr. Noor-un-Nisa Memon, Professor	PhD (UAF)	Floriculture	
4.	Dr. Tanveer Fatima Miano Professor	PhD (Bangladesh)	Floriculture/Vegetable Physiology	
5.	Dr. Niaz Ahmed Wahocho, Associate Professor	PhD (China)	Vegetable Physiology	
6	Mr. Qadir Bux Baloch, Assistant Professor	M.Sc. (Agri.) Hons	Olericulture	

COURSES OFFERED FOR M.Sc (Agri) Hons			
CODE TITLE OF COURSE C.HRS		C.HRS.	
SEMESTER-I			
Hort-701	Post-harvest Physiology 3 (2+1)		
Hort-703	Fruit Breeding 3 (2+1)		
Hort-705	Mineral Nutrition of Horticultural Plants	3 (2+1)	

Hort-707	Propagation of Nursery Management	3 (2+1)		
SEMESTER:	-II			
Hort-702	Vegetable Seed Production and Marketing	3 (2+1)		
Hort-704	Environmental Horticulture Science	3 (2+1)		
Hort-706	Plant Growth Regulators	3 (2+1)		
Hort-708	Tropical and Sub-Tropical Fruits	3 (2+1)		
SEMESTER	SEMESTER III & IV			
Major-710	Thesis Research Work (Synopsis Approval, Data Collection and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	10 (0+10)		

COURSES OFFERED FOR PhD			
CODE	DDE TITLE OF COURSE C.HR		
SEMESTER-	-I		
Hort-711	Citriculture	3 (2+1)	
Hort-713	Advance Fruit Science	3 (2+1)	
Hort-715	Special Problem	1 (1+0)	
Hort-717	Landscape Designs	3 (2+1)	
SEMESTER:	-II		
Hort-712	Horticulture Product under Abiotic Stress	3 (2+1)	
Hort-714	Advance Vegetable Science	3 (2+1)	
Hort-716	Seminar	1 (1+0)	

Hort-718	Root stocks for Horticultural Crops	3 (2+1)
SEMESTER-III to X		
Hort-720	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection and Analysis, Thesis write up, Seminar & <i>Viva</i> voce Examination)	20 (0+20)

DEPARTMENT OF PLANT BREEDING AND GENETICS

Plant breeding is concerned with the evolution of superior varieties of crops with focusing on genetic adjustment of crop plants to diversity of environments.

The Department of Plant Breeding and Genetics was established in 1954. Since then, the department has been offering variety of courses related to crop improvement, cytology, cytogenetics, biometry, quantitative genetics, molecular genetics, and genetic engineering leading to B.Sc. (Hons) and M.Sc. (Hons) degrees. The department is also offering advanced courses and research guidance to PhD scholars. During the past 61 years, the department has produced more than 730 well trained graduates, who have been serving in various organizations at provincial, national, and international level. Department has got highly qualified and experienced faculty, well equipped laboratories, and experimental farm for undertaking research projects. Recently, the department has established a "Seed Production and Development Centre" which will not only improve and strengthen seed supply system of province but will also serve as major income generating unit for the University.

OBJECTIVES

The Department's overall aim is to focus on the improvement of quantitative and qualitative traits of cereal, fiber and oilseed crops, production of model crop ideotypes suitable for cultivation in different agro-environments of the Sindh province and ultimately, development of technology package to enhance the capabilities of farmers for various crops. The specific objectives are:

Impart academic and research training at under-graduate, graduate, and post-graduate levels in the field of Plant Breeding and Genetics.

- Plan and undertake basic and applied research on cereals and other major crops.
- Produce quality seed of wheat, cotton, and vegetable crops for distribution to farmers of Sindh province.
- Establish linkages with provincial, national, and international research and educational organizations to undertake collaborative assignments.
- Development/evolution of genetically improved cultivars/hybrids and other breeding material.
- Improve quantitative and qualitative traits of crop species.

ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	Research Interest
1.	Dr. Shah Nawaz Mari, Professor & Chairman	PhD (SAU)	Conventional Breeding for stress environment
2.	Dr. Zahoor Ahmed Soomro, Professor	PhD (SAU)	Conventional Breeding
3.	Dr. Munaiza Baloch, Professor	PhD (SAU)	Conventional Breeding
4.	Dr. Shabana Memon Associate Professor	PhD (China)	Molecular Breeding and Breeding for stress physiology
5.	Dr. Wajid Ali Jatoi, Associate Professor	PhD (SAU)	Quantitative Genetics, Cotton Breeding and

			Breeding of cereal crops
			for adverse
			environments
6.	Dr. Siraj Ahmed	PhD (China)	Molecular and
	Channa,		Conventional
	Associate Professor		Plant Breeding
7.	Dr. Nasreen Fatima,	PhD (SAU)	Drought stress
	Associate Professor		management
			in major crops
			like Wheat
			and Cotton
8.	Dr. Abdul Wahid	PhD (China)	Molecular
	Baloch,		Breeding and
	Assistant Professor		stress
			Breeding
9.	Mr. Saeed Hyder	M.Sc. (Agri.)	Conventional
	Ghaloo,	Hons	Breeding
	Assistant Professor		
	(Study Leave)		
10	Mr. Asghar Ali	M.Sc. (Agri.)	Conventional
	Rajper,	Hons	Breeding
	Assistant Professor		
11	Dr. Tanveer Fatah	PhD (Malaysia)	Molecular and
	Abro,		Conventional
	Assistant Professor		Breeding
12	Dr. Piar Ali Shar,	PhD (China)	Bioinformatics
	Assistant Professor		and
			Conventional
			Breeding
13	Dr. Naila Gandahi	PhD (SAU)	Conventional
	Lecturer (Adhoc)		Breeding

COURSES OFFERED FOR M.Sc (Agri) Hons		
CODE	TITLE OF COURSE	C.HRS.
SEMESTER	-I	
PBG-701	Principles of Plant Breeding	3(2+1)
PBG-703	Cytogenetics of Crop Plants	3(2+1)
PBG-705	Advanced Genetics	3(2+1)
PBG-707	Genetics in Crop Improvement	3(2+1)
SEMESTER	-II	
PBG-702	Advance Methods in Plant Breeding	3(2+1)
PBG-704	Genetic Engineering in Plants	3(2+1)
PBG-706	Development of Hybrid & Seed Production	3(2+1)
PBG-708	Breeding of Field Crops	3(2+1)
SEMESTER-III to VI		
Major- 710	Thesis Research Work (Synopsis Approval, Data Collection and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	10 (0+10)

COURSES OFFERED FOR PhD			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
PBG-711	Genetics of Plant Diseases and Insect Resistance	3 (2+1)	
PBG-713	Biometrical Techniques in Plant Breeding	3 (2+1)	
PBG-715	Special Problem	1(1+0)	
PBG-717	Seed Production Principles and Practices	3(2+1)	
SEMESTER-II			

PBG-712	Breeding for Stress Environments	3 (2+1)	
PBG-714	Advanced Cytogenetics 3 (2+1		
PBG-716	Seminar	1(1+0)	
PBG-718	Breeding for Crop Improvement	3(2+1)	
SEMESTER-III to X			
PBG-720	Comprehensive Examination, Thesis	20	
	Research Work (Synopsis Approval, Data	(0+20)	
	Collection and Analysis, Thesis write up,		
	Seminar & Viva voce Examination)		

DEPARTMENT OF CROP PHYSIOLOGY

The crop physiology includes various aspects of the plant lifestyle and survival including metabolism, water relations, mineral nutrition, development, movement, irritability, organization, growth, and transport processes. The close link of physiology with biochemistry has made more extensive use of physicochemical methods enabling scientists to conduct research at the cellular, sub cellular and molecular levels and obtain fundamentally new data on the mechanisms regulating the entire complex of life processes and way in which they function as integral systems. Initially (1987), the department was named as Plant Physiology & Biochemistry and established through a Bilateral Link Program between University of Wales, Bangor UK, and Sindh Agriculture University, Tandojam. Under this project, twelve teachers of this department have obtained PhD degrees and Post Doctorate trainings from UK. Later, the department was renamed as Crop Physiology in 2010. The department was established in a way to produce skilled and trained persons to produce sustainable agriculture. The department offers B.Sc. (Agri.) Hons; M.Sc. (Agri.) Hons and PhD degrees in Crop Physiology.

OBJECTIVES

• The department focuses on the advancement and documentation of the frontiers of plant sciences and applicable disciplines to improve the quality and quantity of plants and their products, including food, feed, fuel, and fiber production. Objectives are:

- Impart quality education at undergraduate & post graduate level in crop physiology.
- Discover, formulate, and demonstrate new principles of crop improvement and soil-crop management so that Pakistan's agriculture is socially viable, economically profitable for the farmer and competitive on world markets.
- Identify agriculturally useful genes in wild or little-used plant
- species and develop techniques to use those genes to enhance the nutritional quality and stress tolerance.

ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST
1.	Dr. Qamaruddin Chachar, Professor & Chairman	PhD & Post Doc (UK)	Stress Physiology
2.	Dr. Muhammad Ibrahim Keerio, Professor	PhD & Post Doc (UK)	Stress Physiology
3.	Dr. Mehar-un-Nisa Narejo, Associate Professor	PhD (Malaysia)	Stress Physiology
4.	Ms. Irfana Parveen Bhatti, Assistant Professor	M.Sc. (Hons)	Biochemistry
5.	Ms. Shanila Yasmeen Chang Assistant Professor	M.Sc. (Hons)	Botany

COURSES OFFERED FOR M.Sc (Agri) Hons				
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER	-I			
CP -701	Advanced Seed Physiology	3(2+1)		
CP -703	Biological Nitrogen Fixation	3(2+1)		
CP -705	Advanced Crop Physiology	3(2+1)		
CP -707	Developmental Physiology of Crops	3(2+1)		
SEMESTER	SEMESTER-II			
CP -702	Physiology of Drought	3(2+1)		
CP -704	Plant Molecular Biology	3(2+1)		
CP -706	Physiological Aspects of Herbicides	3(2+1)		
CP -708	Plant Microbes Interaction	3(2+1)		
SEMESTER-III to VI				
Major-710	Thesis Research Work (Synopsis Approval, Data Collection and Analysis, Thesis write up, Seminar & Viva voce Examination)	10 (0+10)		

COURSES OFFERED FOR PhD			
CODE TITLE OF COURSE C.HRS.			
SEMESTER-I	SEMESTER-I		
CP -711	Biophysics of Growth	3 (2+1)	
CP -713	Physiological Aspects of Crop Yield	3 (2+1)	
CP -715	Special problem	1(1+0)	

CP-717	Plant Metabolism and Bioenergetics	3(2+1)
SEMESTER-II		
CP -712	Plant Response to Stress	3 (2+1)
CP -714	Root Physiology	3 (2+1)
CP -716	Seminar	1(1+0)
CP -718 Minor- II	Crops for Changing Environments	3(2+1)
SEMESTER-III to 2	X	
CP-720	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection and Analysis, Thesis write up, Seminar & Viva voce Examination)	20 (0+20)

DEPARTMENT OF SOIL SCIENCE

The soil provides essential nutrients and physical support to the plants we harvest for food, fiber, wood, and fuels. Soil provides critical ecosystem services. This vital resource is a paramount to mankind. The Department of Soil Science addresses many important roles of soil through teaching and research programs.

This department was initially established as the Department of Agricultural Chemistry in 1926's and renamed as Department of Soil Science in late 1970's to focus on better education and research in the fields of soil, water and environmental sciences. The department has well-established Soil Fertility, Plant Nutrition and Bio saline Agriculture Research laboratories in addition to four other common use laboratories and a pot house for conducting experiments. The teaching staff of this department is highly qualified consisting of 13 subject experts of whom 12 are PhD and one is M.Sc. The department has produced hundreds of graduates and post-graduates including 10 PhDs. At present several graduates and postgraduates are enrolled in the

department. The Department of Soil Science conducts basic and applied research through its faculty and postgraduate scholars.

In short, the department is playing an important role in HRD and R&D activities in the field of soil and environmental sciences. The department has strong links with several national & international bodies actively involved in soil and environmental research.

OBJECTIVES

Our aim is to develop and apply basic knowledge of soil and environmental sciences for efficient management of environmentally safe soil, plant and water with following specific objectives:

- Prepare outstanding individuals with an ability to understand & apply fundamental principles of soil & environmental sciences and conduct useful basic and applied research.
- Focus on the study of interaction between soils and chemicals both organic and inorganic in the environment.
- Improve methods used in soil, plant, water and fertilizer analyses.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST		
1.	Dr. Inayatullah Rajpar, Professor & Chairman	PhD (UK)	Bio-saline Agriculture		
2.	Dr. Allah Wadhayo Gandahi, Professor	PhD (SAU)	Salinity		
3.	Dr. Mehrunisa Memon, Professor	PhD (Germany)	Mineralogy		

		I	
4.	Dr. Zia-ul-Hassan	PhD (UAF)	0.115 (11)
	Shah,		Soil Fertility
_	Professor	DID (M.1. ')	
5.	Dr. M. Saleem	PhD (Malaysia)	
	Sarki,		Micronutrient
	Associate Professor		
6.	Dr. Ghulam	PhD (Canada)	
0.	Murtaza Jamro,	PIID (Callada)	Soil Microbiology,
	Associate		Biogeochemistry
	Professor		Diogeochemistry
7.	Dr. Saleem	PhD (New Zealand)	
/•	Maseeh Bhatti,	T IID (New Zearand)	
	Associate		Soil Environment
	Professor		
8.	Dr. Khalid	PhD (China)	
0.	Hussain Talpur,	The (china)	
	Associate		Soil Fertility
	Professor		
9.	Dr. Naheed	PhD (Germany)	
	Akhtar Talpur,	•	Soil Survey
	Associate		Soli Survey
	Professor		
10.	Dr. Shoukat Ali	PhD (China)	
	Abro,		Carbon
	Associate		Sequestration
	Professor		
11.	Ms. Anila Mastoi,	M.Sc. (Agri.) Hons	0.11.5
	Assistant		Soil Fertility
10	Professor	DID (CI.)	
12.	Dr. M. Siddique	PhD (China)	
	Lashari,		Salinity Bio-char
	Assistant		•
12	Professor	DhD (Malaysia)	
13.	Dr. Saima	PhD (Malaysia)	Soil Chemistry
	Kalsoom Babar,		-

Assistant	
Professor	

CO	COURSES OFFERED FOR M.Sc (Agri) Hons			
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER-I		'		
SS-701	Principles and Uses of Laboratory Equipment	3(2+1)		
SS-703	Soil Fertility & Plant Nutrition	3(2+1)		
SS-705	Soil Taxonomy	3(2+1)		
SS-707 (Minor-I)	Salt-Affected Soils & Water Quality	3(2+1)		
SEMESTER-II				
SS-702	Soil Chemistry and Mineralogy	3(2+1)		
SS-704	Soil Microbiology and Biochemistry	3(2+1)		
SS-706	Soil Physics	3(2+1)		
SS-708 (Minor-II)	Soil Fertility and Plant Nutrition	3(2+1)		
SEMESTER-III to VI				
Major-710	Thesis Research Work (Synopsis Approval, Data Collection and Analysis, Thesis write up, Seminar & Viva voce Examination)	10 (0+10)		

COURSES OFFERED FOR PhD				
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER-I	SEMESTER-I			
SS-711	Advanced Soil Chemistry	3(2+1)		
SS-713	Advanced Soil Fertility	3(2+1)		
SS-715	Special Problem	1(1+0)		

SS-717	Soil Fertility & Plant Nutrition	3(2+1)
(Minor-I)	·	, í
SEMESTER-II		
SS-712	Advanced Soil Physics	3(2+1)
SS-714	Advanced Soil Microbiology	3(2+1)
SS-716	Seminar	1(1+0)
SS-718 *(Minor-II)	Soil Problems & their Solutions	3(2+1)
SEMESTER-III	to X	
SS-720	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection and Analysis, Thesis write up, Seminar & Viva voce Examination)	20 (0+20)





Prof. Dr. AIJAZ HUSSAIN SOOMRO, PhD (UAAR)
DIRECTOR, INSTITUTE OF FOOD SCIENCES AND
TECHNOLOGY

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INSTITUTE OF FOOD SCIENCES & TECHNOLOGY

The Institute of Food Sciences and Technology was established in April 2007 through the up gradation of the Department of Food Technology, which was commenced in the year 1996 and initiated its academic activities in the year 1998. The establishment of the Institute of Food Sciences and Technology brought measurable enhancements in the level of quality education and research in food related fields. At present, the Institute offers four-year B. Sc (Hons), two years M.Sc. (Hons) and three years Ph. D degree programs in Food Sciences and Technology and is imparting educational program similar to all food technology departments/institutes of the country through a uniform curriculum as per policy of Higher Education Commission, Islamabad.

MISSION STATEMENT

Institute of Food Sciences & Technology is committed to provide an academic training and processing, preservation, packaging, marketing and safe use of nutritious and wholesome food, dairy products and shall continually improve its effectiveness by system implementation.

OBJECTIVES

- To impart quality education to train manpower in the field of food sciences and technology to meet the demand of growers & food industries.
- To conduct research on various aspects of Food Sciences & Technology.
- To train rural masses for poverty alleviation.
- To develop post-harvest technology to reduce wastage in fruits and vegetables.

FACILITIES

The Institute of Food Sciences & Technology has established seven hi-tech laboratories viz. Food Analysis, Post-harvest Technology, Food Microbiology, New Food Product Development, Cereal/Bakery Technology and Freezing, Drying & Dehydration. Each Laboratory is equipped with advanced (i.e., GC-MS, HPLC, AAS, ELIZA and Texture Analyzer) and other common use instrumentation to carry on the relevant tasks. In addition to this, the Institute has two walk-in type cold storage units, one beverage unit; one juice treatment plant and one canning unit for teaching, research and conduct of trainings.

Other facilities include a computer laboratory with internet facility and a well-established food product display center. The institute has established strong linkages with different food industries such as National Foods Karachi, Wazir Ali Oil Industries, Dawn Bread Hyderabad, Laseefa Food Hyderabad, Pakistan Beverages Hyderabad, Popular Food Industry Tando Adam, Candyland and Cadbury Hub for conduct of mutually agreed trainings, research, and strengthening of practical capacity of students & industry personnel. The Institute also has a strong post graduate program offering courses and facilities for research up to PhD level.

JOB OPPORTUNITIES

In Pakistan, there is a vast potential for food technology graduates to be self-reliant by establishing small food units such as bakery units, beverage production unit, juices/squash preparation unit, pickles etc. Apart from small individual establishment business, there is a need of food sciences & technology graduates in different food industries of the country such as bread baking companies, national food companies, oil and beverage industries, fruit processor exporters, government organizations such as Sindh Horticulture Research Institute Mirpurkhas, Nuclear Institute of Agriculture, Universities, private and semi government companies, Banks, Agriculture Research Institutes, etc.

ISO CERTIFICATION

The Institute of Food Sciences & Technology have ISO Certification (ISO-9001-2015).

