



**University of Balochistan Quetta**

# PROSPECTUS

**2013-14**



## Bachelor Study Program

### Faculty of Life Sciences

BS (Bio Tech/ Bio-Chemistry)  
BS (Microbiology)  
D. Pharmacy

### Faculty of Management Sciences, Business and Information Technology

BS (Computers Science)  
BS (Information Technology)  
B.Com (Self Finance)

### Faculty of Earth and Environmental Sciences

BS (Geology)

### Faculty of Education and Humanities

Bachelor in Fine Arts

# VICE CHANCELLOR'S MESSAGE TO STUDENTS



*The University of Balochistan is offering BS (4 Years) Programs for the academic year 2013-14 in the Faculties of Life Sciences, Earth & Environmental Sciences, Management Sciences, Business & Information Technology, and Education & Humanities and applications are hereby invited from potential candidates for admission in the subjects.*

*I would encourage the capable, energetic candidates to apply confidently in the discipline of their choice and to be part of family of on campus regular students to seek knowledge and gain skills / competence in the field.*

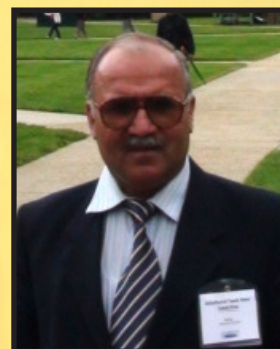
*Looking forward to have you on campus as regular student in BS (4 years) Program.*

*Wish you very best of luck!*

**Prof. Dr. Abdullah Khan**  
Vice Chancellor (Acting)



# MESSAGE OF THE DEAN STUDENTS AFFAIRS TO STUDENTS



***Education is the most powerful weapon which can use to change the world.***

It is with great joy, happiness and pride to write these lines for 2013 annual prospectus, University of Balochistan, Quetta, Pakistan.

This is not only a prospectus it is a polished gem stone which has gone through procedures and cutting till it got its final shape.

It is well said that students are the back bone of the nation, in fact they play a vital role in the building of the nation and the students of today is always the builder of tomorrow.

***It is also the teaching of Islam to work for the betterment of people because it is a great blessing of God to us.*** It is not enough to have a good mind. The main thing is to use it well to become a good professional. Attendance and assessment is valuable tools to monitor the academic progress of a student.

Today's message is to the students, renew your intentions that you are studying for the sake of knowledge. Even when you come out of your house you should have the intention that you are going to gain knowledge.

***The Prophet (peace be upon him) said those who disrespect those who teach us are not from us.***

Work with each other's (a team work, group activity) and you can learn a lot from each others. So collaborate from teams and network, but continuation of study is must.

Sadly, evil and darkness exist in the world. However, now and then, that darkness takes form and horrible things can happen. Sometimes those things are so horrible the darkness seems so big, it covers everything. But each and every one of us has the power to push back the darkness of evil and tragedy by being a source of light/education.

***Learn from yesterday, live for today, hope for tomorrow.***

We offer excellence in teaching, learning, research and sports. Our target is to uplift this university and make it one of the top universities of the world, we welcome students from the core of heart and hope strongly that your stay at the university more rewarding for your future career. We want to see our student an educationist, lawyer, poet writer's, scholars, artist and scientists'. We would like to make/prepare our students in very different way in order to compete with the students of developing and advanced countries.

My heartfelt appreciation, congratulations and thank to team of students affairs section, specially, Mr. Mohammad Naeem (Bache), Mr. Akthar Muhammad & Mr. Noorul Amin for their motivational approach and great efforts they did for the arranging/making of this prospectus.

***God guide us in taking positive steps for the betterment of our University?***

***Wisdom is the principal thing therefore gets wisdom.***

***Prof. Dr. Abdul Tawab Khan***  
*Fulbrighter*  
*Dean Faculty Students Affairs*

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# UNIVERSITY OF BALOCHISTAN

## 1. Introduction

- 1.1. Establishment of the University of Balochistan synchronized with the emergence of Balochistan as a province of Pakistan. The University came into being with the promulgation of the University of Balochistan Ordinance 1970. Located in a developing region of a developing country, the University has a challenging frame of reference for its functioning. Balochistan is passing through a process of rapid socio-economic development and needs well qualified and competent scientists, professionals, academicians and administrators. The University is cognizant of this need and prepared to provide meaningful higher education to the youth of the province.
- 1.2. The University is committed to develop and sustain an environment conducive to excellence in teaching, learning, research and spread of knowledge. In keeping with the priorities of higher education, the University offers its resources and talent for enrichment and enhancement of quality of life through its programmes of research.
- 1.3. The University offers graduate, postgraduate, doctoral and advanced programmes of studies in Physical Sciences, Biological and Chemical Sciences, Arts, Humanities, Social Sciences, State Sciences and Professional Disciplines. BS four years programme of studies in certain disciplines of science are also offered by the University. Besides, University faculty and students organize and conduct community services for the well being of the people, provide leadership in all walks of life, develop potential of the students, channelize energies of the youth and strive for reducing the social and cultural differences through knowledge.