	ACADEMIC STAFF			
Sr. No.	Name & Designation	Qualification	Research Interest	
1.	Dr. Aijaz Hussain Soomro, Professor & Director	Ph.D. (UAAR)	Food Microbiology Dairy Technology	
2.	Dr. Tahseen Fatima Miano, Assistant Professor	Ph.D. (Turkey)	Food Engineering	
3.	Dr. Asadullah Mari, Assistant Professor	Ph.D. (SAU)	Food Science and Technology	
4.	Dr. Shahzore Gul Khaskheli,	Ph.D. (China)	Food Processing	
5.	Dr. Aasia Akbar Khaskheli, Assistant Professor	Ph.D. (SAU)	Food Science and Technology	
6.	Dr. Dileep Kumar, Assistant Professor	Ph.D. (China)	Food Technology	

COURSES OFFERED FOR M.Sc Hons.				
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER-	SEMESTER-I			
FST-701	Functional Foods and Nutraceuticals	3 (2+1)		
FST -703	Advanced Food Chemistry	3 (2+1)		
FST -705	Chemistry of Edible Oils and Fats	3 (2+1)		
FST -707	Food Processing and Preservation	3 (2+1)		
(Minor-I)	(For Non-Major Students)			

Minor-I	For Major FST Students to be selected form other departments			
SEMESTER-	II			
FST -702	Food Quality Assurance Management	3 (3+0)		
FST -704	Advanced Food Microbiology	3 (2+1)		
FST -706	Dairy Processing 3 (2+1)			
FST -708	Post-Harvest Management 3 (2+1)			
(Minor-II)	(For Non-Major Students)			
Minor-II	For Major FST Students to be selected from other departments.			
SEMESTER-II to VI				
FST -710	Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & Viva voce Examination)	10 (0+10)		

	COURSES OFFERED FOR PhD			
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER	SEMESTER-I			
FST -711	Starch Chemistry and Technology	3 (2+1)		
FST -713	Food Supply Chain Management	3 (3+0)		
FST -715	Special Problem	1(1+0)		
FST -717 (Minor-I)	Food Additives and Toxicology (Offered to other departments) (For Non-Major Students)	3(2+1)		

Minor-I	For Major FST Students (to be selected from other departments.)			
SEMESTER	R-II			
FST -712	Food Industrial Waste Management	3 (2+1)		
FST -714	Prebiotics and Probiotics	3 (3+0)		
FST -716	Seminar	1(1+0)		
FST -718 (Minor- II)	Baking Sciences & Technology (Offered to other departments) (For Non-Major Students)	3(2+1)		
Minor-II	For Major FST Students (to be selected from other departments)			
SEMESTER	SEMESTER-III to X			
FST -720	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & Viva voce Examination)	20 (0+20)		







Dr Manzoor Ali Abro
PhD (France)
DEAN, FACULTY OF CROP PROTECTION
Email: deanfcpt@sau.edu.pk | Ph: +92-22-2765870 | Ext: 383











FACULTY OF CROP PROTECTION

The need for new approaches in agricultural teachings aimed to reduce yield losses in crops due to insect pests, plant diseases and weeds was felt at the time of up gradation of former Agriculture College to Sindh Agriculture University, Tandojam in 1977. This was eventually translated into the establishment of the Faculty of Crop Protection in July 1987. The teachings at this Faculty coordinate the work of Entomology, Plant Pathology, weed Science, and other Plant Protection components for imparting the technical know-how of producing healthy crops and addressing the day-to-day problems of farming community in the field of Crop Protection as a whole. The faculty achieves this task through its three departments viz. Entomology, Plant Pathology and Plant Protection; offering course work leading to graduate and postgraduate degrees with special reference to identification and management of newly observed as well as the traditional insect pests, weeds and diseases of crops caused by fungi, bacteria, viruses, and nematodes. At present, the Faculty of Crop Protection offers a 4-year B.Sc. (Agri.) Hons., M.Sc. (Agri.) Hons. and PhD degree program in Entomology, Plant Pathology and Plant Protection. The faculty has all basic facilities of teaching and research including Stored Grain Pests Research Laboratory, Insect Molecular Laboratory, Insect Systematic Laboratory and Insect Museum, Insect Biological Control Laboratory, IPM Laboratory, Plant Diseases Diagnostic & Research Laboratory, Biocontrol Laboratory, which are moderately equipped.

To promote merit and healthy academic competition, the faculty awards various scholarships to needy and meritorious students at graduate and postgraduate levels through pesticide companies and various other government and non-government organizations, including HEC-USAID and HEC-Japanese need-based scholarships.

MISSION STATEMENT

To achieve the highest standards in teaching, learning and research related to insect pests, weeds, and diseases of crops and to advance and disseminate the knowledge in crop protection to all the stakeholders in agriculture, especially the farmers with emphasis on non-chemical management methods including biological, mechanical and cultural control.

JOB OPPORTUNITIES

Graduates from this Faculty can find employment in Academic, Provincial as well as Federal Government Sectors Including Agri. Extension, Research, PARC, PAEC (NIAB, NIBGE, NIFA, NIA), SUPARCO, PCCC, Pakistan Science Foundation (PSF), Pakistan Museum of Natural History (PMNH), FSC&RD (Federal Seed Certification & Registration), Federal Plant Protection/Plant Quarantine, Banks, Rural Support Programs (RSPs), NGOs working in Agriculture and Rural Development and Private Pesticides Companies etc. They also can start their career through self-employment, as Plant Clinicians, Advisers / Consultants, Pesticide Dealers and by starting mushroom cultivation.

DEPARTMENT OF ENTOMOLOGY

The history of the Department of Entomology dates to the beginning of formal agricultural education and research in Sindh, through the establishment of King George V Institute of Agriculture at Sakrand in 1939. With the up gradation of the Institute to Agriculture College and its shifting to Tandojam, the department remained its vital component. Later in 1965, the department started B.Sc. (Agri.) Hon's degree in the field of Entomology. Presently, being an important component of the Faculty of Crop Protection, the Department offers a 4-year B.Sc. (Agri.) Hon's degree in Entomology. In addition, it has a very strong post graduate program offering M.Sc. (Agri.) Hons and PhD degree

programs. The department has all basic facilities of teaching such as classrooms, 4 research laboratories, including Stored Grain Pests Research Laboratory, Insect Molecular Laboratory, Insect Systematic Laboratory and Insect Museum, Insect Biological Control Laboratory, experimental field, and library. The Department is actively involved in basic and applied research financed by various national and international donors. Department provides free agricultural extension services to the farming community and organizes short courses, trainings/workshops for farmers, students, NGO's, Agriculture extension and research workers.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICAT ION	RESEARCH INTEREST		
1.	Dr. Imran Khatri, Professor & Chairman	PhD (SAU)	Insect Morphological and Molecular Taxonomy, Nanomaterials		
2.	Dr. Bhai Khan Solangi Professor	PhD (US)	Integrated Pest Management with special reference to Biological Control (Parasitoids of Invasive Dipteran Pests)		
3.	Dr. Aslam Bukero, Associate Professor	PhD (SAU)	Biological Control in insect pests		
4.	Dr. Syed Shahzad Ali Bukhari	PhD (SAU)	Integrated Pest Management		
5.	Dr. Lubna Bashir Rajput Associate Professor	PhD (China)	Insecticide Toxicology		
6.	Syed Ali Hyder Shah Assistant Professor	M.Sc. (Hons.)	G. Entomology & Insect Physiology		

			5 0 1 1
7.	Dr. Muhammad Ibrahim	M.Sc. (Agri.)	Beneficial and
	Kubar	Hons	harmful diptera
8.	Dr. Arfan Ahmed Gilal	PhD (Malaysia)	Insect Ecology,
	Assistant Professor		Toxicology
9.	Dr. Fahad Nazir Khoso	PhD (Malaysia)	Insect Molecular
	Assistant Professor	, , ,	Science
10.	Dr. Khalid Hussain Dhiloo	PhD (China)	Insect Molecular
	Assistant Professor	, , ,	Science
11.	Dr. Agha Mushtaque	PhD (Malaysia)	Productive Insects
	Ahmed		& Insect
	Assistant Professor		Behaviour,
	Tissistant Torossor		biological control
			of agricultural pests
12.	Dr. Suhail Ahmed Otho	PhD (China)	Insect Molecular
	Assistant Professor		Science
13.	Dr Shahzad Ali Nahiyoon	PhD (China)	Insecticide
	Cooperative Facult	, ,	Application via
			Unmanned
			Vehichles
14.	Dr Abdul Razak Rajpar	PhD (China)	Insect Systematics
	Cooperative Faculty		
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COURSES OFFERED FOR M.Sc Hons.					
CODE	TITLE OF COURSE	C.HRS.			
SEMESTER-I	SEMESTER-I				
ENT-701	Insect Rearing Techniques	3(2-1)			
ENT-703	ENT-703 Research Methods in Entomology 3(2-1)				
ENT-705	Molecular Entomology	3(2-1)			
ENT-707	Medical and Veterinary Entomology (For Non-major)	3(2-1)			

SEMESTER-II				
ENT-702	Insect in Relation to Plant Diseases	3(2-1)		
ENT-704	Molecular Entomology 3(2-1)			
ENT-706	Insecticide Toxicology	3(2-1)		
ENT-708	Pesticides Application Equipments (For Non-major) 3(2-1)			
SEMESTER-II	I to VI			
ENT -710	Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	10 (0+10)		

COURSES OFFERED FOR PhD						
CODE	CODE TITLE OF COURSE C					
SEMESTER-	I					
ENT-711	Insecticides Resistance and Management	3(2-1)				
ENT-713	Advances in Biological Control of Insects	3(2-1)				
ENT-715	Special Problem	1(1-0)				
ENT-719	Insect Nutrition (For Non-major) 3(2-1)					
SEMESTER-	П					
ENT-712	Advances in Pest Management Research	3(2-1)				
ENT-714	Advances in Insect Behavior	3(2-1)				
ENT-716	Seminar on Current Topics	1(1-0)				
ENT-720	ENT-720 Insect Pathology (For Non-major) 3(2-1)					
SEMESTER-III to X						

ENT -721	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & Viva voce	20 (0+20)
	Examination)	

DEPARTMENT OF PLANT PATHOLOGY

The Department of Plant Pathology has a long and distinguished history, due to its importance for increasing the healthy and qualitative agricultural produce. This discipline covers causes, symptoms, perpetuation, transmission, and management of plant / crop diseases. The department was initially established as a main component of the King George-V, Agriculture Institute Sakrand in 1939. With the up gradation of the Institute to Agriculture College and its shifting to Tandojam, the department retained its vital role offering a B.Sc. (Agri.) Hons, degree 5in Plant Pathology. In addition, it has a very strong post graduate program offering M.Sc. (Agri.) Hons, and PhD in plant pathology degrees programs. The identification and cultivation of edible mushrooms, multiplication of antagonistic and other biological control organisms is also a major research component of the department. Consequently, graduates have excelled in various fields and made valuable contribution to the society. The department also offers free farmer advisory services to the farming community, organizes lectures, seminars, workshops and short courses for farmers, students, NGO's, Agriculture extension and research workers. The Department is fully equipped with classrooms, laboratories, and experimental field.

	ACADEMIC STAFF					
SR. NO.	NAME & & DESIGNATION	QUALIFICATION	RESEARCH INTEREST			
1.	Manzoor Ali Abro Professor & Chairman	PhD (France)	Mycology, Biocontrol, Molecular Plant Pathology.			
2.	Dr. Muhammad Ibrahim Khaskheli Associate Professor	PhD (China)	Resistance Mechanism and Integrated Plant Disease Management			
3.	Dr. Khadim Hussain Wagan Assistant Professor	PhD (SAU)	Seed Pathology and diseases of field crops			
4.	Dr. Zubair Ahmed Nizamani Assistant Professor	M.Sc. (Agri.) Hons	Disease diagnosis and treatment			
5.	Dr. Jamal U Din Hajano Assistant Professor	PhD (China)	Molecular Plant Pathology and Virology			
6.	Dr. Faheem Uddin Rajer Lecturer (Adhoc)	PhD (China)	Phytobacteriology, Biocontrol of Plant Pathogens			

COURSES OFFERED FOR M.Sc. Hons.					
CODE TITLE OF COURSE C.HRS.					
SEMESTER-I					
PP-701 Fungal Plant Pathology 3(2-1)					
PP-703 Plant Virology 3(2-1)					
PP-705 Plant Bacteriology 3(2-1)					

PP-707	Fungal Plant Pathology (For Non-major) (For Non-Major)	3(2-1)
SEMESTER-I	I	
PP-702	Plant Nematology	3(2-1)
PP-704	Genetics of Plant Pathogens	3(2-1)
PP-706	Advanced Mycology	3(2-1)
PP-708	Integrated Plant Disease Management (For Non-major)	3(2-1)
SEMESTER-I	II to VI	
PP -710	Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	10 (0+10)

COURSES OFFERED FOR PhD				
CODE	C.HRS.			
SEMESTER-	SEMESTER-I			
PP-711	Advances in Plant Pathology	3(2-1)		
PP-713	Biological Control of Plant Pathogens	3(2-1)		
PP-715	Special Problem	1(1-0)		
PP-719	Biological Control of Plant Pathogens (For Non-major) (For Non-Major)	3(2-1)		
SEMESTER-II				
PP-712	Molecular Plant Microbe Interactions	3(2-1)		

PP-714	Plant Pathology & International Obligations	3(2-1)		
PP-716	Seminar on Current Topics 1(1-0)			
PP-720	Ecology & Epidemiology of Plant Diseases (For Non-major)	3(2-1)		
SEMESTER-	III to X			
PP -721	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	20 (0+20)		

DEPARTMENT OF PLANT PROTECTION

The Department of Plant Protection was established in 1977 with the advent of Sindh Agriculture University, Tandojam, Pakistan. It is one of the most important disciplines of agriculture with a mission to develop and undertake educational and research programs that foster the creation and adoption of agricultural plant protection systems that are profitable, environmentally sound and sustainable. Through its qualified graduates, it plays a pivotal role in providing technical backstopping to agricultural research and extension systems. The department also imparts training / education in community IPM through the Farmer Field School (FFS) approach. The Department offers B.Sc. Agri. (Hons.) degree in Plant Protection. In addition, it has a very strong postgraduate program offering M.Sc. Agri. (Hons.) and PhD degrees in Plant Protection. The academic programs are designed to equip the students with new techniques and principles of crop protection to improve crop management to be translated in a socially viable,

competitive, and profitable agriculture for the farmers. The faculty members are actively engaged in different research programs, funded by national and international organizations. To facilitate the postgraduate students, three laboratories i.e., IPM Laboratory, Plant Diseases Diagnostic & Research Laboratory, Biocontrol Laboratory have set up which are moderately equipped. The practical trainings emphasize identification of agriculturally useful natural enemies (insects and micro-organisms) and mass production of biological control agents for field application. The department aims to introduce organic farming to rationalize the use of pesticides to conserve the environment, irrigation, soil and to minimize the health hazards.

	ACADEMIC STAFF					
SR. NO.	NAME & & DESIGNATION	QUALIFICA TION	RESEARCH INTEREST			
1.	Dr. Imtiaz Ahmed Nizamani Professor & Chairman	PhD (SAU)	Crop Pest Management			
2.	Dr. Abdul Mubeen Lodhi Professor	PhD (KU)	Plant Disease Diagnosis, Fungal Systematics, Postharvest Pathology			
3.	Dr. Rehana Naz Syed Professor	PhD (Germany)	Fungal plant diseases			
4.	Dr. Muhammad Ali Khanzada Associate Professor	PhD (KU)	Plant Protection			

5.	Mr.	Khalid	Hussain	M.Sc.	(Agri.)	Weed Science
	Qureshi		Hons			
	Assistant Professor					

COURSES OFFERED FOR M.Sc. Hons.			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-			
PPT-701	Research Methods in Plant Protection	3(2-1)	
PPT-703	Community Integrated Pest Management	3(2-1)	
PPT-705	SPS Measures and Quarantine	3(2-1)	
PPT-707	Advances in Plant Protection (For Non-major)	3(2-1)	
SEMESTER-	П		
PPT-702	Plant Protection and Environment	3(2-1)	
PPT-704	Host Plant Resistance	3(2-1)	
PPT-706	Pesticide Toxicology	3(2-1)	
PPT-708	Vector of Plant Disease (For Non-major)	3(2-1)	
SEMESTER-III to VI			
PPT -710	Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	10 (0+10)	

COURSES OFFERED FOR PhD			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-	I		
PPT-711	Advanced Integrated Pest Management	4 (3-1)	
PPT-713	Microbial Control of Pests	4 (3-1)	
PPT-715	Special Problem	1 (1-0)	
PPT-719	Advanced Pest Ecology (For Non-major)	4 (3-1)	
SEMESTER-	II		
PPT-712	Advanced Biological Control	4 (3-1)	
PPT-714	Pesticide Resistance Management	4 (3-1)	
PPT-716	Seminar on Current Topics	1 (1-0)	
PPT-720	Advanced Host Plant Resistance (For Non-major)	4 (3-1)	
SEMESTER-III to X			
PPT -721	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	20 (0+20)	







PROF. DR. AIJAZ ALI KHOOHARO, PhD (SAU) DEAN, FACULTY OF AGRICUTURAL SOCIAL SCIENCES





FACULTY OF AGRICULTURAL SOCIAL SCIENCES

Faculty of Agricultural Social Sciences emerged as a faculty in 1984 after bifurcation of Faculty of Agriculture into three faculties. Nevertheless, various departments of this faculty have been offering graduate and postgraduate degree programs since 1975, when the university was defunct Sindh Agriculture College. The faculty plays an important role not only in offering degree programs in various disciplines, but it is also supporting the other academic programs of various faculties, offering compulsory courses in English, Statistics, Pakistan Studies & Islamic Studies. The faculty has following academic departments.

- Agricultural Economics
- Agricultural Education Extension & Short Courses
- Statistics
- Rural Sociology
- English
- Islamic and Pakistan Studies

The first four are degree awarding departments, whereas the remaining two departments are offering compulsory courses in their respective fields in all the Faculties of the University. All the degree awarding departments are offering master's and doctoral degree programs. Department of Agricultural Economics also offers M.S in Agribusiness Management (Off campus Program). The faculty has a Computer Laboratory with internet facility for its faculty staff and the students. Besides this, a library has been established to cater the need of the scholars/scientists and students of the faculty.

JOB OPPORTUNITIES

The successful graduates of this faculty can serve as farm managers in agricultural estates. They also work as specialists in various disciplines of agriculture and allied sciences in public and private sector organizations; autonomous and semi-autonomous bodies viz, Zarai Tarqiati Bank Limited (ZTBL), Pakistan Agricultural Research Council (PARC), Agricultural Census, Agricultural Marketing, Pakistan Broadcasting corporation, all Commercial and microfinance Banks, *Sindh* Irrigation and Drainage Authority (SIDA), Agro-Economic Research, Social Welfare Departments, National Planning Commission, USAID, FAO, IFPRI, ILRI, ICARDA, LEAD, Ford Foundation, National Talent Pool, China Pakistan Economic Corridor (CPEC), and agriculture consultancy firms, etc.

DEPARTMENT OF AGRICULTURAL ECONOMICS

The Department of Agricultural Economics was established in 1975 with the aim to provide entrepreneurs that create wealth and develop the economy through agribusiness activities. The main objectives of the department are to produce academically competent and professionally efficient graduates who are able to manage and direct the nation's agricultural economy; to conduct research into the recurring problems and needs of the Pakistan's agricultural society in order to find short, medium and long-terms solutions; and to develop new patterns of agricultural management through improved agricultural leadership, characterized by ability to innovate and increase reliance on the use of modern business techniques in agricultural production and marketing. The department offers B.Sc. (Agri) Hons, M.Sc. (Agri) Hons and PhD in the field of Agricultural Economics as well as B.Sc. (Hons). and M.S. in Agribusiness Management (off campus program).

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
1.	Dr. Tehmina Mangan Professor & Chairperson	PhD (SAU)	Environmental Economics, Agricultural Economics	
2.	Dr. Fateh M. Marri Professor	PhD (SAU)	Econometrics, Applied Economics	
3.	Dr. Habibullah Magsi Associate Professor	PhD (France)	Land use conflict, Food insecurity	
4.	Dr. Hakimzadi Wagan Associate Professor	PhD (France)	Food inflation, Agricultural climate change economics	
5.	Dr. Jam Ghulam Murtaza Sahito Associate Professor	PhD (Germany)	Econometrics, Applied Economics Empirical research	
6.	Mr. Sanaullah Noonari Assistant Professor	M.Sc. (Agri.) Hons	Agricultural Development	
7.	Mr. Mumtaz Ali Joyo Assistant Professor	M.Sc. (Agri.) Hons	Food Insecurity related concerns, Economic development, climate issues & policy	
8.	Ms. Irfana Noor Memon Assistant Professor	M.Sc. (Agri.) Hons	Agricultural Marketing	
9.	Ms. Mehar Un Nisa Rais Lecturer	M.Sc. (Agri.) Hons	Production economics & woman participation	
10.	Mr. Mussavir Anwar Rustamani Lecturer	M.Sc. (Agri.) Hons	Environmental economics, Production economics	

COURSES OFFERED FOR M.Sc Hons.			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
AgEc-701	Microeconomics	3(3+0)	
AgEc-703	Mathematics for Economists	3(3+0)	
AgEc-705	Environmental and Resource Economics	3(3+0)	
AgEc-707	Elective-I	3(3+0)	
SEMESTER-I	П		
AgEc-702	Macroeconomics	3(3+0)	
AgEc-704	Econometrics	3(3+0)	
AgEc-706	Agricultural Development	3(3+0)	
AgEc-708	Elective-II		
SEMESTER-III to VI			
AgEc-710	Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	10 (0+10)	

COURSES OFFERED FOR M.Sc Hons.			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
ABM-701	Principal of Agribusiness Management	3(3+0)	
ABM-703	Marketing of Agricultural Products	3(3+0)	
ABM-705	Managerial Economics	3(3+0)	

ABM-707	Elective-I	3(3+0)		
SEMESTER-	II			
ABM-702	Agribusiness Entrepreneurship	3(3+0)		
ABM-704	Supply Chain Management	3(3+0)		
ABM-706	Research Methods in Business	3(3+0)		
ABM-708	Elective-II			
SEMESTER-	SEMESTER-III to VI			
ABM-710	Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & <i>Viva voce</i> Examination)	10 (0+10)		

COURSES OFFERED FOR PhD		
CODE	TITLE OF COURSE	C.HRS.
SEMESTER-	I	
AgEc-711	Microeconomic Theory	3(3+0)
AgEc-713	Mathematical Economics	3(3+0)
AgEc-715	Special Problem	1(0+1)
AgEc-717	Elective-I	3(3+0)
SEMESTER-	II	·
AgEc-712	Macroeconomic Theory	3(3+0)
AgEc-714	Applied Econometrics	3(3+0)
AgEc-716	Seminar	1(0+1)
AgEc-717	Elective-II	3(3+0)

SEMESTER-III to X		
AgEc -721	Comprehensive Examination, Thesis Research Work (Synopsis Approval, Data Collection, and Analysis, Thesis write up, Seminar & Viva voce Examination)	20 (0+20)

DEPARTMENT OF AGRICULTURAL EDUCATION, EXTENSION AND SHORT COURSES

The Department of Agricultural Education, Extension and Short Courses offers course work which enables students to serve as social catalyst/extension educationist / social mobilizers in various farming communities / societies. The students after graduating are expected to work for the development of a farmer through a holistic farm education approach and diffusion and adoption of need-based latest agricultural technologies and training in various agricultural products. The department offers B.Sc. (Agri) Hons, M.Sc. (Agri) Hons and PhD in the field of Agricultural Education Extension.

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATON	RESEARCH INTERES	
1.	Dr. Zaheeruddin Mirani, Professor & Chairman	PhD (USA)	Agricultural Philosophy	
2.	Dr. Aijaz Ali Khooharo, Professor	PhD (SAU)	Research Methodology Monitoring & Evaluation	

3.	Dr. Muhammad Ismail Kumbhar, Professor	PhD (SAU)	Smart Agriculture Practices
4.	Mr. Jaleel Ahmed Ibupoto,	M.Sc. (Agri.) Hons	Education Philosophy
5.	Mr. Manzoor Ali Narejo,	M.Sc. (Agri.) Hons	Education Philosophy
6.	Mr. Mukhtiar Ali Mirjat,	M.Sc. (Agri.) Hons	Research Methods in Education

COURSES OFFERED FOR M.SC. (AGRI.) HONS. IN AGRIL. EDUCATION EXTENSION			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
AEE-701	Management in Agricultural Extension	3 (2+1)	
AEE-703	Program Planning	3 (2+1)	
AEE-705	International Agricultural Extension Systems	3 (2+1)	
AEE- 707	Advance Approaches for Transfer Agricultural Technology	3 (2+1)	
SEMESTER-II			
AEE-702	Advance Research Methods	3 (2+1)	
AEE-704	Monitoring and Evaluation in Agricultural Extension	3 (2+1)	
AEE-706	Development of Training Program	3 (2+1)	
AEE-708	Modern Agricultural Extension Methods	3 (2+1)	
SEMESTER-III & IV			
AEE-710	Thesis research work	10 (0+10)	

COURSES OFFERED FOR PHD IN AGRIL. EDUCATION EXTENSION			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
AEE-711	Program Planning	3(2+1)	
AEE-713	Educational Research	3(2+1)	
AEE-719	Special Problems	1(0+1)	
AEE-717	Participatory Approaches in Agril. Extension	3(2+1)	
SEMESTER-I	I		
AEE-712	Gender Mainstreaming for Community Development	3(2+1)	
AEE-714	Human Resource Management	3(2+1)	
AEE-718	Seminar	1(0+1)	
Minor-720	Sustainable Rural Development	3(2+1)	
		3(2+1)	
SEMESTER-III to X			
AEE	Thesis research work	20(0+20)	

DEPARTMENT OF RURAL SOCIOLOGY

Since, the majority of Pakistan consists of rural people, and what humans do fits under the category of social structure or social activity; rural sociology has gradually expanded its focus to such far-flung subjects in the creation of scientific knowledge. In addition, no event can happen without cause, therefore, the scope and importance of rural sociology is evident from its subjects-matter. Keeping this in mind, the department proposes following subjects to understand the ever-changing social phenomena, while ensuring the progress

in rural societies. In particular, the department offers B.Sc. (Agri) Hons, M.Sc. (Agri) Hons and PhD (Agri.) Hons in the field of Rural Sociology.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST		
1.	Dr. Muhammad Javed Sheikh, Associate Professor &	PhD (Malaysia)	Rural Development / Participatory approach		
2.	Dr. Ghulam Mujtaba Khushk, Associate Professor	PhD (Malaysia)	Empowerment & well-being of Rural communities		
3.	Mr. Muhammad Ali Sheikh, Assistant Professor	M.Sc. (Agri.) Hons	Community development, Social issues / superstition in rural / urban		
4.	Mr. Arshad Ali Narejo, Lecturer (Contract)	M.Sc. (Agri.) Hons	Rural sociology, climate change, climate change adoption well- being		

COURSES OFFERED FOR M.SC. (AGRI.) HONS IN RURAL SOCIOLOGY				
CODE	CODE TITLE OF COURSE C.HRS.			
SEMESTER-I				
RS-701	RS-701 Theories of Social Change 3(2+1)			
RS-703	RS-703 Rural Social Organization 3(2+1)			
RS-705	RS-705 Population and Agricultural Development 3(2+1)			
RS-707	RS-707 Elective-I 3(2+1)			

SEMESTER-II			
RS-702	2 Statistics for Social Scientists 3(2+1)		
RS-704	S-704 Sociology of Rural Society 3(2+1)		
RS-706	706 Human Resource management 3(2+1)		
RS-716	Elective-II	3(2+1)	
SEMESTER-III & IV			
RS-710	Thesis research work	10(0+10)	

COURS	COURSES OFFERED FOR PHD (AGRI.) HONS IN RURAL SOCIOLOGY				
CODE TITLE OF COURSE C.HRS					
SEMESTE	ER-I				
RS-711	Sociology of Agriculture	3(2+1)			
RS-713	Community Development	3(2+1)			
RS-719	Special Problem	1(0+1)			
RS-717	Sociology of Migration (Minor-I)	3(2+1)			
SEMESTE	SEMESTER-II				
RS-712	Social Research Design	3(2+1)			
RS-714	Industrial Sociology	3(2+1)			
RS-718	Seminar	1(0+1)			
RS-720	Criminology	3(2+1)			
SEMESTER-III, IV, V & VI					
RS Thesis research work 20(0+20)					

DEPARTMENT OF STATISTICS

Statistics section was established in the defunct Sindh Agriculture College under the scheme "Intensification of the Graduate, Postgraduate and Advanced Studies" in 1967. Later in 1972-73, its status was raised to a full-fledged department, with aim to increase the awareness of the utility

of statistical expertise across the campus, nationally and internationally. Whereas the other mandate is to serve through excellence in research and education in the statistical sciences and through service to the academia, researchers, statistical professionals, and the society at large. In particular, the department offers B.Sc. (Agri) Hons, M.Sc. (Agri) Hons, and PhD (Agri.) Hons in the field of Statistics.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST		
1.	Dr. Velo Suthar Professor & Chairman	PhD (Malaysia)	Computational inferences		
2.	Dr. Riaz Ali Buriro Professor	PhD (SU)	Statistics, Regression, Time series		
3.	Dr. Muhammad Hanif Lakho Professor	PhD (UP)	Biostatistics		
4.	Dr. Barkatullah Qureshi Professor	PhD (Malaysia)	Computer networking, Communication transport, Graphics, Statistics analysis		
5.	Dr. Gordhan Das Professor (on lien)	PhD (Austria)	Networking		
6.	Dr. Naeem A. Qureshi Associate Professor	PhD (Germany)	Statistical Modelling, Time series econometrics		

7.	Mr. Bahauddin Baloch Assistant Professor	M.Sc. (Hons)	IT, Computer network, Computer science, Mathematics, Statistics
8.	Ms. Komal Abubakar Lecturer (Contract)	M.Sc. (Agri.) Hons	Statistical Inferences

COURSES OFFERED FOR M.SC. (AGRI.) HONS IN STATISTICS				
CODE	C.HRS.			
SEMESTER-	I			
STAT-701	Sampling Survey Methods	3(2+1)		
STAT-703	Design and Analysis of Experiment	3(2+1)		
STAT-705	Statistical Methods-I	3(2+1)		
STAT-707	Design and Analysis of Experiment (Elective-I)	3(2+1)		
SEMESTER-	П			
STAT-702	Time Series Analysis and Forecasting	3(2+1)		
STAT-704	Econometrics for Count Data and Durations	3(2+1)		
STAT-706	Survival Data Analysis	3(2+1)		
STAT-708	Logical reasoning and research methods (Elective-II)	3(2+1)		
SEMESTER-III & IV				
STAT-708	Thesis research work	10(0+20)		

COURSES OFFERED FOR PHD (AGRI.) HONS IN STATISTICS					
CODE	TITLE OF COURSE	C.HRS.			
SEMESTER	-I				
STAT-711	Advanced Probability Theory	3(2+1)			
STAT-713	Advanced Time Series Analysis & Forecasting	3(2+1)			
STAT-719	Special Problem	1(0+1)			
STAT-717	Research Methodology (Elective-I)	3(2+1)			
SEMESTER	-II				
STAT-712	Advanced Design of Experiments 3(2+1)				
STAT-714	Advanced Regression Analysis	3(2+1)			
STAT-718	Seminar 1(0+1)				
STAT-720	Statistical Methods (Elective-II)	3(2+1)			
SEMESTER	SEMESTER-III, IV, V & VI				
STAT-708	STAT-708 Thesis research work 20(0+20)				





Dr. Mir Sajjad Hussain Talpur PhD (China)

DIRECTOR, INFORMATION TECHNOLOGY CENTER

PH: +92-22-2766338 | EXT: 341













INFORMATION TECHNOLOGY CENTRE

The Information Technology Centre (ITC) was established in 2002 at the Sindh Agriculture University Tandojam (SAU), Tandojam under a development project approved by the Government of Pakistan. ITC aims to impart quality education to the youth, prepare, and empower them for facing the future frontiers of the new millennium with the potential of rapidly-advancing Information and Communication Technology (ICT). ICT plays an important role in the evolution of innovative solutions in all sectors including agriculture, health, education, governance, energy, environment, and transport. The center produces experts and highly-skilled manpower that fills that gap of technical human resource in the region and beyond. Skilled manpower is one of the most valuable resources contributing significantly to the socio-economic development of Pakistan's knowledge- and technology-driven economy aiming for achieving sustainable GDP growth and poverty alleviation.

ICT potential can be exploited for digital transformation of government and private sector using advanced technologies such as Cloud Platforms, IoT, Artificial Intelligence, Blockchain, and Virtual Reality. To bridge the huge gap of technical skills and technology incubation, the center offers state-of-the-art technology- based curriculum taught by experts having PhD qualifications from around the world. The skill-development and technology-transfer activities of the center are creating opportunities for youth through labour market intervention by providing research-oriented trainings, innovate solution development experience, academic-industry co-supervision, career counselling, internships, and job placement. The teaching methodologies and capacity-building activities are mainly handson, project-oriented, and teamwork-based for giving the students of undergraduate and masters programs, a real-world experience under the supervision of academic and industry experts.

MISSION STATEMENT

The mission of the postgraduate program is to prepare students for successful careers in information technology and related advanced disciplines to graduate education with a thorough understanding of domain and experiential learning opportunities to apply gained knowledge for solving real-world problems.

The focus of the program is to offer advanced and updated technology training needed for strong base with clear understanding of the key subjects required for opening ways in adopting several professions in the field of IT, depending upon one's aptitude during training and promoting independence in learning. It provides a modern IT education system and market-oriented curriculum, as well as an academic atmosphere that educates students to be successful professionals in a modern world dominated by IT. Bring about meaningful, productive IT education, ensuring that every student obtains the necessary, accessible, and cheap IT education and skill. The postgraduate studies in IT enables the university students to enhance their research capabilities through prototype development and utilize their research skills and critical thing to produce innovative solutions for Smart Agriculture systems, Smart healthcare system, Smart Education System and eGovernance.

FACILITIES FOR STUDENTS

The Centre has six air-conditioned and well-equipped computer laboratories for software engineering, computers, data sciences, artificial intelligence, and the Internet of Things, all of which are outfitted with cutting-edge computer hardware and software, as well as audio-visual equipment and teaching aids. There is also an electronics and embedded computing lab where the relevant practicals are held. This lab is completely equipped with analogue and digital trainers, as well as microprocessor trainers and other pertinent equipment.

Students are assigned research-based projects of their interest to undertake studies and develop software as per the requirement of the degree and the market. Project Lab, established in an air-conditioned room fully equipped with latest computers and software, is available for final year students to complete their projects.

In addition to above academic facilities, digital library facility is also provided to the faculty as well as students with the assistance of Higher Education Commission under the Program for Enhancement of Research Information (PERI). Postgraduate students and researchers of Sindh Agriculture University, Tandojam have access to thousands of online research journals and other research publications. With this facility, the faculty members, and researchers of the Sindh Agriculture University, Tandojam can access over 11,000 latest research journals and other research material through university network.

The Information Technology center is equipped with blanket WiFi coverage at 650 Mbps speed provided by HEC through Pakistan Education and Research Network (PERN). The smart university project provided a suite of important services to thousands of students and faculty members including student authentication, guest WiFi portals for visitors, and eduroam (a secure, world-wide roaming access service).

Furthermore, with the assistance of the Higher Education Commission, the most sophisticated and advanced Video Conference Room with a capacity of more than 60 people is established at the Information Technology Centre to enable students and faculty to communicate at local, national, and international levels for the purpose of education and information dissemination.

The MSIT (Hons.) program is a two-year self-finance program aiming to develop academics and professionals with research excellence. The program's goal is to create a nurturing atmosphere for young professionals to develop crucial and deeper insight into cutting-edge research methodologies and processes. The course work is designed to give indepth understanding of fundamental IT, while specialized courses allow students to gain advanced skills in their chosen area of specialization. There are now two specializations available: Software Engineering and Information Systems Track and Communication Systems and Networking Track.

JOB OPPORTUNITIES

The BS(IT) Hons and MS(IT) Hons programs at ITC educate students with the fundamental abilities to design and implement software applications and works on networks and web design. It also provides opportunities to the graduates to get jobs in the development sector in various positions such as an office support Managers (word processing, spreadsheet, database, and accounting), the intranet specialists, software engineer, network administrators, IT managers, the Internet service provider experts and specialized professional software developers (multi-media, website development and Commerce), lecturers and instructors in IT.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFI CATION	RESEARCH INTEREST		
1.	Dr. Mir Sajjad Hussain Talpur Director & Associate Professor	PhD (China)	IoT, smart agriculture, smart transportation, smart healthcare, smart city, smart robotics, RFID, green computing, mobile edge computing, transparent computing, HCI, BCI		
2.	Dr. Mubina Pathan Associate Professor	PhD (Malaysia)	Remote sensing, GIS, Image Processing, Artificial intelligence, Digital Logic Design, Graphics, Computer vision		
3.	Dr. Mukhtiar Memon Associate Professor	PhD (Austria)	Software designing, system architecture, model-driven engineering, and QoS evaluation of complex IT Systems		
4.	Dr. Pinial Khan Butt Associate Professor	PhD (China)	Green Computing, E-Commerce, Web Engineering & Technologies, and Telecommunication Technology		

5.	Dr. Erum Saba Chang Assistant Professor	PhD (MUET)	Intelligent control system, Vehicle system dynamics, Kalman filter, Model based estimation, communication systems and networks
6.	Dr. Kavita Tabbassum Assistant Professor	PhD (MUET)	Electronic Engineering, Digital Electronics, Multi-core Processor, Computer Architecture, Circuit Theory
7.	Ms. Farah Naveen Issani Assistant Professor	MSIT (SAU)	IOT & cloud computing, Mobile & wireless communication , Machine learning , communication systems and networks , computational and artificial intelligence , Adhoc and wireless sensors networks
8.	Engr. Irfan Ali Shahani Assistant Professor	MSIT (MAJU))	Data communication
9.	Engr. Saima Shaikh Assistant Professor	MSIT (SAU)	Communication system and networks, IoT and Cloud Computing, Software designing and development, FoG Computing, Machine Learning
10	Ms. Saima Tunio Lecturer	MSIT (ISRA)	Internet of Things, Human Computer Interaction, information security, wireless networks, blockchain technology and digital forensic,
11	Dr. Suhni Abbasi Assistant Professor	PhD (ISRA)	Human Computer Interaction, Learning System, Intelligent tutoring Systems, Serious Games

12	Dr. Zulfikar Ahmed Mahar Lecturer	PhD (Malaysia)	Information Systems, Requirement Engineering, Secure Software Development
13	Dr. Muhammad Yaqoob Koondhar Lecturer	PhD (Malaysia)	Information System, Acceptance models, Usability, Learning Transformation, Machine Learning and Big Data
14	Mr. Noor Nabi Dahri Lecturer	MSIT (SAU)	Information System (Web and Mobile application Design and deployment, official portals, Enterprise office automation system), Microsoft application integration
15	Engr. Muhammad Bux Soomro Lecturer	B.E. (MUET)	Telecommunications system, Mobile and wireless network, Network Architecture, Management sciences

COURSES OFFERED FOR MS(IT)				
CODE	CODE TITLE OF COURSE			
SEMESTE	SEMESTER-1			
ITC-701	Advanced Database Systems	3 (3+0)		
ITC-703	Information Security	3 (3+0)		
ITC-705	Object Oriented Software Engineering (T+P)	3 (2+1)		
ITC-707	Communication Systems (T+P)	3 (2+1)		
ITC-709	IT Planning and Management	2 (2+0)		

SOFTWARE ENGINEERING & INFORMATION SYSTEM

SEMESTER-II					
ITC-702	Web	Services	&	Service-Oriented	3 (2+1)
	Architectures (T+P)				
ITC-704	Software Quality Assurance 3 (3+0)				
ITC-706	Software Evolution			3 (3+0)	

ITC-708 Model-driven Engineering (T+P)	3 (2+1)
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COMMUNICATION SYSTEMS AND NETWORKS

SEMESTER-II			
ITC-710	Advanced Wireless Communication 3 (2+1)		
ITC-712	Wireless Ad Hoc & Sensor Networks 3 (3+0)		
ITC-714	Internetworking Protocols 3 (3+0)		
ITC-716	Virtual Reality & Interactive Communication	3 (2+1)	
	Systems		
SEMESTER III & IV			
ITC-711	Research Work	10 (0-10)	



FACULTY OF AGRICULTURAL ENGINEERING

The Faculty of Agricultural Engineering is among the five faculties of Sindh Agriculture University Tandojam. Initially, it started as a Department of Agricultural Engineering of the defunct Sindh Agriculture College Tandojam in 1955. The department was upgraded into a full-fledged Faculty of Agricultural Engineering in 1977. Faculty has played a leading role in providing engineering solutions to agricultural problems and is devoted to meet the needs of people of Sindh and Pakistan in general. Its primary goal is to take leading role in the promotion of technological changes and their management for sustainable agricultural development in the province of Sindh through high level education, research, and outreach activities by integrating technology, planning and management. The dissemination of quality education, research, and training with special emphasis on interdisciplinary interface among the technological and educational expertise is the focus of the faculty.