## 2. Our Vision

To be a model public University providing affordable quality, higher education opportunities to develop the potentially rich human resource in Balochistan through knowledge-centered teaching and research, thus advancing the prosperity of our region.

## 3. Our Mission

- 3.1 Help our students achieve their maximum potential and be equipped for their future careers.
- 3.2 Continue investment in our people, courses, partnerships and facilities to be the leading University in enhancing the student experience.
- 3.3 Undertake and exploit research, create new knowledge which is relevant and thus applied; achieving International Standard in Key Research areas for improving our International ranking.

## 4. Our Values

The following set of core values inform and sustain all of our activities.

- Putting students first, with teaching and learning as the core business.
- Team work and Synergy
- Excellence in teaching and learning willingly and with integrity.
- Innovation, creativity and professionalism.
- Respect for each other.

## 5. Jurisdiction

The main objective of the University is to provide facilities of higher education and research to the people of Pakistan in general and Balochistan in particular. The University fulfills the functions of teaching, research, providing affiliation to colleges and of examining body. Forty-four Colleges (Public / Private / Professional) are affiliated with the University.

## **6. Governance**

- 6.1. The Governor of Balochistan is the Chancellor of the University. The University Senate chaired by the Chancellor, is the Supreme Governing/Legislative Body of the University.
- 6.2. The Vice Chancellor is the Chief Executive of the University. He chairs the Syndicate, the Executive Body of the University, and all other Statutory Bodies.

## **7. Administration**

- 7.1 Chancellor  
7.2 Vice Chancellor  
7.3 Pro Vice Chancellor  
7.3. Registrar  
7.4. Treasurer  
7.5. Controller of Examinations  
7.6. Director General (Admin/HR)

## **8. Teaching Faculties**

- 8.1. The University of Balochistan began functioning in March, 1971 with the opening of the Departments of Physics, Chemistry and Geology at the postgraduate level. Gradually, other Departments were introduced in Arts, Science and Humanities. At present, the University has 43 departments, two Institutes and six specialized centers of Higher Studies and Research, one constituent Law College and 44 affiliated colleges including Agriculture College, the Bolan Medical College and the Internationally renowned Command and Staff College Quetta.

## **9. Faculty of Students' Affairs**

- 9.1. Dean Students Affairs very closely associated by Director, Students Affairs play the Role of Chief arbitrator in all matters concerning the students. He deals with all matters pertaining to academic / non-academic matters of the students of the University.
- 9.2. Role and duties of faculty of Students. The Faculty of Students Affairs performs duties pertaining to academic, financial, extra-curricular and miscellaneous matters in coordination with the Registrar / Heads of Departments / Deans. Its duties are as follows:
- 9.2.1. **Academic**
- 9.2.1.1. Admission of students under category B & C.
  - 9.2.1.2. Selection of students for other universities of the country.
  - 9.2.1.3. Migration from one department to other.
  - 9.2.1.4. Re-admission of struck off cases.
  - 9.2.1.5. Arrange meetings with the Students Advisory Council.

## **10. Programs of Study**

- |       |                                     |         |       |                            |
|-------|-------------------------------------|---------|-------|----------------------------|
| 10.1. | BS Computer Science (BS-IT) (BS CS) | 4 years |       |                            |
| 10.2. | BS Microbiology                     | 4 years | 10.3. | BS Geology 4 years         |
| 10.4. | BS Biotech/Bio Chem                 | 4 years | 10.4  | Bechelol Fine Arts 4 years |
| 10.5  | D-Pharm                             | 5 years |       |                            |
| 10.7  | B.Com (Self Finance Program)        | 2 years |       |                            |

## **11. Number of Seats Available**

- 11.1. The Total number of seats in each Department/Institute/Center/ in each programme of study, including all categories of reserved seats, will be 35 (thirty five) per section. The distribution of seats in each department is as under:-

11.1.1.	<b>Local and Domicile of Balochistan - Category 'A'</b>		<b>30</b>
	Open merit: Balochistan	10%	03
	Open merit Quetta District	15%	04
	Open merit: District other than Quetta	75%	23

**Category "A"** Local / Domiciled Residents of Balochistan. (Applicants will submit their application forms to the respective Teaching Department).



11.1.2. **Personnel Serving in Balochistan - Category “B”**  
(Non-Local & Non Domicile) Daughter/son/Spouse.

**Category “B”** Direct dependents (son/daughter/sister/wife/husband) of the Federal Government and Autonomous organizations personnel serving in Balochistan who are non-local/non-domiciled of Balochistan.