At present, the faculty offers a four-year B.E. (Agri) degree program. The program provides a fundamental understanding of the natural, basic, and engineering sciences and their application to design devices and processes in any general area. A permutation of courses caters to the design and engineering aspects related to agriculture. The focus span starts with basic principles of engineering themes like irrigation systems, soil and water management, farm machinery, farm structures, environment, energy, and resource management to ultramodern geographic information systems (GIS), remote sensing (RS), electronics and instrumentation applications related to the agriculture. M.E., M.Phil., and PhD degree programs are also offered in various disciplines including irrigation and drainage, land and water management, farm machinery, energy and environment, and farm structures. Besides teaching, the faculty is actively engaged in extension and leading-edge research. The regular professional education and research activities are carried out in the six integral departments as under:

- Irrigation and Drainage
- Farm Power and Machinery

- Land and Water Management
- Farm Structures
- Energy and Environment
- Basic Engineering

The Faculty of Agricultural Engineering strives to attain excellence in teaching and research, where students are urged to excel in qualification and competency with basic and applied research as well as technology transfer and outreach activities including consultancy. The faculty has highly qualified teaching staff with well-equipped laboratories, workshop facilities, field experimental area, library, computer lab, auditorium, and seminar hall. Graduates of the faculty are registered with Pakistan Engineering Council as Professional Engineers. The B.E. (Agri.) degree holders are eligible to be appointed as Professional Engineers in the engineering related fields. They are capable to undertake any professional engineering task in the field of Agricultural Engineering.

MISSION STATEMENT

The mission of the faculty is to strive for excellence in education, research, and outreach in the agricultural sector for sustainable development. We expand students' knowledge and skills in Agricultural Engineering by giving professional and academic training in the areas of Irrigation & Drainage Engineering, Land & Water Management, Mechanization & Farm Machinery, Post-Harvest Technology, Farm Structures and Environmental Engineering.

JOB OPPORTUNITIES

Graduate Engineers holding B.E. (Agri.) degree are eligible for registration as Professional Engineers with Pakistan Engineering Council (PEC). They are entitled to perform as professional engineers in public or private organizations on a post requiring the expertise of an agricultural engineer.

Our graduate engineers are employed on key positions in federal and provincial organizations including Universities, Research organizations like Environmental Protection Agency (EPA), Agriculture Research, Agriculture Extension, Agricultural Engineering, Sindh on Farm Water Management (SOFWM), Pakistan Agriculture and Storage Corporation (PASCO), Pakistan Agriculture Research Council (PARC), Pakistan Council of Research in Water Resources (PCRWR), Water and Power Development Authority (WAPDA), Sindh Irrigation and Drainage Authority (SIDA), International Water-logging and Salinity Research Institute (IWASRI), Drainage and Reclamation Institute of Pakistan (DRIP), Lower Indus Water Management and Reclamation Research (LIM) Project, Zarai Taraqiati Bank (ZTBL), International Water Management Institute (IWMI), Rural Development Department, various Semi Government and Autonomous Bodies, and NGO's like SAFWCO, WWF, NRSP, SPO, RDF and other departments of Agriculture, consulting companies and related sectors.

REMOTE SENSING AND GIS LABORATORY

Accurate estimation and forecasting of agriculture statistics is essential to a country's economy, food security and agricultural market development. Pakistan needs quality agricultural monitoring and real time statistics because so much of its economy as well as food security depends on a thriving agricultural sector. Thus, a Remote sensing (RS) and Geo Information Systems (GIS) laboratory was established in the faculty during 2014 in collaboration with Food and Agriculture Organization (FAO)o fthe United Nations and United States Department of Agriculture (USDA), under the FAO project, "Building Provincial Capacity in Pakistan for Crop Forecasting and Estimation.

The RS/GIS Laboratory provides an environment where faculty, staff and students work together to advance knowledge in the application of geospatial technologies in Agriculture, Environment, Ecosystem and Natural Resources Management. The mission of the Laboratory is to:

Integrate state-of-the-art remote sensing (RS), geographic information system (GIS), and global positioning (GPS) technologies with Agriculture Monitoring and Management to address relevant issues.

Transfer knowledge and skills to the undergraduate and postgraduate students, teaching faculty and farming community through education, outreach, and training.

Conduct scientific research focused on agriculture monitoring, environmental issues, and water management.

Make digital geospatial data of Sindh readily available for use in variety of related issues in agriculture

DEPARTMENT OF IRRIGATION AND DRAINAGE

The reliable water supplies for irrigated agriculture are instrumental to feed the growing population in the developing countries including Pakistan. However, they are declining with each passing day; hence their efficient utilization and management is crucial for sustainable agriculture. The water resource, irrigation and drainage engineers are educated and trained to recognize the complex problems related to the planning, designing, and utilizing the available water resources. This is only possible through better water application methods, conservation techniques, and water management practices. The government of Pakistan has been putting efforts to ensure water supplies for irrigated agriculture, industry, and domestic purposes. During past 65 years, several mega projects were launched in the fields of irrigation, drainage, and water resources engineering. Keeping in view the complexity of the water related problems, the Department of Irrigation and Drainage was established in 1977 under the umbrella of Faculty of Agricultural Engineering to produce young engineers and scientists in this field. Since then, it has remained as one of the foremost departments of the faculty. The department is actively involved in teaching and research activities at undergraduate levels. It contributes more than 30% of the courses in a composite graduate degree program. This department offers postgraduate degree programs of M.E and Ph. D in irrigation and drainage.

The department works for the refinement of vision and skills of graduate and postgraduate professionals with distinction in the field of irrigation, drainage, soil, and water resources engineering. Our aim is to produce young, generous, highly motivated, and talented professional engineers, who uphold and advance for the integrity, honor, dignity, and development of their profession. They should understand the future water demands and offer better solutions using their skills and knowledge.

The department of irrigation and drainage is enriched with a well-qualified faculty who always strive to provide cutting-edge research opportunities that will place graduates at the forefront of new developments in engineering. The adequate classrooms established computer lab, well equipped soil, water and hydraulic engineering labs and departmental library provide conducive environment for learning. There is an experimental station to demonstrate and conduct field experiments located at the Latif Farm. A weather station is also installed at the station.

ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST
1.	Mashooque Ali Talpur, Associate Professor & Chairman	PhD (China)	Water Resources and Agricultural Engineering
2.	Irfan Ahmed Shaikh Associate Professor	PhD (Malaysia)	Water Resources Modelling, Irrigation, Drainage, RS and GIS
3.	Shamim Ara Memon Assistant Professor	PhD (SAU)	Integrated water resources Management, Irrigation and Drainage, Climate Change, Hydropower Development

4.	Rajesh Kumar Soothar Assistant Professor	PhD (China)	Water Resources Management
5.	Muhammad Uris Mirjat Assistant Professor	PhD (SAU)	Water Resources Modelling, Irrigation and Drainage

COURSES OFFERED FOR POST-GRADUATE (M.E) PROGRAM				
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER-I	SEMESTER-I			
ID-701	Design of Hydraulic Structures	3(3-0)		
ID-703	Agricultural Drainage	3(3-0)		
ID-705	Applied Hydrology	3(3-0)		
BE-707	Numerical Methods (offered by the department of Basic Engineering) 3(3-0)			
SEMESTER-II				
ID-702	Open Channel Hydraulics	3(3-0)		
ID-704	Design of Pressurized Irrigation 3(3-0)			
ID-706	Sediment Transport and Control 3(3-0)			
BE-708	Computer Programming (offered by 3(3-0)			
SEMESTER-III & IV				
Research Work (Major Field)	10 (0			
	Analysis, Thesis Write up, Seminar			

COURSES OFFERED FOR POST-GRADUATE (PhD) PROGRAM					
CODE	TITLE OF COURSE C.HRS				
SEMESTER-I	SEMESTER-I				
ID-711	Irrigation Scheduling	3(3-0)			
ID-713	Flood Estimation and Control	3(3-0)			
ID-715	Hydrometery 3(3-0)				
SP-717	Special Problems	1(0-1)			
SEMESTER-II					
ID-712	Lab and Field Techniques in Soil and	3(3-0)			
ID-714	Advanced Hydrology 3(3-0)				
ID-	Surface Water Modeling 3(3-0)				
SEM-718	Seminar on Current Topics 1(0-1)				
SEMESTER-III t	o X				
Research work	Comprehensive Examination,	20 (0-			
	Synopsis Seminar & Approval, Data	20)			
	Collection, Data Analysis,				
	Thesis Writeup, Seminar &				
	Viva-voce Examination				

DEPARTMENT OF FARM POWER AND MACHINERY

The Department of Farm Power and Machinery was established in 1977 as one of the major departments in the faculty to cater the manpower needs of Sindh and Baluchistan. It offers graduate and postgraduate degree programs since its inception. Initially, it offered M. Sc. (Hons.) in Farm Mechanization. Later, it started offering M.E. and Ph. D. degree programs to graduates having B.E. (Agri.) and B. E. (Mech.) degrees. The department has highly qualified faculty members. It has modern and well-equipped laboratories and workshop. Besides teaching and research, the department provides advisory services to farmers and offers short trainings on various aspects of farm mechanization and machinery as to increase

crop production. This department offers postgraduate degree programs of M.E and Ph.D in Farm mechanization.

The mission of the department is to provide leadership and excellence in teaching, research and outreach in farm power and machinery at graduate and postgraduate levels. The department has well equipped Agricultural Engineering Workshop, Machinery Hall, Power Units Garage, Mechanical and Electronics Laboratories, Drawing & Design Laboratory, Machine Shop, Welding, and smithy Shops.

ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
1.	Dr. Ahmed Ali Tagar Associate Professor and Chairman	PhD (China)	Agricultural Mechanization	
2.	Dr. Abdul Qadir Mughal Professor Emeritus	PhD (UK)		
3.	Dr. Farman Ali Chandio Associate Professor	PhD (China)	Precision and Digital Agriculture	
4.	Mr. Ameet Kumar Assistant Professor	M.E (SAU)	Farm Mechanization	
5.	Mr. Abdul Sattar Mashori Assistant Professor	M.E (SAU)	Farm Mechanization	

COURSES OFFERED FOR POST-GRADUATE (M.E) PROGRAM				
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER-I				
FPM-701	Soil Cutting and Tillage	3(3-0)		
FPM-703	Agricultural Machinery Management	3(3-0)		
FPM-705	Instrumentation & Data Handling	3(3-0)		
BE-707	Numerical Methods (offered by the department of Basic Engineering)	3(3-0)		
SEMESTER-II	SEMESTER-II			
FPM-702	Advance Farm Power	3(3-0)		
FPM-704	Tractor Implement Performance	3(3-0)		
FPM-706	Advance Machinery Design	3(3-0)		
BE-708	Computer Programming (offered by	3(3-0)		
SEMESTER-III &	SEMESTER-III & IV			
Research Work (Major Field)	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar	10 (0- 10)		

COURSES OFFERED FOR POST-GRADUATE (PhD) PROGRAM				
CODE	CODE TITLE OF COURSE C.HRS			
SEMESTER-I				
FPM-711	Project Planning and Management 3(3-0)			
FPM-713	Design of Agriculture Machinery 3(3-0)			
FPM-715	Workshop Organization &	3(3-0)		
SP-717	Special Problems	1(0-1)		
SEMESTER-II				
FPM-712	Machinery for Land Improvement	3(3-0)		

FPM-714	Advanced Farm Machinery	3(3-0)
FPM-716	Modern Mechanization Control	3(3-0)
SEM-718	Seminar on Current Topics	1(0-1)
SEMESTER-III to	οX	
Research work	Comprehensive Examination,	20 (0-
	Synopsis Seminar & Approval, Data	20)
	Collection, Data Analysis,	- /
	Thesis Writeup, Seminar &	
	Viva-voce Examination	

DEPARTMENT OF LAND AND WATER MANAGEMENT

Soil and Water are the key natural resources for the sustainability of flora and fauna and environmental system. But unfortunately, they are being used unwisely resulting in threat to the sustainability of agriculture and the environment. So far, in Pakistan enormous sums of money are spent on the planning, design, construction and maintenance of farm irrigation systems but many failed to meet the planned agricultural and social objectives, it has now been recognized that one of the main reasons for this is the lack of human resources with the proper technical and managerial skills needed to install, operate, and manage the schemes successfully. Keeping in view the importance of technical education in Land and Water Resources Management, Department of Land and Water Management was established in December 1985 in the Faculty of Agricultural Engineering to produce graduates with technical expertise in the management of land and water resources. This department offers

postgraduate degree programs of M.E and Ph.D in Land and Water Management.

The department imparts quality education to the students through wide range of subjects and research to enhance the productivity of land and water resources so as to meet future demands of food and fiber. In addition, the department also provides trainings and advisory service to the farming community of the country. The department plays a leading role in imparting quality education in the field of soil and water conservation and management. The mission of the department is to produce highly motivated and talented professional engineers with expertise in the field of soil and water resources conservation and management.

The department has well equipped lab with latest equipment used for land surveying and leveling, soil and water testing, and watercourse design and construction.

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
1	Dr. Altaf Ali Siyal Professor	PhD (UK)	Soil and Water; GIS, Remote Sensing, Irrigation	
2	Dr. Munir Ahmed Mangrio Professor & Chairman	PhD (SAU)	Irrigation Water Management	
3	Dr. Abdul Ghafoor Siyal Professor	PhD (Malaysia)	Soil and Water Engineering	

4.	Dr. Faisal Mehmood Assistant Professor	Ph.D.	Agricultural Water Soil Engineering
5.	Mr. Shoukat Ali Soomro Assistant Professor	M.E (SAU)	Land and Water Management, Irrigation and Drainage
6.	Mr. Abdul Saboor Soomro Assistant Professor	M.E (SAU)	Land and Water Management

COURSES OFFERED FOR POST-GRADUATE (M.E) PROGRAM				
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER-I				
LWM-701	Soil Water Plant Relationship	3(3-0)		
LWM-703	Land and Water Management	3(3-0)		
LWM-705 (optional)	Saturated and Unsaturated flow and Transport	3(3-0)		
BE-707	Numerical Methods (offered by the department of Basic Engineering)	3(3-0)		
SEMESTER-II				
LWM-702	Advanced Soil Physics	3(3-0)		
LWM-704	Ground Water Modeling	3(3-0)		
LWM-706	Soil Water and Salinity Management	3(3-0)		
BE-708	Computer Programming (offered by the department of Basic Engineering)	3(3-0)		
SEMESTER-III &	SEMESTER-III & IV			
Research Work (Major Field)	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar	10 (0- 10)		

COURSES OFFERED FOR POST-GRADUATE (PhD) PROGRAM				
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER-I				
LWM-711	Water Logging & Salinity Control	3(3-0)		
LWM -713	Water Harvesting Techniques	3(3-0)		
LWM-715	Integrated Watershed Management	3(3-0)		
SP-717	Special Problems	1(0-1)		
SEMESTER-II				
LWM-712	Water Resources Management 3(3-0)			
LWM-714	Vadoze Zone Modeling of Water and 3(3-0)			
LWM-716	Advanced Soil and Water Conservation 3(3-0)			
SEM-718	Seminar on Current Topics	1(0-1)		
SEMESTER-III to	o X			
Research work	Comprehensive Examination,	20 (0-		
	Synopsis Seminar & Approval, Data	20)		
	Collection, Data Analysis,	, 		
	Thesis Writeup, Seminar &			
	Viva-voce Examination			

DEPARTMENT OF FARM STRUCTURES

The department of Farm Structures was established in 1977 for providing technical knowledge in three main areas i.e., Farm Structures, Post-harvest and Process Engineering in Agriculture and Rural Electrification. The department offers courses at graduate (B.E.) and postgraduate (M.E. & PhD) level. There are well qualified staff members capable to serve the purpose of enhancing technological knowledge of youth in Agriculture, Structures and Electrification. This department offers postgraduate degree programs of M.E and PhD in Farm structures and Process engineering.

This department also provides advisory services to the progressive farmers in the field of Post-harvest and Process Engineering in the field of agriculture for improving the quality and quantity of farm produce.

The mission of department is to produce the technical as well as skilled persons for the society in general and to benefit the individual end users.

ACADEMIC STAFF			
	ACAL		
SR.	NAME &	QUALIFICATION	RESEARCH
NO.	DESIGNATION		INTEREST
1.	Dr. Bakhtawar	PhD (China)	
	Wagan		Agriculture
	Professor &		Engineering.
	Chairperson		
2.	Dr. Shakeel Hussain	PhD (Malaysia)	
	Chatha		Farm structures
	Assistant Professor		
3.	Dr. Shakeel Ahmed	PhD (China)	Agri. Process
	Soomro		Engineering /
			Post-Harvest
	Lecturer		Engineering
4.	Mr. Zaheer Ahmed	M.E (SAU)	Farm Structures
	Khan		& Agri Process
	Lecturer		Engineering

COURSES OFFERED FOR POST-GRADUATE (M.E) PROGRAM					
CODE	CODE TITLE OF COURSE C.HRS.				
SEMESTER-I					
FS-701	Crop Drying & Storage	3(2-1)			
FS-703	Food Processing and Preservation	3(2-1)			
FS-705	Process Instrumentation	3(3-0)			

BE-707	Numerical Methods (offered by the department of Basic Engineering)	3(3-0)
SEMESTER-II		
FS-702	Design of Livestock Shades	3(2-1)
FS-704	Processing of Cereal Grains	3(2-1)
FS-706	Processing of Perishable Crops	
BE-708	Computer Programming (offered by the department of Basic Engineering)	3(3-0)
SEMESTER-III &	IV	
Research Work (Major Field)	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar	10 (0- 10)

COURSES OFFERED FOR POST-GRADUATE (PhD) PROGRAM					
CODE	CODE TITLE OF COURSE C.HRS.				
SEMESTER-I					
FS-711	Solar Drying and Collectors	3(3-0)			
FS-713	Theoretical Simulation and Modeling	3(3-0)			
FS-715	Fumigation of Grains 3(3-0)				
SP-717	Special Problems 1(0-1)				
SEMESTER-II					
FS-712	Heat Mass and Transfer in Grains	3(3-0)			
FS-714	Crop Refrigeration and Air	3(3-0)			
FS-716	Marketing of Farm Products				
SEM-718	Seminar on Current Topics 1(0-1)				
SEMESTER-III to X					

Research work	Comprehensive	Examination,	20	(0-
	Synopsis Seminar &	Approval, Data	20)	
	Collection, Da	ta Analysis,		
	Thesis Writeup,	Seminar &		
	Viva-voce Examin	nation		

DEPARTMENT OF ENERGY AND ENVIRONMENT

The Department of Energy and Environment was established in the year 1995 in the Faculty of Agricultural Engineering. The department offers courses in energy related areas with main emphasis on the efficient use of available energy resources and to develop the renewable energy resources to minimize reliance on fossil fuels. The management and disposal of agricultural and industrial wastes is one of the major areas of its concern. The department also offers courses on environmental engineering, agroindustrial management and waste utilization. This department offers postgraduate degree programs of M.E and PhD in Energy and Environment.

It also deals with the changes that occur in the eco-system through manmade interventions to protect and preserve the environment from external influences. It focuses on the agro-industrial development and its management strategies. Apart from the academic activities, the department is involved in project research and consultancy. The department has contributed in the design of various machines for the use of farmers and remained involved in the projects sponsored by the national and international organizations.

The department works for the manpower development to formulate strategies for sustainable development, effective use of water, explore sustainable energy alternatives reducing reliance on fossil fuels, sustainable land management to combat desertification and land degradation, conservation of biodiversity, and planning to reduce land, water, and air pollution on local, regional, and global perspective.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST		
1.	Dr. Mahmood Leghari Associate Professor & Chairman	PhD (China)	Biomass pyrolysis and gasification, biochar and ashes, wastewater treatment, composting engineering, soil fertility		
2.	Dr. Hafeez Ur Rehman Mangio Associate Professor	PhD (SAU)	Water Quality and it's Treatment		
3.	Engr.Sheeraz Aleem Brohi	ME	Soil and Water analysis		

COURSES OFFERED FOR POST-GRADUATE (M.E) PROGRAM				
CODE	DE TITLE OF COURSE C.HRS			
SEMESTER-I				
EE-701	Environmental Disaster Management	3(3-0)		
EE-703	Air :& Noise Pollution Control	3(3-0)		
EE-705	Agriculture Pollution & Control	3(3-0)		
BE-707	Numerical Methods (offered by the department of Basic Engineering) 3(3)			
SEMESTER-II				
EE-702	Environmental Health and Safety	3(3-0)		
EE-704	EE-704 Environmental Analytical Techniques 3(3-0)			
EE-706	EE-706 Environmental Impact Assessment 3(3-0)			
BE-708	Computer Programming (offered by the department of Basic Engineering)	3(3-0)		
SEMESTER-III & IV				

Research Work	Synopsis Seminar & Approval, Data	10 (0-
(Major Field)	Collection / Recording, Data	10)
	Analysis, Thesis Write up, Seminar	10)

COURSES OFFERED FOR POST-GRADUATE (PhD) PROGRAM			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
EE-711	Pollution Control Technologies	3(3-0)	
EE-713	Environmental Management and	3(3-0)	
EE-715	Agricultural Pollution and Control	3(3-0)	
SP-717	Special Problems	1(0-1)	
SEMESTER-II			
EE-712	Industrial and Hazardous Waste	3(3-0)	
EE-714	Project Planning and Management	3(3-0)	
EE-716	Water Supply and Wastewater	3(3-0)	
SEM-718	Seminar on Current Topics	1(0-1)	
SEMESTER-III t	o X		
Research work	Comprehensive Examination,	20 (0-	
	Synopsis Seminar & Approval, Data	20)	
	Collection, Data Analysis,		
	Thesis Writeup, Seminar &		
	Viva-voce Examination		

DEPARTMENT OF BASIC ENGINEERING

The Department of Basic Engineering was established in 1977 as one of the departments of Faculty of Agricultural Engineering. The department deals with various supporting courses like Applied Mathematics, Applied Physics, Computer Science and Engineering Mechanics with special application in Agricultural Engineering. The supporting course

of Functional Mathematics is offered to the faculties of Crop Production, Crop Protection, Agriculture Social Sciences and Animal Husbandry and Veterinary Sciences. The department also offers two courses of Mathematics to the Information Technology Centre and one course to Institute of Food Sciences Technology.

The mission of the department is to provide leadership and excellence in teaching, research and outreach in Engineering Mechanics and Computer Science with Applied Mathematics at the graduate and postgraduate levels. Engineering Mechanics and Applied Physics laboratory and Computer Lab are available forteaching to graduate and postgraduate students.

	ACADEMIC STAFF		
SR. NO	NAME & DESIGNATION	QUALIFICA TION	
1.	Mr. Muhammad Aslam Samo Assistant Professor & Incharge Chairman	M.Sc. (US)	
2.	Mr. Ghulam Shabbir Bughio Assistant Professor	M.Sc. (US)	
3.	Mr. Saleem Ahmed Naich Lecturer	MPhil (MUET)	
4.	Mr. Amanullah Tunio Lecturer	MPhil (MUET)	
5.	Mr. Veeromal Bheel Lecturer	B.S. (US)	





PROF. DR. S. GHIASUDDIN RASHDI, PHD (UAF)
DEAN, FACULTY OF ANIMAL HUSBANDRY & VETERINARY SCIENCES
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FACULTY OF ANIMAL HUSBANDRY AND VETERINARY SCIENCES

Faculty of Animal Husbandry and Veterinary Sciences is amongst the five faculties of Sindh Agriculture University, Tandojam. This faculty is located towards the eastern end of the main campus of the University on Hyderabad - Mirpurkhas Highway about 15 km to the South of Hyderabad city it was established in 1971, The faculty offers five-year Doctor of Veterinary Medicine (DVM), M.Phil and PhD degree programs under semester system through its 14 teaching departments in various disciplines related to animal and veterinary sciences.

The faculty offers innovative teaching programs and new academic developments in small and large animal surgery, medicine, reproduction, nutrition, and management. It also offers courses on domestic and wild animal diseases, fisheries and aquaculture and animal product technologies. Well- equipped classrooms with state of art teaching infrastructure, air-conditioned library with latest arrivals of textbooks and research journals, three veterinary clinics (Teaching Hospitals) and livestock and poultry farms to provide hands-on experience.

MISSION STATEMENT

To provide efficient veterinary and para-veterinary manpower and expertise for promoting the welfare of the total socio-economic spectrum of communities of Pakistan in general and the province of Sindh by improving animal health, welfare, production and performance, veterinary public health and conservation of animal genetic resources.

JOB OPPORTUNITIES

The graduates have job opportunities in Poultry and livestock Institutes, Livestock and Dairy Development Departments, Biological Product Units, Poultry & livestock Extension Department, Disease Diagnostic Laboratories.

Public and Private Universities, Animal Quarantine Department, Agriculture Development Bank of Pakistan (ADBP) and other Scheduled banks as Agriculture / Livestock / Poultry Credit Officer, and all other government jobs through competitive examinations, beside this self-employment opportunity as a professional veterinarian.

DEPARTMENT OF ANATOMY & HISTOLOGY

Department of Anatomy and Histology is a part of Faculty of Animal Husbandry & Veterinary Sciences. It was established in 1987, provides basic scientific knowledge to the undergraduates related to Veterinary Anatomy, Histology and Embryology of animals and birds. The collaboration of this department with other disciplines of the faculty, both in research and teaching gives an excellent opportunity for conducting advance research in the various fields.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST		
1.	Dr. Jameel A. Gandahi Professor & Chairman	PhD (China)	Veterinary Anatomy and Histology		
2.	Dr. Syed Ghiasuddin Shah Rashdi Professor	PhD (PAK)	Veterinary Anatomy and Histology		

3.	Mr. Ghulam	MPhil (SAU)	Veterinary	
	Murtaza Lochi		Anatomy an Histology	ıd
	Lecturer (Contract)		Thistology	

COURSES OFFERED FOR MPHIL				
CODE TITLE OF COURSE C				
SEMESTER-I	SEMESTER-I			
V.AN.701	Histological and Histochemical	3(2-1)		
V.AN.703	Advanced Histology (General)	3(2-1)		
V.AN.705	Mammalian Embryology	3(2-1)		
	Minor	3 (2-1)		
SEMESTER-II				
V.AN.701 Histological and Histochemical 3(2-1)				
V.AN.703 Advanced Histology (General) 3(2		3(2-1)		
V.AN.705	Mammalian Embryology	3(2-1)		
	Minor	3 (2-1)		
SEMESTER-III &	SEMESTER-III & IV			
Research Work	Research Work Synopsis Seminar & Approval, Data			
(Major Field)	Collection / Recording, Data Analysis, Thesis Write up, Seminar	10 (0- 10)		

COURSES OFFERED FOR PHD					
CODE	CODE TITLE OF COURSE C.HRS.				
SEMESTER-I	SEMESTER-I				
V.AN.711	V.AN.711 Surgical Anatomy 3 (2-1)				
V.AN.713 Techniques in Electron Microscopy		3 (2-1)			
V.AN.715 Special Problem 1 (1-0)					
	Minor	3 (2-1)			

SEMESTER-II				
V.AN.712	Neuroanatomy	3 (2-1)		
V.AN.714	Advanced Histology (Systemic)	3 (2-1)		
V.AN.716	Seminar on current topic	1 (1-0)		
Minor 3 (2-1)				
SEMESTER-III to	X			
Research work	Comprehensive Examination, Synopsis Seminar & Approval, Data Collection, Data Analysis, Thesis Writeup, Seminar & Viva-voce Examination	20 (0-20)		

DEPARTMENT OF VETERINARY PHYSIOLOGY AND BIOCHEMISTRY

The Department of Physiology and Biochemistry is an important segment of the Faculty of Animal Husbandry and Veterinary Sciences, Sindh Agriculture University Tandojam. The -department possesses highly qualified teaching staff. This department offers post-graduate courses (MPhil and PhD Degree) in the field of Veterinary Physiology and Biochemistry. The department has excellent facilities for teaching, research, seminars, trainings, and workshops. The laboratories of the department have state of the art equipment and computational facilities for hematological, biochemical, proteomic, and physiological studies.

	AC	ADEMIC STAFF	
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST
1	Dr. Allah Bux Kachhiwal Professor & Chairman	PhD (SAU)	Veterinary surgery and physiology
2.	Dr. Mool Chand Malhi Associate Professor	PhD (China)	Rumen physiology and Selenium
3.	Dr. Saeed Ahmed Soomro Associate Professor	PhD (SAU)	Veterinary Pathological physiology
4.	Dr. Jamila Soomro Associate Professor	PhD (China)	Rumen microbes and selenium

COURSES OFFERED FOR MPHIL					
CODE TITLE OF COURSE C.HRS					
SEMESTER-I					
PHYS-701	PHYS-701 General Principles of Physiology 3(2+1)				
PHYS-703 Advance Physiology of Nerve and 3(2+1)					
PHYS-705 Advance Analytical Biochemistry		3 (2+1)			
	Minor	3 (2-1)			
SEMESTER-II					
PHYS-702	PHYS-702 Advance Physiology of Respiratory 3(2+1)				
PHYS-704	Advance Physiology of Digestion and	3(2+1)			
PHYS-706 Advance Endocrinology					

	Minor	3 (2-1)
SEMESTER-III & IV		
Research Work Synopsis Seminar & Approval, Data		10 (0-
(Major Field) Collection / Recording, Data		10)
	Analysis, Thesis Write up, Seminar	/

COURSES OFFERED FOR PHD			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
PHYS-711	Advance Physiology of Kidney and Sweet Glands	3 (2-1)	
PHYS-713	Advance physiology of Steroid Hormone	3 (2-1)	
PHYS- 715	Special Problem	1 (1-0)	
	Minor		
SEMESTER-II			
PHYS-712	Advance Enzymology	3 (2-1)	
PHYS-714	Advance Physiology and Biochemistry of Digestion		
PHYS-716	Seminar on Current Topic	1 (1-0)	
	Minor		
SEMESTER-III to X			
Research work Comprehensive Examination, Synopsis Seminar & Approval, Data Collection,		20 (0- 20)	

	Data Analysis, Thesis Writeup, Seminar & Viva-voce Examination	
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DEPARTMENT OF VETERINARY PHARMACOLOGY

Veterinary Pharmacology is a scholarly discipline with its extraordinary distinctive implementation recognition clinically in animals. It highlights comprehensive knowledge of the kinetics and effects of chemical agents having therapeutic value or toxicity of these agents on biological systems. This department has a dynamic contribution to the M.Phil and PhD degree programs through its various courses designed to expand the knowledge regarding the application of drugs and thus enabling the postgraduate students to rationally understand the selection of appropriate therapeutic agents in managing the sick animals, execution of disease prevention, treatment of diseases and also to plan and handle research methodology strategies. Hence, the department has a strong and vibrant postgraduate program offering M.Phil and PhD degrees in the field of Veterinary Pharmacology.

	ACADEMIC STAFF			
SR.	NAME &	QUALIFICATION	RESEARCH	
NO.	DESIGNATION		INTEREST	
1	Dr. Shamsuddin	PhD (China)	Veterinary	
	Bughio		Toxicology and pharmacology	
	Professor &		pharmacology	
	Chairman			

2.	Dr. Rehana	PhD (China)	Veterinary Pathology
	Buriro		and pharmacology
	Professor		

COURSES OFFERED FOR MPHIL			
CODE TITLE OF COURSE			
SEMESTER-I			
PHAR-701	General Pharmacology	3(2-1)	
PHAR-703	Advanced Pharmacology-I	3(2-1)	
PHAR-705	Pharmacology of ANS	3(2-1)	
	Minor	3 (2-1)	
SEMESTER-II			
PHAR-702	Advanced Pharmacology-II	3(2-1)	
PHAR-704	Pharmacology of Central Nervous System 3(2-1		
PHAR-706	Pharmacology of Autacoids	3(2-1)	
	Minor	3 (2-1)	
SEMESTER-III & IV			
Research Work (Major Field)	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar & <i>Viva voce</i> Examination	10 (0- 10)	

	COURSES OFFERED FOR PHD			
CODE	CODE TITLE OF COURSE			
SEMESTER-I				
PHAR-711	Chemotherapy	3 (2-1)		
PHAR-713	General Therapy	3 (2-1)		
PHAR-715	Special Problem	1 (1-0)		
	Minor	3 (2-1)		
SEMESTER-II				
PHAR-712	Pharmacotherapy	3 (2-1)		
PHAR-714	General Toxicology	3 (2-1)		
PHAR-716	R-716 Seminar on current topic			
	Minor	3 (2-1)		
SEMESTER-III to X				
Research work	Comprehensive Examination, Synopsis Seminar & Approval, Data Collection, Data Analysis, Thesis Writeup, Seminar & Viva- voce Examination	20 (0-20)		

DEPARTMENT OF ANIMAL BREEDING AND GENETICS

The Department is to teach and performed research in the discipline of Animal Breeding, Genetics, Genomics, studies on livestock species. Along with doing statistical genetics data analysis with bioinformatic tools to promote advanced research for improving qualitative and quantitative traits in farm animals. The following main mission and objective of the Department of Animal Breeding & Genetics.

MISSION

- I. The mission is to produce highly educated, skills postgraduate students in the Animal Breeding & Genetics/Animal Genomics area to serve nations in the animal science field in the country.
- II. The mission is our native livestock breeds recognized globally as the best ones.

OBJECTIVE

- I. To improve the phenotypic traits performance of indigenous Dairy/Meat type breeds of buffalo, cattle, and goat species in Sindh province.
- II. To increase genetic diversity and conservation strategies to protect pure breeds from loss of germplasm resources including goat, sheep, horse, donkey, camel in the province and country.
- III. To support and help livestock farmers and villagers in the selection of superior animals of native and exotic cattle breeds for breeding to improve the growth and income of livestock farmers.

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
	Dr. Hubdar Ali Kaleri Associate Professor & Chairman	PhD (China)	Animal Breeding Genetics and Reproduction	

COURSES OFFERED FOR MPHIL

CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
ABG-701	General Genetics	3(2-1)	
ABG-703	Breeding of Farm Animals	3(2-1)	
ABG-705	Statistical Methods for Bioscience	3(2-1)	
	Minor	3 (2-1)	
SEMESTER-II			
ABG-702	Population Genetics	3(2-1)	
ABG-704	Animal Breeding Plans	3(2-1)	
ABG-706	Theory of Inbreeding	3(3-0)	
	Minor	3 (2-1)	
SEMESTER-III & IV			
ABG-710	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar & Viva voce Examination		

COURSES OFFERED FOR PHD			
CODE	CODE TITLE OF COURSE C.H		
SEMESTER-I			
ABG-711	Theory of Genetic Selection	3(2-1)	
ABG-713	3 Advance Animal Breeding 3(2-1)		
ABG-715	Special Problem 1(1		
Minor 3(2-		3(2-1)	
SEMESTER-II			
ABG-712 Biometrical Genetics 3(2-1)		3(2-1)	
ABG-714	Experimental Techniques in Population Genetics	3(2-1)	

ABG-716	Seminar on current topic 1(0-		
	Minor	3(2-1)	
SEMESTER-III to X			
ABG-720	Comprehensive Examination, Synopsis	20 (0-	
	Seminar & Approval, Data Collection,	20)	
	Data Analysis, Thesis Writeup,		
	Seminar & Viva-voce Examination		

DEPARTMENT OF LIVESTOCK MANAGEMENT

The department of livestock management is one of the key departments in the Faculty of Animal Husbandry and Veterinary Sciences. The department maintains experimental herd of Kundhi buffalo, Red Sindhi, Tharparkar and crossbred cattle including a flock of sheep and goat. It delivers the teaching, research, and outreach functions. Postgraduate student's research focuses on sustainable livestock production systems, small- and large-scale dairy farming, livestock business management and farm profitability analysis.

	ACADEMIC STAFF			
SR.	NAME &	QUALIFICATION	RESEARCH	
NO.	DESIGNATION		INTEREST	
1	Dr. Huma	PhD (SAU)	Animal Production	
	Rizwana			
	Assistant			
	Professor &			
	Chairperson			
2	Dr. Muhammad	PhD (China)	Livestock	
	Naeem Rajput		Management /	
	Assistant		Livestock Breed and Nutritional	
	Professor		Improvement.	