**Category “C”** Nominees of AJk/FATA/Afghan Refugees/ Foreign Students/NA/Disabled Persons/Direct Dependents of University Employees/ Officers/ Teachers (Son/Daughter/Spouse/ Brother/Sister).

Applicant’s coming under Category “B & C” will have to submit their application forms to the Deputy Registrar (Students Affairs) by the due date (complete in all respects).

**Details of Reserved seats, under category “C”:**

Sr.No.	Categories	Allocation of Seats		Procedure
1.	Azad Jamu & Kashmir	Arts Faculty: Science Faculty	01 01	Applicants will be nominated by the AJK Government.
2.	FATA	Bachelor’s Degree Programs	05	Applications will be entertained through proper channel
3.	Foreign Students	Arts Faculty: Science Faculty:	02 05	Applications to be submitted to the Economic Affairs Division and the Federal Ministry of Education Government of Pakistan through the relevant Embassy in Pakistan
4.	Afghan Refugees	Arts Faculty: Science Faculty:	05 05	Applications will be entertained through proper channel (Applicants must possess Computerized NADRA Refugees Card)
5.	N.A. (Norther Area)	Arts Faculty: Science Faculty:	01 01	Application to be submitted through proper channel.
6.	Direct dependents of University Teachers / Officers / Employees (Son / Daughter / Spouse / Brother / Sister)	Three(03) in each section/program of studies on merit amongst the applicants.	03	Applications to be submitted on prescribed Application Form to the Deputy Registrar (SA) as per admission schedule.
7.	Disabled Persons (Balochistan only)	Arts Faculty: Science Faculty	02 02	The disability certificate issued by Balochistan Provincial Standing Medical Board (Provincial Health Directorate has to be submitted.

## **12. Entry Test**

12.1. The Candidates shall have to qualify the Entry Test which will be conducted by the concern Department, securing 40% marks and appearing in the interview is compulsory for admission. If a candidate fails to appear in the Entry Test and interview on the fixed date and time, he / she will not be considered for admission applied for.

## **13.Determination of Merit for Admission in Graduate Program - Weightage**

13.1.	Matriculation	:	20%
13.2.	Intermediate	:	50%
13.3.	Written Test/ Interview	:	30%

## **14. Admission Policy**

- 14.1. Admission:- all disciplines running bachelor degree programs will be allowed to Local/Domicile of Balochistan (under category-“A”). However, Wards of servants of Federal Government or Autonomous Organizations, who have had their previous education other than Balochistan will be considered for admission under category “B”. Moreover, admissions against reserved seats including Foreign Students will also be entertain under Category “C”.
- 14.2. Candidates who qualify in Bi-annual/supplementary examination 2013 shall not be eligible for admission 2013.
- 14.3. Admission to a second or subsequent graduate degree course in the University is not allowed.
- 14.4. No student shall at one time join or continue on the roll of two or more courses of study, leading to two or more degrees in the same or different faculties or institutions.
- 14.5. Admission will be allowed only to those applicants who have passed the qualifying examination at most two years prior to the year of admission i.e Annual 2013/Annual/Bi-Annual 2012. However, in the disciplines where the number of applicants is less than the number of seats available in a department, relaxation of one year i.e Annual/Bi-annual 2011 can also be considered for seeking admission.



## **15. Admission Procedures**

- 15.1. Application Forms for admission can be obtained from Habib Bank Limited, University Branch, Quetta and will be submitted (Complete in all respect in the concern department).
- 15.2. Offices of Teaching Departments shall remain open during office hours to receive admission forms.
- 15.3. Candidates seeking admission shall submit the admission form in duplicate.
- 15.4. Each applicant and his/her father/guardian shall have to sign a declaration that he/she shall abide by all the rules and regulations of the University and he/she shall devote his/her time to studies and **shall not indulge in politics.**

### **Required Documents**

- 15.5. Four copies of recent passport size pictures duly attested.
- 15.6. Two Attested copy of character certificate from the Head of the Institution last attended. Candidates qualifying as private candidate shall produce character certificate from a Gazetted Government Officer (Grade 17 or above). (Two Photocopies)
- 15.7. Attested copy of Provisional Certificate of the last qualifying examination. (Two Photocopies)
- 15.8. Attested copy of the Detailed Marks Sheet of the last qualifying examination. (Two Photocopies)
- 15.9. Attested copy of Local/Domicile Certificate. (Two Photocopies)
- 15.10. Attested copies Matric certificates. (Two Photocopies)
- 15.11. Original documents will be shown at the time of Interview and will be checked by the Chairperson/Admission Committee of the concerned department.
- 15.12. Candidates having qualified from other Boards/Universities shall have to submit, in addition to the above, a migration certificate (in original) from the said Board / University.
- 15.13. Applicants must collect an acknowledgment receipt, for each application, which must be produced at the time of Test/Interview. Process of admission will be completed within prescribed schedule as announced.
- 15.14. The selected candidates will be required to complete the admission formalities by last date announced by the University.
- 15.15. If a candidate fails to make payment of admission dues by last date, his/her seat will stand cancelled.
- 15.16. If a candidate fails to join the department within fifteen days from the date of admission his / her admission will stand cancelled.
- 15.17. List of selected candidates will be displayed on the Notice Board of concerned Department/Institute/Center on the dates announced in the academic calendar. The candidates may check the Notice Board of the respective Department/Institute/Center during admission process.
- 15.18. Candidates will not be informed individually about their provisional admission/withdrawal or cancellation of admission and the University, therefore, will not accept any responsibility in this regard.