3 Dr. Atique	PhD (Malaysia)	Animal Production /
Ahmed Behan		Livestock Management
Lecturer (Adhoc)		Wanagement

COURSES OFFERED FOR MPHIL		
CODE	TITLE OF COURSE	C.HRS.
SEMESTER-I		
LM-701	Advanced Dairy Production	3(2-1)
LM-703	Advanced Wool and Hair Science	3(2-1)
LM-705	Advanced Meat Production	3(2-1)
	Minor	3 (2-1)
SEMESTER-II		
LM-702	Milk Secretion and Lactation	3(2-1)
LM-704	Livestock Industry	3(2-1)
LM-706	Management of Calves and Heifers	3(2-1)
	Minor	3 (2-1)
SEMESTER-III & IV		
LM-710	Synopsis Seminar & Approval, Data	10 (0-
	Collection / Recording, Data	10)
	Analysis, Thesis Write up, Seminar &	

COURSES OFFERED FOR PHD			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
LM-711	Trends and Potentials of Milk and	3(2-1)	
LM-713	Range Livestock Production	3(2-1)	
LM-715	Special Problem	1(0-1)	
	Minor	3(2-1)	
SEMESTER-II			
LM-712	Recent Advances in Livestock	3(2-1)	

LM-714	Management of Dry Cows and	3(2-1)
LM-716	Seminar on Current Topic 1(0-	
	Minor	3(2-1)
SEMESTER-III to X		
LM-720	Comprehensive Examination, Synopsis	20 (0-
	Seminar & Approval, Data Collection,	20)
	Data Analysis, Thesis Writeup,	
	Seminar & Viva-voce Examination	

DEPARTMENT OF POULTRY HUSBANDRY

The Department of Poultry Husbandry offers basic and advanced courses of Poultry Science for the students of DVM, M.Phil. and PhD. This department has well established laboratory, hatchery, Poultry Experimental Station including modern controlled environment shed which provide opportunities to learn science by practice for both undergraduate and post-graduate students. The practical teachings involve farm visits and laboratory demonstrations. It also caters to the needs of poultry industry of the area by offering periodical trainings, seminars, conference, and workshops. The Department has significantly contributed through its research to improve production, health and welfare of poultry and other birds. Department also offers internship facilities in poultry farming. In addition, the department provides opportunities to rural masses particularly woman through short trainings courses in poultry farming.

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
1	Dr. Nasir Rajput Associate Professor & Chairman	PhD (China)	Poultry Sciences / Nutritional Regulation of Poultry Production & Health	

2	Dr. Imadad Hussain Leghari Associate Professor	PhD (China)	Vet. Medicine / Avian Reproduction & Hatchery Management
3	Dr. Azizullah Memon Assistant Professor	PhD (SAU)	Animal Nutrition / Poultry Nutrition
4	Dr. Ahmed Ali Moriyani Assistant Professor	PhD (SAU)	Poultry Husbandry / Avian Health

COURSES OFFERED FOR MPHIL			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
POUL-701	Advance Poultry Breeding &	3(2-1)	
POUL-703	Poultry Housing & Environment	3(2-1)	
POUL-705	Advanced Poultry Production	3(2-1)	
	Minor	3 (2-1)	
SEMESTER-II			
POUL-702	Hatchery Operation & Management	3(2-1)	
POUL-704	Advance Poultry Feeding	3(2-1)	
POUL-706	Recent Advances in Poultry Sciences	3(2-1)	
	Minor	3 (2-1)	
SEMESTER-III & IV			
POUL-710	Synopsis Seminar & Approval, Data	10 (0-	
	Collection / Recording, Data	10)	
	Analysis, Thesis Write up, Seminar &		

COURSES OFFERED FOR PHD			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
POUL-711	Advance Layer Production	3 (2-1)	
POUL-713	Poultry Health & Hygiene	3 (2-1)	
POUL-715	Special Problem	1 (1-0)	
	Minor	3 (2-1)	
SEMESTER-II			
POUL-712	Production of Table Poultry	3 (2-1)	
POUL-714	Avian Physiology	3 (2-1)	
POUL-716	Seminar on current topic	1 (1-0)	
	Minor	3 (2-1)	
SEMESTER-III to	X		
POUL-720	Comprehensive Examination, Synopsis Seminar & Approval, Data Collection, Data Analysis, Thesis Writeup, Seminar & Viva-voce Examination	20 (0- 20)	

DEPARTMENT OF ANIMAL NUTRITION

This is one of the important departments of Faculty of Animal Husbandry and Veterinary Sciences. It contributes to the DVM degree program by offering several courses with strong practical teachings and trainings. The department has strong post graduate program offering M.Phil. and PhD degrees. The department has well equipped laboratories with state-of-the-art equipment. It also provides access to the farming community and other stakeholders in the Feed Industry for quantitative and qualitative testing of various feedstuffs used in the preparation of least cost rations and extend assistance in the efficient utilization of conventional and non-conventional feed resources.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST		
1	Dr. Gulfam Ali Mughal Associate Professor & Chairman	PhD (China)	Silage Making		
2	Dr. Rani Abro Associate Professor	PhD (Sweden)	Fish Nutrition		
3	Dr. Shoaib Ahmed Pirzado Assistant Professor	PhD (China)	Poultry Nutrition		
4	Dr. Farman Ali Siyal Lecturer (Adhoc)	PhD (China)	Poultry Nutrition		

COURSES OFFERED FOR MPHIL		
CODE TITLE OF COURSE C.HR		C.HRS.
SEMESTER-I		
AN-701	Analytical Techniques in Animal	3(2-1)
AN-703	Feeds and feeding	3(2-1)
AN-705	Advanced Vitamin Nutrition	3(2-1)
	Minor from related field	3 (2-1)
SEMESTER-II		
AN-702	Energy Metabolism	3(2-1)
AN-704	Ruminant Nutrition	3(2-1)
AN-706	Advanced Mineral Nutrition	3(2-1)
	Minor from related field	3 (2-1)
SEMESTER-III & IV		

AN-710	Synopsis Seminar & Approval, Data Collection / Recording, Data	10 (0- 10)
	Analysis, Thesis Write up, Seminar &	

COURSES OFFERED FOR PHD			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
AN-711	Reactions in Rumen	3 (2-1)	
AN-713	Advanced Animal Feed Industry	3 (2-1)	
AN-715	Special Problem	1 (1-0)	
	Minor from related field	3 (2-1)	
SEMESTER-II			
AN-712	Avian Nutrition	3 (2-1)	
AN-714	Recent Advances in Animal Nutrition	3 (2-1)	
AN-716	Seminar on current topic	1 (1-0)	
	Minor from related field	3 (2-1)	
SEMESTER-III to	X		
AN-720	Comprehensive Examination, Synopsis	20 (0-	
	Seminar & Approval, Data Collection,	20)	
	Data Analysis, Thesis Writeup,		
	Seminar & Viva-voce Examination		

DEPARTMENT OF ANIMAL PRODUCTS TECHNOLOGY

The department exists with the contemporary name "Animal Products Technology" since 2010; previously it was named as "Dairy Technology". Animal Products Technology consists of Milk Processing Lab, Dairy/Meat Chemistry Lab, Dairy/Meat Microbiology Lab and a modern Slaughterhouse (Demonstration Unit). The prime focus of research is quality and safety of milk, meat and their products. The resulting

outcomes of the research are applied to educate students by adding results in their syllabus, aware industry through scientific literature and to aware common people through organizing seminars. The trainees may start their own dairy business to improve the livelihood of their families which adds in poverty alleviation. The department offers various courses at undergraduate and post-graduate levels to meet the requirements of Higher Education Commission and Pakistan Veterinary Medical Council.

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
1	Dr. Syed Atta Hussain Shah Associate Professor & Chairman	PhD (Malaysia)	Public Health/Food Safety	
2	Dr. Gul Bahar Khaskheli Assistant Professor	PhD (China)	Dairy Technology	
3	Dr. Munir Ahmed Jamali Lecturer (Adhoc)	PhD (China)	Meat Science	
4	Dr. Ghulam Shabir Barham Lecturer (Adhoc)	PhD (SAU)	Animal Products Technology	

COURSES OFFERED FOR MPHIL			
CODE TITLE OF COURSE C.HRS.			
SEMESTER-I			
APT-701 Dairy Chemistry 3 (2-1)			

APT-703	Dairy and Meat Microbiology	3 (2-1)
APT-705	Judging of Dairy and Meat products	3 (2-1)
	Minor	3 (2-1)
SEMESTER-II		
APT-702	Processing of Milk and Milk Products	3 (2-1)
APT-704	Processing of Meat and Meat	3 (2-1)
APT-706	Animal Fiber and Leather Technology	
	Minor	3 (2-1)
SEMESTER-III &	ĪV	
AN-710	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar & Viva voce Examination	10 (0- 10)

COURSES OFFERED FOR PHD			
CODE	C.HRS.		
SEMESTER-I			
APT-711	Advanced Dairy Chemistry	3 (2-1)	
APT-713	Advanced Dairy and Meat	3 (2-1)	
APT-715	Special Problem	1 (1-0)	
	Minor	3 (2-1)	
SEMESTER-II			
APT-712	Advanced Dairy Products Technology	3 (2-1)	
APT-714	Advanced Technologies for Meat	3 (2-1)	
APT-716	Seminar on current topic	1 (1-0)	
	Minor	3 (2-1)	
SEMESTER-III to X			

APT-720	Comprehensive Examination, Synopsis	20 (0-
	Seminar & Approval, Data Collection,	20)
	Data Analysis, Thesis Writeup,	
	Seminar & Viva-voce Examination	

DEPARTMENT OF VETERINARY MICROBIOLOGY

The Department of Veterinary Microbiology is one of the most important departments of the Faculty of Animal Husbandry and Veterinary Sciences. Established in 1971, it aims to equip DVM graduates with the fundamental knowledge of bacteriology, virology, immunology, and other related aspects to broaden their understanding of disease mechanism and inherent body defenses against the diseases of veterinary importance.

The departmental academic staff and post graduate scholars conduct basic and applied research aimed at isolation, identification, characterization, bio-typing and molecular biology of bacterial organisms. The Department of Veterinary Microbiology has developed its bilateral linkages, particularly on research side with different laboratories and institutes of the country where post-graduate scholars conduct their research for their degree program.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST		
1	Dr. Shahid Hussain Abro Professor & Chairman	PhD (Sweden)	Veterinary Virology		
2	Dr. Asghar Ali Kamboh Associate Professor	PhD (China)	Veterinary Microbiology		

3	Dr. Dildar Hussain Kalhoro Associate Professor	PhD (China)	Veterinary Virology
4	Dr. Hasina Baloch Assistant Professor	PhD (SAU)	Veterinary Microbiology

COURSES OFFERED FOR MPHIL				
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER-I				
MICR-701	Advanced General Bacteriology and	3(2-1)		
MICR-703	Advance immunology	3(2-1)		
MICR-705	Advance Techniques in Molecular	3(2-1)		
	Minor	3 (2-1)		
SEMESTER-II				
MICR-702 Advance Virology 3(2-1)				
MICR-704 Advance systematic bacteriology 3(2)		3(2-1)		
MICR-706 Advance Microbial physiology 30		3(2-1)		
	Minor 3 (2-			
SEMESTER-III &	SEMESTER-III & IV			
MICR-710	Synopsis Seminar & Approval, Data	10 (0-		
	Collection / Recording, Data 10)			
Analysis, Thesis Write up, Seminar &				

COURSES OFFERED FOR PHD				
CODE TITLE OF COURSE C.HRS				
SEMESTER-I	SEMESTER-I			
Micr-711 Advance Veterinary Epidemiology 3 (2-1)				
Micr-713 Vaccine and Vaccinology 3 (2-1)				
Micr-715	Special Problems	1 (1-0)		

	Minor	3 (2-1)		
SEMESTER-II	SEMESTER-II			
Micr-712	Oncogenic and Microbial Genetics	3 (2-1)		
Micr-714	Cell Culture Techniques	3 (2-1)		
Micr-716	Seminar on current topics	1 (1-0)		
	Minor	3 (2-1)		
SEMESTER-III to	X			
Micr-720	Comprehensive Examination, Synopsis	20 (0-		
	Seminar & Approval, Data Collection,	20)		
	Data Analysis, Thesis Writeup,			
	Seminar & Viva-voce Examination			

DEPARTMENT OF VETERINARY PATHOLOGY

Pathology as a discipline primarily involves the understanding of disease processes at macro and micro level. It provides deeper insight into the functional and morphological changes in the tissues and fluids during disease. The product of a veterinary curriculum is a clinician whose main responsibility is the diagnosis and treatment of diseases. The department of Veterinary Pathology offers courses which broaden the understanding of disease processes and help prepare students for clinical sciences. The department has well equipped histopathology and clinical pathology laboratories for practical demonstration and training of students. The department has strong postgraduate program and offers MPhil and PhD in veterinary pathology.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST		
1	Dr. Zaheer Ahmed Nizamani Professor & Chairman	PhD (France)	Veterinary Virology and Pathology		

2	Dr. Fahmida Parveen Associate Professor	PhD (China)	Veterinary Pathology
3	Dr. Tarique Mansoor Samo Assistant Professor	PhD (China)	Veterinary Virology and Immunopathology
4	Dr. Shah Nawaz Kumbhar Assistant Professor	PhD (China)	Veterinary Pathology

COURSES OFFERED FOR MPHIL				
CODE TITLE OF COURSE C.HRS.				
SEMESTER-I				
PATH -701	Advanced General Pathology	3(2-1)		
PATH -703	Diagnostic Techniques in Pathology	3(0-3)		
PATH -705	Ruminant Pathology	3(2-1)		
Minor 3(2-1)				
SEMESTER-II				
PATH -702	Advanced Poultry Pathology-I 3(2-1)			
PATH -704 Advanced Oncology 3(2-1)		3(2-1)		
PATH -706	PATH -706 Advanced Clinical Pathology 3(2-1			
Minor 3(2-1)		3(2-1)		
SEMESTER-III & IV				
PATH -710	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar &	10 (0- 10)		

COURSES OFFERED FOR PHD					
CODE TITLE OF COURSE C.H					
SEMESTER-I	SEMESTER-I				
PATH-711	Advanced Poultry Pathology-II	3 (2-1)			
PATH-713	Equine Pathology	3 (2-1)			
PATH-715	Special Problem	1 (1-0)			
	Minor	3 (2-1)			
SEMESTER-II					
PATH-712	Camel Pathology	3 (2-1)			
PATH-714	Canine and Feline Pathology 3 (
PATH-716	Seminar on current topic				
	Minor	3 (2-1)			
SEMESTER-III to	X				
PATH-720	Comprehensive Examination, Synopsis	20 (0-			
	Seminar & Approval, Data Collection, 20)				
	Data Analysis, Thesis Writeup,				
	Seminar & Viva-voce Examination				

DEPARTMENT OF VETERINARY PARASITOLOGY

Department of Veterinary Parasitology aims to achieve excellence in both teaching and research in the field of Parasitology. Our goal is to discover and implement novel strategies to control parasitic diseases that affect the health of millions of animals worldwide. We employ cutting-edge research in genomics, cell biology, immunology, epidemiology, entomology, and biochemistry to discover new ways to combat parasitic disease. Through our teaching and training programs, we aim to educate and mentor the next generation of Parasitologists.

The Department of Veterinary Parasitology is staffed by an outstanding team of scientists at faculty, striving to contribute in veterinary health by teaching and research. The Department has a distinguished history in parasitic disease research, particularly on tick-transmitted diseases. It has been a national leader in both research and training of veterinary parasitologists from the Pakistan as well as overseas. The Department contributes to awarding DVM, M.Phil. and PhD degrees. Besides, it also offers short trainings in diagnostics of parasitic diseases.

The Department of Parasitology has been renovated by developing a state-of-art Molecular Parasitology Laboratory equipped with most-modern equipment required for cutting edge research. The department in future to create an infra-structure which includes the creation of a computer lab for epidemiologic research, bioinformatics, and genomics laboratories.

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
1	Dr. Abdullah G. Arijo Professor & Chairman	PhD (UK)	Veterinary Parasitology, Entomology and Protozoalogy	
2	Dr. Bachal Bhutto Professor	PhD (SAU)	Veterinary Parasitology, Epidemology of Parasitic Diseases,	
3	Dr. Javed Ali Gadahi Associate Professor	PhD (China)	Veterinary Parasitology, Helminthology Parasitic Biotechnology, Immunology	
4	Dr. Feroza Soomro Assistant Professor	PhD (SAU)	Veterinary Parasitology, Poultry Parasitology	

	ubair ed Leghari rer (Adhoc)	PhD (China)	Veterinary Parasitology, Parasitology, Biotechnology Immunology	
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COURSES OFFERED FOR MPHIL				
CODE TITLE OF COURSE C.HRS				
SEMESTER-I				
PARA-701	Advanced Protozoology	3 (2-1)		
PARA-703	Technique in Parasitology	3 (2-1)		
PARA-705	Biotechnology for Parasitic Control	3 (2-1)		
Minor 3 (2-1)				
SEMESTER-II				
PARA-702	Medical Entomology	3 (2-1)		
PARA-704	Chemotherapy of Parasitic Disease 3 (2-1)			
PARA-706	ARA-706 Epidemiology of Parasitic Diseases 3 (2)			
	Minor	3 (2-1)		
SEMESTER-III & IV				
PARA-710	Synopsis Seminar & Approval, Data	10 (0-		
	Collection / Recording, Data 10)			
Analysis, Thesis Write up, Seminar &				

COURSES OFFERED FOR PHD				
CODE TITLE OF COURSE C.HRS.				
SEMESTER-I				
PARA-711	PARA-711 Immunology of Parasitic Diseases 3 (2-1)			
PARA- 713	PARA- 713 Techniques in Molecular Parasitology 3 (2-1)			
PARA-715 Special Problem 1 (1-0)				

	Minor	3 (2-1)		
SEMESTER-II	SEMESTER-II			
PARA-712	Medical Protozoology and	3 (2-1)		
PARA-714	Wildlife Parasitology	3 (2-1)		
PARA-716	Seminar on current topic 1 (1			
	Minor	3 (2-1)		
SEMESTER-III to	X			
PARA-720	Comprehensive Examination, Synopsis	20 (0-		
	Seminar & Approval, Data Collection, 20)			
	Data Analysis, Thesis Writeup,			
	Seminar & Viva-voce Examination			

DEPARTMENT OF ANIMAL REPRODUCTION

Department of Animal Reproduction was established in the year 1984 under the project "Establishment of Department of Animal Reproduction" at Faculty of Animal Husbandry & Veterinary Sciences, the project was institutionalized by the University in the year 1988. Our fully accredited department emphasize on teaching, research and clinical resource management. Our academic vision focuses on preparing our graduate and postgraduate students as specialists in obstetrics, gynecology, reproductive endocrinology, infertility, artificial insemination, pregnancy diagnosis & reproductive biotechnology. The department provides a potential place for internship program for DVM students. Since the established, it has remained a constant source of short trainings and refresher courses to the field veterinarians and para-vet staff offered in collaboration with Washington State University (USA). A new "Animal Genetic Resource Conservation Center" will be equipped with state of art facilities for semen processing, preservation, embryo transfer and other reproductive bio technologies.

	ACADEMIC STAFF				
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST		
1	Dr. Pershotam Khatri Professor & Chairman	PhD (Germany)	Theriogenology & Cytogenetics		
2	Dr. Akeel Ahmed Memon Professor	PhD (Malaysia)	Reproductive Endocrinology		
3	Dr. Nazar Ali Korejo Associate Professor	PhD (China)	Endocrinology and Stress Management		
4	Dr. Asmatullah Kaka Assistant Professor	PhD (Malaysia)	Theriogenology and Cytogenetics		

COURSES OFFERED FOR MPHIL			
CODE	TITLE OF COURSE C.HRS.		
SEMESTER-I			
A-REP-701	Reproduction of Farm Animals	3 (2-1)	
A-REP -703	Biotechnology & Semen Preservation 3 (Techniques		
A-REP -705	Equine Reproduction	3 (2-1)	
Minor 3		3 (2-1)	
SEMESTER-II			
A-REP -702 Infertility and Genital Diseases 3 (2-1)		3 (2-1)	
A-REP -704 Advanced Obstetrics 3 (2-1)		3 (2-1)	

A DED 706	Commonstino Domas de etico	2 (2.1)		
A-REP -706	Comparative Reproduction	3 (2-1)		
	Minor	3 (2-1)		
SEMESTER-III &	SEMESTER-III & IV			
A-REP -710	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar & Viva voce Examination			
	URSES OFFERED FOR PHD			
CODE	TITLE OF COURSE	C.HRS.		
SEMESTER-I				
A-REP -711	Physiology & Reproduction	3(2-1)		
A-REP -713	Animal Biotechnology	3(2-1)		
A-REP -715	Special Problem	1(1-0)		
	Minor	3(2-1)		
SEMESTER-II				
A-REP -712	Comparative Reproduction in Farm Animals	3(2-1)		
A-REP -714	Artificial Insemination & Semen Preservation Techniques	3(2-1)		
A-REP -716	Seminar on current topic	1(0-1)		
	Minor	3(2-1)		
SEMESTER-III to	X			
A-REP -720	Comprehensive Examination, Synopsis Seminar & Approval, Data Collection, Data Analysis, Thesis Writeup, Seminar & Viva-voce Examination	20 (0-20)		

DEPARTMENT OF VETERINARY MEDICINE

The department of Veterinary Medicine delivers excellence in veterinary education and research by preparing highly skilled trained veterinary professionals. The Department offers health care facilities to the nearby farmers through well qualified Faculty. The main mission of the department is to provide quality education and research, it enables students to discover, evaluate and implement new vistas of knowledge. The department of Veterinary Medicine has strong postgraduate program, it offers credit hours in the M.Phil and PhD curriculum as mandated by Higher Education Commission and Pakistan Veterinary Medical Council.

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
1	Dr. Amjad Hussain Mirani Professor & Chairman	PhD (SAU)	Ethnoveterinary Medicine	
2	Dr. Abdul Latif Bhutto Professor	PhD (UK)	Veterinary Medicine	
3	Dr. Jam Kashif Zaman Sahito Associate Professor	PhD (China)	Veterinary Clinical Medicine	
4	Dr. Riaz Ahmed Leghari Associate Professor	PhD (China)	Veterinary Clinical Medicine	

COURSES OFFERED FOR MPHIL			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-I			
MED-701	Design and Analysis of Clinical Trials	3(1-2)	
MED-703	Veterinary Neonatology	3(2-1)	
MED-705	Epidemiological Approaches to Disease investigation in control	3(2-1)	
	Minor	3 (2-1)	
SEMESTER-II			
MED-702	Clinical Laboratory Aids in Diagnosis 3(
MED-704	Zoo and Wild Animal Medicine		
MED-706 Advanced Dairy Herd Health		3(2-1)	
Minor		3 (2-1)	
SEMESTER-III	I & IV		
MED-710	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar & Viva voce Examination	10 (0-10)	

COURSES OFFERED FOR PHD			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-	SEMESTER-I		
MED-711	Laboratory Animal Medicine	4 (3-1)	
MED-713	Advanced Vet. Preventive Medicine	4 (3-1)	
MED-715	Special Problem	2 (2-0)	
	Minor	4 (3-1)	

SEMESTER-II			
MED-712	Vet. Public Health	4 (3-1)	
MED-714	Diseases of the mammary glands of dairy animals	4 (3-1)	
MED-716	Seminar on current topic	2 (2-0)	
	Minor	4 (3-1)	
SEMESTER-	SEMESTER-III to X		
MED-720	Comprehensive Examination, Synopsis Seminar & Approval, Data Collection, Data Analysis, Thesis Writeup, Seminar & Viva-voce Examination	20 (0-20)	

DEPARTMENT OF SURGERY AND OBSTETRICS

This clinical department focuses on teaching and research in the areas of veterinary surgery, anesthesiology, and diagnostic imaging to produce well trained veterinary graduates for improving health and production of farm animals as well as welfare of pet and wild animals. The department is strong in continuum of education and training programs which are organized regularly with collaboration of international and national organizations for the benefit of students, veterinarians, researchers, teachers, and farmers. It has highly qualified staff, well equipped laboratories, a library, and teaching hospital with indoor facilities for small and large animals.

	ACADEMIC STAFF			
SR. NO.	NAME & DESIGNATION	QUALIFICATION	RESEARCH INTEREST	
1	Dr. Ahmed Nawaz Tunio Professor & Chairman	PhD (Malaysia)	Small and Large Animal Surgery	

COURSES OFFERED FOR MPHIL		
CODE	TITLE OF COURSE	C.HRS.
SEMESTER-I		
SURG- 701	Advanced Small Animal surgery	3(2-1)
SURG- 703	Advanced Anesthesiology and Intensive Care	3(2-1)
SURG- 705	Advanced Surgical Techniques	3(2-1)
	Minor	3 (2-1)
SEMESTER-II	SEMESTER-II	
SURG- 702	Advanced Orthopedic Surgery.	3(2-1)
SURG- 704	Advanced Radiology and Ultrasonography.	3(2-1)
SURG- 706	Advanced Ruminant surgery	3(2-1)
	Minor	3 (2-1)
SEMESTER-III & IV		
SURG- 710	Synopsis Seminar & Approval, Data Collection / Recording, Data Analysis, Thesis Write up, Seminar & <i>Viva voce</i> Examination	10 (0-10)

COURSES OFFERED FOR PHD			
CODE	TITLE OF COURSE	C.HRS.	
SEMESTER-	SEMESTER-I		
SURG- 711	Advanced Soft Tissue Surgery	3 (2-1)	
SURG- 713	Advanced Equine Surgery	3 (2-1)	
SURG- 715	Special Problem	1 (1-0)	
	Minor	3 (2-1)	
SEMESTER-	SEMESTER-II		
SURG- 712	Ophthalmic and Auricular Surgery	3 (2-1)	
SURG- 714	Avian Wild and Zoo Animal Surgery	3 (2-1)	
SURG- 716	Seminar on current topic	1 (1-0)	
	Minor	3 (2-1)	
SEMESTER-III to X			
SURG- 720	Comprehensive Examination, Synopsis Seminar & Approval, Data Collection, Data Analysis, Thesis Writeup, Seminar & Viva-voce Examination	20 (0-20)	



POSTGRADUATE ADMISSION POLICY 2022

ADMISSION POLICY 2022 (POSTGRADUATE DEGREE PROGRAMS)

1. Admission Policy Committee

Chairman

1. Dr. Fateh Muhammad Marri, Vice-Chancellor, Sindh Agriculture University Tandojam

Members

- 2. Dr. A. Q. Mughal, Professor Emeritus & Ex-VC. SAU Tandojam
- 3. Dr. Khalil Ahmed Ibupoto, Vice-Chancellor. SALU Khairpur Mir
- 4. Dr. Qamaruddin Chachar, Dean, Faculty of Crop Production
- 5. Dr. Aijaz Ali Khooharo, Dean, Faculty of Agricultural Social Sciences
- 6. Dr. Ghiasuddin Shah, Dean, Faculty of Animal Husbandry and Veterinary Sciences
- 7. Prof. Dr. Altaf Ali Siyal, Dean, Faculty of Agricultural Engineering
- 8. Dr. Abdullah G. Arijo, Advisor (Academics) to Vice-Chancellor, SAU Tandojam
- 9. Dr. Inayatullah Rajper, Chairman, Department of Soil Science
- 10. Dr. Bachal Bhutto, Professor, Department of Veterinary Parasitology
- 11. Dr. Zia Ul Hassan Shah, Advisor (P&D) to Vice-Chancellor, SAU Tandojam
- 12. Dr. Zaheer Ahmed Nizamani, Chairman, Department of Veterinary Pathology
- 13. The Director Advanced Studies, SAU Tandojam

- 14. The Registrar, SAU Tandojam
- 15. The Controller of Examinations, SAU Tandojam
- 16. The Director Finance, SAU Tandojam

2. General Instructions

- Admission to all postgraduate degree programs is made according to the policy and the rules framed by the university. The rules of admission described below are subject to modification by the statutory bodies of the university as and when considered necessary.
- ii. In case a candidate provides incorrect information and/or false certificates/documents detected before or at any stage after admission, his/her admission shall be canceled.
- iii. An applicant registered with any other University / Institution / College, if selected at Sindh Agriculture University, Tandojam shall be admitted in M.Sc (Agri.) Hons / MS / M.E / MSIT / M. Phil / PhD only after cancellation of his / her registration / admission in other academic institution. Any proof of dual admission shall result in cancellation of admission at Sindh Agriculture University Tandojam.
- iv. An applicant previously admitted at any other University / Institution but rusticated/debarred before applying for admission at Sindh Agriculture University Tandojam shall not be considered for admission at this university.
- v. Prospectus and admission form shall be provided to the candidates on payment of the prescribed amount.
- vi. An applicant convicted of moral turpitude shall not be considered for admission.
- vii. The hostel accommodation is not the liability of the University and shall only be provided subject to the availability of space.
- viii. The students, after getting admission at the University, will be issued University Identity Cards by the Directorate of Advanced Studies.

The students must keep their valid University Identity Cards with them while attending the classes, traveling in the point buses, or staying at campus.

- ix. Those students who remained absent from their classes and examinations for any reasons will be considered for re-admission to the appropriate semester where they left their studies, with the appropriate batch subject to the application of other relevant rules, provided the application for re-admission shall be routed through the Dean/ Postgraduate Coordinator of the concerned faculty giving the cogent reasons.
- x. Each student is required to enroll in the University after the finalization of the registration during the 1st Semester of the program and obtain an Enrolment Card accordingly. In case of failure, he/she will not be allowed to appear in the examination of the 1st Semester.

3. Scrutiny Committee

The admission is made through the Scrutiny Committee, which comprised of:

- i. Dean of the Faculty
- ii. Director Advanced Studies
- iii. Chairperson of the Department
- iv. Postgraduate Coordinator

4. Degrees offered in various disciplines

S. No	Discipline	Degree Program	
Facult	Faculty of Crop Production		
1	Agronomy	M.Sc. (Agri.) Hons.	PhD
2	Horticulture	M.Sc. (Agri.) Hons.	PhD
3	Soil Science	M.Sc. (Agri.) Hons.	PhD
4	Crop Physiology	M.Sc. (Agri.) Hons.	PhD
5	Biotechnology	M.Sc. (Agri.) Hons.	PhD

6	Plant Breeding and Genetics	M.Sc. (Agri.) Hons.	PhD
Institu	Institute of Food Science & Technology		
1	Food Sciences and Technology	M.Sc. (Hons.)	PhD
	y of Crop Protection	Tilber (Hons.)	1112
		3.50 (4. 1) **	D1 D
1	Entomology	M.Sc. (Agri.) Hons.	PhD
2	Plant Pathology	M.Sc. (Agri.) Hons.	PhD
3	Plant Protection	M.Sc. (Agri.) Hons.	PhD
Facult	y of Agricultural Social Sciences		
1	Agricultural Economics	M.Sc. (Agri.) Hons.	PhD
2	Agricultural Education Extension	M.Sc (Agri.) Hons.	PhD
3	Statistics	M.Sc (Agri.) Hons.	PhD
4	Rural Sociology	M.Sc. (Agri.) Hons.	PhD
5	Agri. Business Management	M.S.	
Information Technology Centre			
1	Software Engineering and	MSIT (Hons.)	
	Information System		
2	Communication Systems and Networks	MSIT (Hons.)	
Facult	Faculty of Agricultural Engineering		
1	Farm Power and Machinery	M.E.	PhD
2	Irrigation and Drainage	M.E.	PhD
3	Farm Structures	M.E.	PhD
4	Land and Water Management	M.E.	PhD
5	Energy and Environment	M.E.	PhD
Facult	Faculty of Animal Husbandry & Veterinary Sciences		
1.	Animal Products Technology	M.Phil.	PhD
2.	Livestock Management	M.Phil.	PhD
3.	Poultry Husbandry	M.Phil.	PhD
4.	Animal Nutrition	M.Phil.	PhD
5.	Veterinary Physiology and	M.Phil.	PhD
	Biochemistry		

6.	Veterinary Pharmacology	M.Phil.	PhD
7.	Veterinary Parasitology	M.Phil.	PhD
8.	Veterinary Microbiology	M.Phil.	PhD
9.	Veterinary Pathology	M.Phil.	PhD
10.	Anatomy and Histology	M.Phil.	PhD
11.	Animal Reproduction	M.Phil.	PhD
12.	Veterinary Medicine	M.Phil.	PhD
13.	Surgery and Obstetrics	M.Phil.	

5. General Regulations

- 1.2. All applicants seeking admission to postgraduate degree programs shall be required to appear in a GRE-type Pre-admission Test (conducted by the University) or qualified in GRE (Subject)/GRE (General) administrated by Education Testing Services (ETS).
- 1.3. Final merit list of the candidates shall be prepared according to the marks adjusted using the following formula:

EXAMINATION	WEIGHTAGE	
	M.Sc./ MS / M. E / MSIT / M.Phil	PhD
Statement of Purpose or Concept Paper*	10 points	10 points
B.Sc / B.E./ D.V.M	40 points	20 points
M.Sc. / M.E. / MS / M.Phil		20 points
Pre-Admission Test**	50 points	60 points

^{* &#}x27;Statement of Purpose or Concept Paper' shall be part of the Pre-Admission Test.

- 1.4. In the case of degrees and examinations, the points shall be awarded on the overall percentage of marks obtained in the examination (e.g., Intermediate or M.Sc.), if a student secures 78% marks in Intermediate, he/she shall be awarded 7.8 points. Similarly, an aggregate percentage of 70 shall earn 07 points for the graduate degree.
- 1.5. Concerned Chairperson in consultation with Dean of the Faculty shall develop a 'Written Test' for the respective subject of opted specialization.
- 1.6. Postgraduate Coordinators/Chairpersons/Dean of the concerned Faculty shall organize and conduct the 'Written Test'.
- 1.7. The students shall show their original CNIC and admit card for permission to appear in the pre-entry test'
- 1.8. A candidate securing <50% marks in the GRE-type Preadmission Test (conducted by the University) will not be eligible to compete for admission to M.Sc./MS./M.E./ M.Phil. Degree Program.
- 1.9. A candidate secured 60% marks in the GRE-type Pre-admission Test (conducted by the University) shall be eligible to compete for admission to PhD Degree Program.

6. Masters degree Program

6.1 Pre-Requisite Qualification (Eligibility)

Degree Program	Eligibility
M.Sc. (Agri.) Hons.	B. Sc. (Agri.) Hons. in the subject of specialization or equivalent with overall marks not less than 50% in various subjects of Agriculture/ Statistics shall be eligible for admission to M. Sc. (Hons.) in the respective field of study for the Faculties of FCPD, FCPT, and FASS.

^{** &#}x27;Pre-Admission Test' shall consist of 100 questions. Out of 100, 70 are from relevant subjects and 30 were from general knowledge, reasoning, or analytical type.

M.Sc.(Hons.) Food Science	B. Sc. Hons. in Food Science & Technology or equivalent with overall marks not less than 50% shall be	
&	eligible for admission to M. Sc. (Hons.) in Food Science	
Technology	& Technology	
M.E.	Field of specialization for M. E	Required Degree
	Energy and	B.E. (Agri.) / B.E. (Energy &
	Environment	Environmental, Mining, Civil,
		Chemical & Industrial
		Engineering) or equivalent
	Farm Structure	B.E. (Agri.) / B.E. (Civil)/Food
		& Processing Engineering or equivalent
	Irrigation and	B.E. (Agri.) / B.E. (Civil)
	Drainage	
	Farm, Power, and Machinery	B.E. (Agri.) / B.E. (Mechanical)
	Land and Water	B.E. (Agri.) / B.E. (Civil)
	Management	
	B.E. in the subjects of specialization recognized by PEC with overall marks not less than 50% shall be eligible for admission to M.E. in the respective field of study for the Faculty of Agricultural Engineering.	
MSIT		c. in Information Technology,
(Hons.)		Telecommunication, Electronics,
		g, and related fields or equivalent
	shall be eligible for admission to MSIT in the subject of specialization in Information Technology.	
MS. Agri.	B.Sc. (Agri.) Hons.	/ B.E. (Agri.) / B.Sc. (Hons.) in
Business	Food Sciences	and Technology/DVM or
Management		Agri. Business or equivalent (16
		ntion) with overall marks not less
		ligible for admission to MS Agri.
	Business Manageme	nt.

M.Phil.	DVM/ B.Sc. (AH) recognized by PVMC with overall
	marks not less than 50% shall be eligible for admission
	to M.Phil. in the Faculty of Animal Husbandry and
	Veterinary Sciences.

- **6.2.** The Equivalence Committee constituted by Sindh Agriculture University Tandojam shall evaluate candidates possessing degrees other than specified above.
- **6.3.** The prior degree must be B.Sc. (Hons.) [16 years of schooling].
- **6.4.** Duration: Minimum: 02 Years (04 Semesters), Maximum: 03 Years (06 Semesters)
- **6.5.** After expiry of maximum period, the extension may be granted by BASAR, if recommended with sound reasons and justification by the Supervisory Committee, concerned Chairperson and Dean of the Faculty.

7. PhD Degree Program

7.1. Pre-Requisite Qualification (Eligibility)

Degree Program	Eligibility
PhD	M.Sc. (Agri.) Hons. /M.Sc. (Hons.) in Food Sciences & Technology /M.E./MS./M.Phil. in the subject of specialization or equivalent with CGPA of 3.0 or 60% marks in master's degree and research component in master's degree shall be eligible for admission to Ph.D. in the respective field of study.

Pre-Requisite Qualification for FAH&VS

4.2 Candidates possessing M.Sc. (Hons.)/M.Phil. in different disciplines of Veterinary Sciences (Veterinary Microbiology, Vet. Pathology, Vet. Parasitology, Vet. Physiology & Biochemistry, Vet. Medicine, Animal Reproduction, Surgery and Obstetrics Anatomy & Histology)

shall be eligible for admission to Ph.D. in any one of the abovementioned programs of Veterinary Sciences by taking necessary deficiency course(s).

- 4.3 Candidates possessing M.Sc. (Hons.)/M.Phil. in different disciplines of Animal Sciences/Animal Husbandry (Animal Nutrition, Livestock Management, Poultry Husbandry, Animal Product Technology and Animal Breeding and Genetics) shall be eligible for admission to Ph.D. in any one of the abovementioned programs of Animal Sciences/Animal Husbandry by taking necessary deficiency course(s).
- 4.4 The Equivalence Committee constituted by Sindh Agriculture University Tandojam shall evaluate candidates possessing degrees other than specified above.
- 4.5 The prior degree must be M.Sc./M.E./MS./M.Phil. (Or equivalent).
- 4.6 Candidates possessing master's degree in the respective disciplines or closely related discipline(s) as identified and already recommended by the Board of Studies of concerned Departments shall qualify to take admission to Ph.D. program, with the condition to take necessary deficiency course(s) during a program (not more than two in one semester) if recommended by the Supervisory Committee and/or concerned Chairperson.