## **16. Attendance Requirements**

- 16.1. Attendance of Lectures, Practicals, tutorials and field work, is compulsory for all students.
- 16.2. The name of a student, who remains absent from classes without proper leave for a period of fifteen consecutive days, shall be struck off the rolls of that department.
- 16.3. A student, whose name has been struck off the rolls, may be readmitted for valid reason within two weeks during the same academic year to the same class. This readmission will, however, be allowed by the respective Dean on the recommendation of the Chairperson of the Department. Fee for readmission will be Rs.1000/-. If a student fails to apply for readmission within the stipulated period, then he/she will be given two more weeks to apply readmission to the Academic Committee headed by the Dean Students Affairs. In such a case the readmission fee will be Rs. 2000/-. The Committee Academic Council (CAC) headed by the Pro-Vice Chancellor can allow readmission up to two months (60 days) in such a case the readmission fee will be 3000/-.
- 16.4 Each student will be required to complete minimum of 75% of attendance in lectures and practicals to be eligible to appear in examinations that year.**

## **17. Students Code of Conduct-Discipline**

- 17.1. No Student shall:
- 17.1.1. Do, or propagate, anything repugnant to Islam within and outside the precincts of the University.
- 17.1.2. Say or do anything which might adversely affect the honour and prestige of Pakistan.
- 17.1.3. Smoke in the classroom, laboratory, workshop, library and examination hall.
- 17.1.4. Form or associate himself / herself with an organization / society / club or any other body promoting inciting parochial / linguistic/regional feelings.
- 17.1.5. Organize or hold any function in the University except in accordance with the prescribed rules/regulations.
- 17.1.6. Collect money, receive donations or pecuniary assistance for or on behalf of the University or any University Organization except with the written permission of the Vice Chancellor.
- 17.1.7. Stage, incite, or participate in a walkout, strike or any other form of agitation which might create, or is likely to create, law and order problem for the University and affect, or is likely to affect, its smooth functioning.
- 17.1.8. Indulge in immoral activities, use indecent language, wear immodest dress, make indecent remarks, jokes or gestures or behave in an improper manner.
- 17.1.9. Cause disturbance to others.
- 17.1.10. Disturb the peace and tranquility of the Institution.
- 17.1.11. Keep or carry weapons, narcotics, immoral or subversive literature and use non-salutary or abusive language or resort to violence against fellow student or employee of the University.
- 17.2. Violation of any of the above will be considered misconduct and liable to disciplinary action.
- 17.3. **Disciplinary Action**
- the 17.3.1. Disciplinary action by the Principal of a Constituent /Affiliated College/Chairperson of University Teaching Department/ Director of an Institute/Center and the Discipline Committee against the student(s) may be taken in one or more of the following forms depending upon the severity of the offence:
- 17.3.1.1. A student may be fined.



- 17.3.1.2. A student may be placed on probation for a fixed period. If during the period of probation he/she fails to improve his/her conduct, he/she may be rusticated or expelled.
- 17.3.1.3. A student may be suspended from the rolls of a College / Institute / Center / Department for a period not exceeding two weeks at a time.
- 17.3.2. A student may be rusticated / expelled or asked to withdraw from the College/Institute/Center/Department in the manner mentioned in the regulations relating to rustication, expulsion and withdrawal.

## **19. Regulations Relating to Rustication, Expulsion and Withdrawal**

- 19.1. Rustication, whenever imposed on a student, shall always mean the loss of one academic year so far as his/her Examinations are concerned. The period of absence will, however, depend upon the time of the year when the penalty is imposed.
- 19.2. The Vice Chancellor may, at his discretion, permit to rejoin the class in the same College/Department/Institute/Center at the beginning of the next academic year.
- 19.3. A rusticated student once readmitted and again found creating disturbance/indiscipline, etc. will be expelled from the University.
- 19.4. A student expelled from the University shall not be readmitted into the same University without the approval of the Syndicate. Readmission shall in no case be granted before the expiry of one academic year from the date of expulsion.

## **20. Code of Honor**

Being a student in the University is a matter of privilege, prestige and honour. All students are expected to conduct themselves with honor and dignity. The following Code of Honour enunciating the basic principles of conduct expected of a student should be propagated by the Principals of the Constituent Colleges and the Chairperson/Director of the University Teaching Departments / Institute / Centers:-

- 20.1. All Students must have faith in and respect for the ideology of Pakistan.
- 20.2. All Students must in matters of religion respect the convictions of others.
- 20.3. Every student is expected to:-
  - 20.3.1. Be Loyal to Pakistan;
  - 20.3.2. Obey the Law of the land as well as the rules & regulations of the University;
  - 20.3.3. Maintain law and order as well as the dignity and prestige of the University.
  - 20.3.4. Protect the property of the University;
  - 20.3.5. Show due respect to elders, teachers and outside visitors;
  - 20.3.6. Work hard and co-operate in completing the courses of study within the prescribed period.

## **21. Facilities**

- 21.1. **Central Library** which plays a vital role in the academic life of a University. The fundamental role of the library being educational, it should not be considered as mere store house of books, but as a dynamic instrument of education. The Central Library of the University is organized on these lines. The library collections support not only every course in the curriculum but also include selected stock of general material of books, periodicals, publications, newspapers etc. The total number of books in the Central Library is 150,000. The whole library system is being computerized and online library service will be available through a network after the completion of the computerization process. A large number of International Research Journals are also available on Digital Library provided by Higher Education Commission and research articles of interest can also be downloaded.

- 21.2. **Digital Library** The University of Balochistan has established a digital library to provide researchers, faculty members and students of the University access to the International scholarly literature. The facility is based on electronic (online) delivery system. The Digital Library also provides access to high quality peer-reviewed journals database and articles on a wide range of discipline. The facility could be availed by the faculty members and students of the University on provision of his/her identification card. The facility is restricted to online journals for the University of Balochistan through University of Balochistan website i.e. [www.uob.edu.pk](http://www.uob.edu.pk).
- 21.3. The internet connectivity and link to Digital Library provided by the Information Technology Directorate has access to over 4,000 books and 22,000 online journals. For maximum utilization of Digital Libraries all over the World, the Directorate of Information Technology has established a Computer Lab in the Central Library and ensured its operation during University working hours, so that the students may benefit from it. This all has become possible due to the high speed connectivity of PERN (Pakistan Educational Research Network). The number of Computer Units in the digital library has been increased to 80.
- 21.4. **Computer Laboratories.** Computers have been provided to the Departmental Computer Laboratories. This service is provided to the Central Library and to the Academic Departments/Institutes/Centers and available over long hours. In the Central Labs, PCs are provided, offering a range of standard office software for document creation and presentations. Specialist provision is available to support research and advanced study within the University. Computers in all departments / institutes / centers / sections are connected to the University's main server through Local Area Network and Wide Area Network (LAN/WAN) giving access via the internet to the major information, research and communications networks worldwide.
- 21.5. **Video Conference Center** The University of Balochistan with the help of Higher Education Commission has established a Video Conferencing Center. The main objective of this Video Conference is to enhance student-teacher interaction through distance learning at global-level, bridge the gap of good faculty, meet the shortage of faculty members at the University and ultimately to uplift the standard of education in Balochistan.
- 21.6. **Hostels** There are 15 double storey blocks of hostels on the Campus for male students with a total capacity for 1040 residents, while one block under construction is now complete with a capacity of 260 students. For female students and Lady Teachers, there is a hostel block with 64 rooms to accommodate 210 inmates. The students' hostels have all the facilities e.g. Furniture, Mess, Common Room, T.V. Lounge, Telephone etc. Hostel administration consists of Senior Provost, Provosts, Senior Warden, and one Resident Warden for each hostel.
- 21.7. **Medical Center / Health Care** A Medical Centre for meeting the needs of the community is functioning. It is reasonably equipped, looked after by two doctors (Male and Female) and assisted by qualified staff at the Campus. Complicated cases are referred to the specialists in the Civil Hospital, B.M.C. Complex, C.M.H. and Children Hospital. Ambulance service is also available in case of emergency.
- 21.8. **Bank and Post Office** A branch of Habib Bank and Post Office are available with in the premises of the University.
- 21.9. **Transport** The University of Balochistan operates a fleet of buses which provide Pick and Drop facility to the students. Transport facility is also available for social-work field work and field visits of students of Geology, Botany, Zoology and other departments on need basis.
- 21.10. **Study Tour** Students Study Tours are considered educational as well as part of the University's co-curricular activities. Each student may participate at least once in a study tour arranged by the concerned Teaching Department during his/her stay at the University. Study tours are partly financed by the students and supplemented by the University.

21.11. **Co-Curricular Activities**

21.11.1. **Golden Week.**

21.11.1.1. The University places due emphasis on co-curricular activities to ensure overall grooming of the personality of its students. Co-Curricular activities form an integral part of the University's endeavors to provide its students an opportunity to build up skills and gain experience in so many fields.

21.11.1.2. By encouraging its students to participate in co-curricular activities the University makes a conscious effort to also build and strengthen their confidence required to meet the challenges of practical life effectively.

21.11.1.3. Dramatics, Debate competitions, Art exhibitions, Poetry writing Competitions, Quiz Competitions, Dialogues and Essay Writing Competitions are some of the co-curricular activities that are managed by the University during the Golden Week.

21.11.2. **Sports Week** Special endeavors are made to organize games and sports on the campus. There are well established play grounds for football, cricket, basketball, volleyball and Tennis. The students have been participating in the National, Provincial and Inter- University tournaments and have won many prizes. The University organizes regular activities in a number of sports and games. It also arranges Inter-University sports competitions in Athletics, Football, Hockey, Volley Ball, Cricket, Badminton, Table Tennis, Tug of War, Basket Ball etc. Separate sports facilities exist for girls. The sports activities are looked after by the Director of Sports.

21.12. **Audio Visual Aids** Audio-visual aids are used in the class rooms, seminars and conferences to facilitate the students learning process.

21.13. **Tutorial and Guidance** Tutorial and Guidance service is available to the University students. The Tutors Facilitates the learning process of the students and enable them to make positive use of the educational facilities available in the University. The faculty members provide guidance and counseling to the students in the establishment of their educational and professional goals. During the course of studies, the Tutors keep in touch with the progress and development of the students and help to solve some of the individual psychosocial problems which are likely to obstruct their academic performance.

21.14. **Career Counseling Cell** A Career Counseling Cell exists to guide the students for their future career/jobs. It helps the students to establish and achieve their vocational goals and solve some of their individual queries. It also arranges lectures/presentations by future employers.

**AFFIDAVIT SPECIMEN**

**Category B**

(Balochistan Non-local / Non-domiciled Applicants who are  
Direct dependents of personnel serving in Balochistan  
(Son/Daughter, Brother /Sister, Husband/Wife)

(to be submitted on judicial stamp paper along with attested Photostat/ copies of N.I.C. of the applicant and the deponent)

Applicant: \_\_\_\_\_

Father : \_\_\_\_\_

N.I.C. No of Applicant: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

The deponent declares on oath / solemn affirmation that the Applicant \_\_\_\_\_ S/O \_\_\_\_\_ seeking admission in the \_\_\_\_\_ Department of University of Balochistan, Quetta is my:

(a) Son/Daughter: (b) Real Brother / Real Sister (C). Husband / Wife

The deponent swears / solemnly affirms that the above said declaration submitted is true and that it conceals nothing and that no part of it is false.

Deponent.

Name. \_\_\_\_\_

Designation \_\_\_\_\_

Father. \_\_\_\_\_

N.I.C. No. \_\_\_\_\_

**CERTIFICATION**

It is certified that Mr. Miss/Mrs. \_\_\_\_\_ S/D/W/O \_\_\_\_\_ is an employee of \_\_\_\_\_ Designation \_\_\_\_\_ and at present serving in the province of Balochistan from \_\_\_\_\_

Attested by:  
Magistrate/Oath Commissioner

Signature  
Head of the Organization  
(Name & Stamp)

Name: \_\_\_\_\_  
Designation: \_\_\_\_\_



Category C

Affidavit Specimen

(To be submitted by the University Teacher / Staff / Employee on  
Judicial stamp paper along with the photostate copies of the  
CNIC of the applicant and the deponent.)

Applicant : \_\_\_\_\_  
Father : \_\_\_\_\_  
CNIC No. : \_\_\_\_\_  
Address : \_\_\_\_\_  
\_\_\_\_\_

I. The deponent declares on oath /solemn affirmation that the applicant \_\_\_\_\_  
seeking admission in the Department of \_\_\_\_\_ University of Balochistan, Quetta is my:

(a) Son / Daughter (b) Real Brother/Real Sister (c) Husband/Wife

II. The deponent swears / solemnly affirms that the abovesaid declaration submitted is true  
and that it conceals nothing and that no part of it is false.

DEPONENT

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

CNIC No.: \_\_\_\_\_

CERTIFICATE

It is certified that Mr. Miss / Mrs. \_\_\_\_\_ S/D/W/O \_\_\_\_\_ is

An employee of \_\_\_\_\_ designation \_\_\_\_\_ and at

present serving in the dept/ section \_\_\_\_\_ of Balochistan.

**Signature**  
**Head of Deptt**  
**( Name & Stamp)**

**Name:** \_\_\_\_\_

**Designation** \_\_\_\_\_

**UNDERTAKING BY THE STUDENT**

(To be submitted on judicial stamp paper)

(As per order of the Supreme Court of Pakistan dated 1st July 92)

I am seeking admission in the University of Balochistan, Quetta do hereby undertake that while studying in the University I will not indulge in any sort of politics. And if ever during my studentship I am found indulging in politics, I may be expelled from the University without any notice.

**Signature of the applicant**

**UNDERTAKING BY THE PARENT / GUARDIAN**

(This undertaking is also to be submitted on Judicial stamp paper separately)

(As per order of the Supreme Court of Pakistan dated 1st July, 92)

I \_\_\_\_\_ Parent/Guardian of \_\_\_\_\_ who is seeking admission in the University of Balochistan, Quetta do hereby undertake that while studying in the University he/she shall not indulge in any sort of politics. And if ever during the studentship is found indulging in politics, he/she can be expelled from the University without any notice.

I also undertake that the findings with regard to his/her indulgence in politics given by the competent authority of the University under his seal and signature shall be final and shall not be questioned except only before the Supreme Court of Pakistan.

**Date:** \_\_\_\_\_

**Signature of the Parent /Guardian**

**(UNDERTAKING BY THE CANDIDATE)**

(To be signed by the student at the time of admission in the Educational Institutions) I solemnly undertake that:

- I.
    - i. I am not enrolled at present in any of the University teaching Department / Institute / Centers / affiliated College.
  - II. I shall make one person literate so that he she will be able to:
    - ii. Write his / her name.
    - iii. Make Simple calculations.
    - iv. Read and write a simple statement
- OR
- Read and writ Qurani Quaida e.g “Yassarnal Quran”

**Signature of the Candidate.**

**N.B. FOR FURTHER INSTRUCTIONS PLEASE SEE EXTRACTS OF ADMISSION RULES.**

## CODE OF CONDUCT

1. **I solemnly undertake to abide by the following Code of Conduct:**
  - 1.1. That during my stay in the University, I shall diligently apply myself to acquire and develop the knowledge, skills and attitudes necessary for the practice and advancement of the field of study in which I will be enrolled.
  - 1.2. That I shall participate fully and whole-heartedly in sports, games and other co-curricular activities.
  - 1.3. I shall have minimum attendance of 75% in order to qualify for the examinations.
  - 1.4. That I shall maintain identity as a student of the University by wearing the gown or badge as may be prescribed by the University.
  - 1.5. That I shall never use violence or threat of violence or other sort of pressures in resolving any dispute. I shall only use logic, persuasion, petition, appeal, revision, review and other legal and peaceful methods for the settlement of differences and disputes.
  - 1.6. That in any conflict or disputes if any with fellow students or teachers or employees of the University. I shall accept the judgment of the authorities constituted by the University.
  - 1.7. That I accept all provision of the statutes, regulations and rules of the University or the statutes, regulations and rules as may hereafter be framed by the appropriate authorities of the University.
  - 1.8. I will deposit my admission fee after declaration of admission, if I fail to do so, my admission if cancelled, i will have no right to claim of it.
2. **Further I undertake to refrain from:-**
  - 2.1. Doing anything which may cause insult to Head of the Institution, teachers, officers and other staff of the institution.
  - 2.2. Holding a gathering, or meeting, or taking out processions in any part of the University Campus other than areas specified for the purpose, and with due permission.
  - 2.3. Indulging in any kind of unfair means, malpractices in examinations and coercion by any means.
  - 2.4. Allowing or abetting the entry into the premises of the University of expelled students, antisocial elements or other groups whose presence on the campus could cause conflict amongst the students.
  - 2.5. Bringing into the campus, consuming or encouraging consumption of alcoholic products, drugs and narcotics, and indulging in acts of moral turpitude.
  - 2.6. Bringing or keeping any type of weapons within the University premises.
  - 2.7. Using or occupying any room or part of any building of the institution without lawful authority.
  - 2.8. Damaging any University property including buildings, equipments, vehicles etc. in any manner.
  - 2.9. From all such acts and deeds as might bring disgrace and bad name to the University.

**Countersigned by Parents / Guardians  
Candidate)**

**(Signature of the**

\_\_\_\_\_

\_\_\_\_\_

## FEE STRUCTURE OF VARIOUS COURSES OF STUDIES FOR 2013 ADMISSION

<p><b>Fine Arts</b> (4 years)</p> <p>Total Dues for 4 Year <b><u>Rs. 37,880/-</u></b></p>	<p><b><u>1st Year.</u></b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>i) <u>Adm. Fee.</u></td><td style="text-align: right;"><u>Rs. 1200/-</u></td></tr> <tr><td>ii) <u>Tuition Fee.</u></td><td style="text-align: right;"><u>Rs. 2880/-</u></td></tr> <tr><td>iii) <u>Security Money</u> <u>Non Refundable.</u></td><td style="text-align: right;"><u>Rs. 360/-</u></td></tr> <tr><td>iv) <u>Identity Card.</u></td><td style="text-align: right;"><u>Rs. 60/-</u></td></tr> <tr><td>v) <u>Sports Fee.</u></td><td style="text-align: right;"><u>Rs. 600/-</u></td></tr> <tr><td>vi) <u>Transport Fee.</u></td><td style="text-align: right;"><u>Rs. 960/-</u></td></tr> <tr><td>vii) <u>Library Fee.</u></td><td style="text-align: right;"><u>Rs. 360/-</u></td></tr> <tr><td>viii) <u>Student Cultural</u> <u>Activities.</u></td><td style="text-align: right;"><u>Rs. 180/-</u></td></tr> <tr><td>ix) <u>Field Work.</u></td><td style="text-align: right;"><u>Rs. 480/-</u></td></tr> <tr><td>x) <u>Studio Work.</u></td><td style="text-align: right;"><u>Rs. 2160/-</u></td></tr> <tr><td>xi) <u>Library Fee</u> <u>50% (Refundable)</u></td><td style="text-align: right;"><u>Rs. 2000/-</u></td></tr> <tr><td style="text-align: right;"><b>Total:</b></td><td style="text-align: right;"><b><u>Rs. 11240/-</u></b></td></tr> </table>	i) <u>Adm. Fee.</u>	<u>Rs. 1200/-</u>	ii) <u>Tuition Fee.</u>	<u>Rs. 2880/-</u>	iii) <u>Security Money</u> <u>Non Refundable.</u>	<u>Rs. 360/-</u>	iv) <u>Identity Card.</u>	<u>Rs. 60/-</u>	v) <u>Sports Fee.</u>	<u>Rs. 600/-</u>	vi) <u>Transport Fee.</u>	<u>Rs. 960/-</u>	vii) <u>Library Fee.</u>	<u>Rs. 360/-</u>	viii) <u>Student Cultural</u> <u>Activities.</u>	<u>Rs. 180/-</u>	ix) <u>Field Work.</u>	<u>Rs. 480/-</u>	x) <u>Studio Work.</u>	<u>Rs. 2160/-</u>	xi) <u>Library Fee</u> <u>50% (Refundable)</u>	<u>Rs. 2000/-</u>	<b>Total:</b>	<b><u>Rs. 11240/-</u></b>	<p><b><u>2nd, 3rd &amp; 4th per Year.</u></b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>i) <u>Adm. Fee.</u></td><td style="text-align: right;"><u>Rs. 1200/-</u></td></tr> <tr><td>ii) <u>Tuition Fee.</u></td><td style="text-align: right;"><u>Rs. 2880/-</u></td></tr> <tr><td>iii) <u>Security Money</u> <u>Non Refundable.</u></td><td style="text-align: right;"><u>-----</u></td></tr> <tr><td>iv) <u>Identity Card.</u></td><td style="text-align: right;"><u>Rs. 60/-</u></td></tr> <tr><td>v) <u>Student Cultural</u></td><td style="text-align: right;"><u>Rs. 180/-</u></td></tr> <tr><td>vi) <u>Sports Fee.</u></td><td style="text-align: right;"><u>Rs. 600/-</u></td></tr> <tr><td>vii) <u>Transport Fee.</u></td><td style="text-align: right;"><u>Rs. 960/-</u></td></tr> <tr><td>viii) <u>Library Fee.</u></td><td style="text-align: right;"><u>Rs. 360/-</u></td></tr> <tr><td>ix) <u>Field Work.</u></td><td style="text-align: right;"><u>Rs. 480/-</u></td></tr> <tr><td>x) <u>Studio Work.</u></td><td style="text-align: right;"><u>Rs. 2160/-</u></td></tr> <tr><td>xi) <u>Library Fee</u> <u>50% (Refundable)</u></td><td style="text-align: right;"><u>-----</u></td></tr> <tr><td style="text-align: right;"><b>Total:</b></td><td style="text-align: right;"><b><u>Rs. 8,880/-</u></b></td></tr> </table>	i) <u>Adm. Fee.</u>	<u>Rs. 1200/-</u>	ii) <u>Tuition Fee.</u>	<u>Rs. 2880/-</u>	iii) <u>Security Money</u> <u>Non Refundable.</u>	<u>-----</u>	iv) <u>Identity Card.</u>	<u>Rs. 60/-</u>	v) <u>Student Cultural</u>	<u>Rs. 180/-</u>	vi) <u>Sports Fee.</u>	<u>Rs. 600/-</u>	vii) <u>Transport Fee.</u>	<u>Rs. 960/-</u>	viii) <u>Library Fee.</u>	<u>Rs. 360/-</u>	ix) <u>Field Work.</u>	<u>Rs. 480/-</u>	x) <u>Studio Work.</u>	<u>Rs. 2160/-</u>	xi) <u>Library Fee</u> <u>50% (