4.7 Duration

Minimum: 03 years (06 semesters)

Maximum: 05 years (10 semesters)

4.8 After expiry of maximum period, the extension may be granted by BASAR, if recommended with sound reasons and justification by the Supervisory Committee, concerned and Dean of the Faculty.

7.10. Statement of Purpose

3.5.1. Candidates shall write a 'Statement of Purpose or Concept Paper' of 2-3 pages during the Pre-Admission Test/Entry Test.

7.11. Residency Requirement

- 3.6.4. There shall be a residency requirement for at least two years.
- 3.6.5. In-service candidates shall submit the NOC from their parent organization along with the admission form.
- 3.6.6. After qualifying for admission to Ph.D. program, the inservice candidates shall submit the 'Study Leave' from their parent organization at the time of registration.

BREAKUP OF VARIOUS FEES (Rupees) The fee to be charged from the students registering in M.Sc. (Agri.) Hons. / M.E. / MS / MSc (Hons) Programs

Sr. No	Fee Structure	At the time of the first admission		Subsequent Semesters	
		Merit	Self- Finance	Merit	Self- Finance
1	Admission	6,000.00	12,000.00		
2	Registration	1,000.00	2,000.00	1,000.00	2,000.00
3	Tuition	6,200.00	12,400.00	6,200.00	12,400.00
4	Gymkhana	200.00	400.00	200.00	400.00
5	Magazine / Newsletter	100.00	200.00	100.00	200.00
6	Co-Curricular Activities	200.00	400.00	200.00	400.00
7	Enrolment Card	300.00	600.00		
8	Identity Card	300.00	600.00		
9	Library User Charges	300.00	600.00	300.00	600.00
10	Library Card	200.00	400.00		
11	Transport	1,000.00	2,000.00	1,000.00	2,000.00
12	Lab Fee	1,000.00	2,000.00	1,000.00	2,000.00
	Total	16,800.00	33,600.00	10,000.00	20,000.00
	on charges once from the can ved seat or under the self-finar	Rs.65,000.00			
	Examination Examination Fee	Rs. 8,000.00 Rs. 16,000.00			
Fee for International/Expatriate Students					US\$ 1,500.00 per Semester (including all fees e.g., admission, registration, tuition etc.)

After 2nd semester, the fees shall be increased by 5% in all subsequent semesters.

Summary of Fees Payable

S.No.	Stage	Merit	Self- Finance
	Admission+1st Semester	16,800.00	33,600.00
	2nd Semester	10,000.00	20,000.00
	3rd Semester	10,500.00	21,000.00
	4th Semester	11,030.00	22,050.00
	5th Semester		23,150.00
	6th Semester	12,150.00	24,300.00

	BREAKUP OF VARIOUS FEES (Rupees) The fee to be charged from the students registering in the M. Phill program				
	The fee to	stering in the M			
Sr. No	Fee Structure		he first admission	Subsequent Semesters	
<u> </u>	1 00 011 001010	Merit	Self- Finance	Merit	Self- Finance
1	Admission	5,400.00	10,800.00		
2	Registration	1,000.00	2,000.00	1,000.00	2,000.00
3	Tuition	12,800.00	25,600.00	12,800.00	25,600.00
4	Gymkhana	200.00	400.00	200.00	400.00
5	Magazine / News letter	100.00	200.00	100.00	200.00
6	Co-Curricular Activities	200.00	400.00	200.00	400.00
7	Enrolment Card	300.00	600.00		
8	Identity Card	300.00	600.00		
9	Library User Charges	300.00	600.00	300.00	600.00
10	Library Card	200.00	400.00		
11	Certificate Verification (Board fee)	1,000.00	2,000.00	1,000.00	2,000.00
13	Lab Fee	1,000.00	2,000.00	1,000.00	2,000.00
	Total	22,800.00	45,600.00	16,600.00	33,200.00
Capitat	ion charges once from the candidate the reserved seat or	Rs.75,000.00			
	Examination Fee at Examination Fee at the		Rs. 14,000.00 Rs. 28,000.00		
	Fee for International/Expatriate Students				US\$ 1,500.00 per Semester (including all fees e.g., admission, registration, tuition etc.)

After 2nd semester, the fees shall be increased by 5% in all subsequent semesters.

Summary of Fees Payable

S.No.	Stage	Merit	Self- Finance
1.	Admission+1 st Semester	22,800.00	45,600.00
2.	2 nd Semester	16,600.00	33,200.00
3.	3 rd Semester	17,430.00	34,860.00
4.	4 th Semester	18,300.00	36,600.00
5.	5 th Semester	19,220.00	38,430.00
6.	6 th Semester	20,180.00	40,350.00

	BREAKUP OF VARIOUS FEES (Rupees)					
	The fee to be charged from the students registering in the Ph.D. program					
Sr. No	Fee Structure	At the time of the first admission		Subsequent Semesters		
31. 110	ree Structure	Merit	Self- Finance	Merit	Self- Finance	
1	Admission	11,200.00	22,400.00			
2	Registration	4,200.00	8,400.00	4,200.00	8,400.00	
3	Tuition	24,000.00	48,000.00	24,000.00	48,000.00	
4	Gymkhana	200.00	400.00	200.00	400.00	
5	Magazine / News letter	100.00	200.00	100.00	200.00	
6	Co-Curricular Activities	200.00	400.00	200.00	400.00	
7	Enrolment Card	300.00	600.00			
8	Identity Card	300.00	600.00			
9	Library User Charges	300.00	600.00	300.00	600.00	
10	Library Card	200.00	400.00			
11	Transport	1,000.00	2,000.00	1,000.00	2,000.00	
12	Lab Fee	1,000.00	2,000.00	1,000.00	2,000.00	
	Total	43,000.00	86,000.00	31,000.00	62,000.00	
Capitati	on charges once from the can the reserved s	Rs.1,20,000.00				
	Examinati		Rs. 50,000.00			
	Fee for In		US\$ 2,000.00 per Semester (including all fees e.g., admission, registration, tuition etc.)			

After 4th semester, the fees shall be increased by 5% in all subsequent semesters.

Summary of Fees Payable

S.No.	Stage	Merit	Self- Finance
1.	Admission+1st Semester	43,000.00	86,000.00
2.	2 nd Semester to 4 th Semester	31,000.00	62,000.00
3.	5 th Semester	32,550.00	65,100.00
4.	6 th Semester	34,180.00	68,360.00
5.	7 th Semester	35,890.00	71,770.00
6.	8 th Semester	37,680.00	75,360.00
7.	9 th Semester	39,560.00	79,130.00
8.	10 th Semester	41,540.00	83,090.00

	BREAKUP OF VARIOUS FEES (Rupees) The fee to be charged from the students registering in MSIT (Information Technology) program			
Sr. No	Fee Structure	At the time of the first admission	Subsequent Semesters	
1	Admission	26,000.00		
2	Registration	6,000.00	6,000.00	
3	Tuition	30,000.00	30,000.00	
4	Gymkhana	200.00	200.00	
5	Magazine / News letter	100.00	100.00	
6	Co-Curricular Activities	200.00	200.00	
7	7 Enrolment Card 300.00			
8	Identity Card	300.00		
9	Library User Charges	300.00	300.00	
10	Library Card	200.00		
11	Transport	1,000.00	1,000.00	
12	Lab Fee	3,000.00	3,000.00	
	Total	67,600.00	40,800.00	
	Capitation charges once from the candidates other than Sindh Province to be admitted either against the reserved seat or under the self-finance scheme:		Rs.60,000.00	
	Examination Fee at the time of Viva voce:		Rs. 50,000.00	
	Fee for International/Expatriate Students		US\$ 1,500.00 per Semester (including all fees e.g., admission, registration, tuition etc.)	

After 2nd semester, the fees shall be increased by 5% in all subsequent semesters.

Summary of Fees Payable

S.No.	Stage	Fees
1.	Admission+1st Semester	67,600.00
2.	2 nd Semester	40,800.00
3.	3 rd Semester	42,840.00
4. 4th Semester		44,980.00
5.	5 th Semester	47,230.00
6.	6 th Semester	49,590.00

Self-Financing Charges (Rs.)

S#	Program	Lump-sum	Two (02) equal installments (to be charged in 1st two semesters
1	M.Sc. / M.E.	150,000	100,000x2=200,000
2	M.Phil.	200,000	125,000x2=250,000

Change of Department Fees (applicable after 2nd merit list): Rs. 50,000.00

DISCIPLINE WISE BREAKUP OF SEATS FOR VARIOUS POSTGRADUATE PROGRAMS							
		Allocation of Seats					
S. No.	Discipline	M.Sc. (Agri.) Hons. / MS / M.E/MSIT/ M.Phil.					
		Sindh	Other Provinces	Self- Finance			
Faculty	of Crop Production						
1	Agronomy	90	05	20			
2	Horticulture	40	05	15			
3	Crop Physiology	25	05	10			
4	Soil Science	40	05	15			
5	Biotechnology	25	05	10			
6	Plant Breeding and Genetics	60	05	15			
Institut	Institute of Food Sciences & Technology						
1	Food Sciences & Technology	25	10	15			
Faculty	Faculty of Crop Protection						
1	Entomology	60	08	10			
2	Plant Pathology	45	05	10			
3	Plant Protection	50	08	10			
Faculty of Agricultural Social Sciences							
1	Agricultural Economics	30	14	16			
2	Agricultural Education Extension	30	14	16			
3	Statistics	30	14	16			
4	Rural Sociology	30	14	16			

5	Agri. Business Management			30			
Information Technology Centre							
1	Software Engineering and Information System			25			
2	Communication Systems and Networks			25			
Faculty	Faculty of Agricultural Engineering						
1	Farm Power Machinery	16	05	05			
2	Irrigation and Drainage	20	05	05			
3	Farm Structures	20	05	05			
4	Land and Water Management	20	05	05			
5	Energy and Environment	12	05	05			
Faculty of Animal Husbandry & Veterinary Sciences							
1.	Animal Products Technology	16	02	04			
2.	Livestock Management	12	05	06			
3.	Poultry Husbandry	16	05	04			
4.	Animal Nutrition	16	03	04			
5.	Veterinary Physiology and Biochemistry	16	02	04			
6.	Veterinary Pharmacology	08	02	04			
7.	Veterinary Parasitology	20	02	04			
8.	Veterinary Microbiology	16	03	04			
9.	Veterinary Pathology	16	03	04			
10.	Anatomy and Histology	12	02	04			
11.	Animal Reproduction	12	02	04			

12.	Veterinary Medicine	16	05	04
13.	Surgery and Obstetrics	04	03	04

GENERAL INSTRUCTIONS FOR PRE-ADMISSION TEST

- 1. The pre-admission test will be conducted in the respective faculty. The question paper will contain 100 objective-type questions (80% from the subject from the relevant field and 20% from general knowledge).
- 2. The candidate will be required to write his/her name, father's name, and seat number on the top of the answer sheet and rough worksheet.
- 3. Rough work must be done on the rough worksheet.
- 4. To attempt the test efficiently, the candidate must carefully follow the instructions given by the invigilator.
- 5. The invigilator will inform the candidate when to start work on any of the tests and when to stop.
- 6. During the test, do not talk, whisper, or turn your eyes or head away from your papers.
- 7. Any evidence of cheating or non-compliance of instructions will disqualify the candidate from the test, and his name will be removed from the list of the candidate for admission.
- 8. There will be no negative marking in all parts of the test.
- 9. When the invigilator says, stop, the candidates are required to stop writing and cover your test booklet with the large size card specially provided for this purpose.

Note: The candidate should not mark answers on the question paper. All answers must be written only on the answer sheet with a black ballpoint pen that has been provided to you.









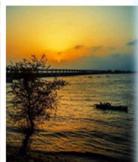




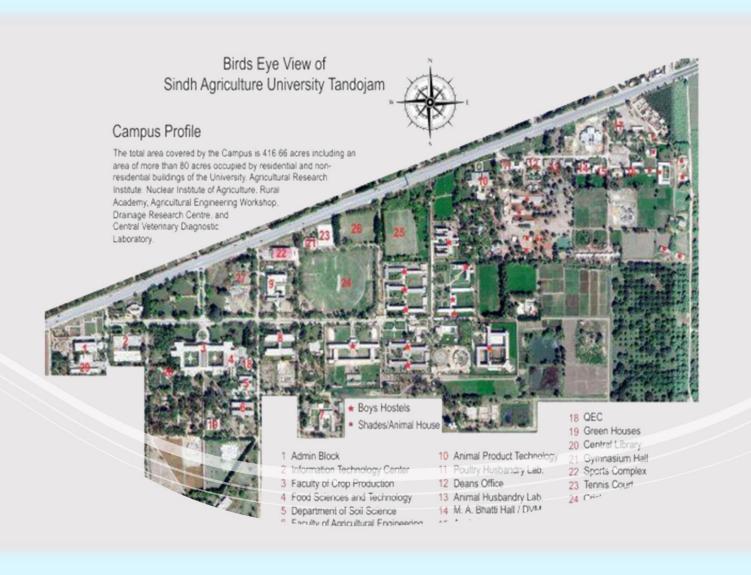








SAU VICINITY

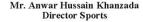






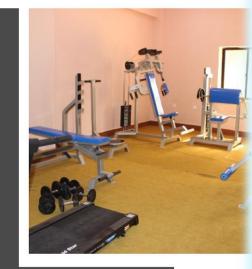
SPORTS











SAU IS AN INSTITUTION THAT PROVIDES YOU WITH ALL KINDS OF CO-CURRICULAR AND EXTRACURRICULAR ACTIVITIES. AS ONE OF THE GREATEST INSTITUTION OF THE COUNTRY IT HAS ALWAYS PLAYED A VITAL ROLE IN SPORTS. GAME AND SPORTS ARE SUPERVISED BY THE DIRECTORATE OF SPORTS. A VRIETY OF SPORTS FACILITIES ARE PROVIDED BY DIRECTOR OF SPORTS TO THE STUDENT PLAYERS. IN THE LAST TWO DECADES THERE HAS BEEN A GREAT CHANGE, SPORTS MAN AND PEOPLE BELONGING TO THE WORLD OF ENTERTAINMENT HAVE GAINED GREAT RESPECT AND POPULARITIES. THEY ARE STAR OF THE WORLD GIVEN HIGH PROTOCOL AND RESPECT WHEREEVER THEY GO. THE STUDENTS OF SAU ARE ACTIVELY PARTICIPATING IN THE UNIVERSITY COMPETITION AT INTER FACULTY LEVEL AS WELL AS ALL PAKISTAN INTER UNIVERSITY CHAMPIONSHIP, SAU HAS HONOR OF PROVIDING SUCCESSFUL SPORTSMAN, WHO PARTICIPATE IN THE HEC TEAMS ON NATIONAL LEVEL.

WE CAN GIVE A HEALTHY ENVIRONMENT TO OUR YOUTH AND THIS CAN PUT PAKISTAN ON THE RIGHT TRCK IF WE PROMOTE SPORTS IN THE COUNTRY. SAU PUT LUSH GREEN GROUNDS OF FOOTBALL, HOCKY AND CRICKET WITH STANDARD TRUF WICKETS, TENNIS COURT, BADMINTON HALL, FITNESS CENTER AND MULTIPURPOSE SPORT COMPLEX ALSO PROVIDED THE NATIONAL STANDARD SPORTS FACILITIES TO THE STUDENTS. EACH YEAR, DIRECTORATE OF SPORTS ORGANIZED THE COMPETITION, FOR STUDENTS AT CAMPUS, INTERFACULTY AND ALL PAKISTAN INTER UNIVERSITY LEVEL, AND SAU TEAMS COMPLETING ALL KINDS OF SPORTS IN ALL PAKISTN INTER UNIVERSITY LEVELS WITH DIGNITY, HONESTY AND SPORTSMEN SPRIT.



Conditions for Allotment of Accommodation in the Hostel:

- Allotment in the hostel shall not be claimed as a matter of right even when a person
- Is a bonafide student of this Institution.
- · Allotment in the hostel will be considered only after the hostel administration has satisfied
- Itself of the merit, eligibility of the student, and that his/her stay to the hostel shall in no
- · Way be prejudicial to the interests of the other residents of hostels in particular and the
- University in general.
- Allotment to a hostel will be on an academic year basis (Two terms). After that the allotment automatically
- Stands cancelled. Fresh applications will be invited for the next academic year.



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RESIDENTIAL ACCOMODATION

SINDH AGRICULUTRE UNIVERSITY, TANDOJAM IS PRIMARILY A RESIDENTIAL CAMPUS WITH AN ACCOMMODATION CAPACITY OF 1654 STUDENTS IN 13 HOSTELS INCLUDING ONE HOSTEL EACH FOR POSTGRADUATE STUDENTS AND FOR GIRL STUDENTS. EVERY HOSTEL HAS A TV LOUNGE, COMMON ROOM, WATER COOLER, TELEPHONE, INTERNET AND KITCHEN FACILITIES. THERE IS A COMMON SWIMMING POOL, A GYMKHANA, HOSTEL CANTEEN, BADMINTON AND TENNIS COURTS AND FACILITIES FOR TABLE TENNIS AND OTHER INDOOR GAMES ON RESIDENTIAL CAMPUS. THE UNIVERSITY STADIUM WITH A NUMBER OF LUSH GREEN PLAYGROUNDS PRESENT A PICTURESQUE VIEW OF THE CAMPUS. BESIDES, A BEAUTIFULLY CONSTRUCTED MOSQUE IS SITUATED IN THE CENTRE OF THE HOSTELS. THE STUDENTS ARE CHARGED FOR HOSTEL ACCOMMODATION AND RELATED FACILITIES EXCEPT BOARDING CHARGES WHICH IS THE SOLE RESPONSIBILITY OF STUDENTS THEMSELVES.



















STUDENT TEACHERS' ENGAGEMENT PROGRAM









• STEP IS A JOINT FORUM OF TEACHERS AND STUDENTS OF SINDH AGRICULTURE UNIVERSITY, WHICH HAS BEEN ENTRUSTED WITH RESPONSIBILITIES OF ORGANIZING, COORDINATING AND PROMOTING CO-CURRICULAR ACTIVITIES IN THE UNIVERSITY AS WELL AS PREPARING THE STUDENTS FOR PARTICIPATION IN VARIOUS INTER-UNIVERSITY COMPETITIONS OUTSIDE THE CAMPUS.







Auditorium

- Main Auditorium with 650 seats and Dr. A. M. Shaikh Auditorium with 275 Seats provide a venue for continuum education, shot courses, seminars, workshops, conferences, symposia and extra curricular activities.
- New Auditorium with capacity above 1000 is under construction.











LABORATORIES

Independent and fully equipped laboratories are available for graduate and postgraduate practical teaching and demonstration under the administration of various teaching departments of the University. The University also maintain Horticulture Garden, Botanical Garden, Student Farm, Livestock Experimental Station, Poultry Experimental Station, Veterinary Hospital, and Agricultural Engineering Workshop for imparting practical training to the students.









Research

- To conduct quality research
- To develop research plans for community development
- To enhance crop production through evaluation and adopting modern techniques





OUTREACH

- TO DEVELOP COLLABORATION WITH INDUSTRIES AND TECHNOLOGY REGIONS
- TO INCREASE RECOGNITION AND EFFICIENCY ON NATIONAL AND INTERNATIONAL LEVELS





- KEEPING EDUCATIONAL AND INSTRUCTIVE PROGRAM UPDATED
- CONSTANT
 IMPROVEMENT OF
 EDUCATIONAL AND
 INSTRUCTIONAL
 PROCESSES
- RAISING THE QUALITY OF THE STUDENTS



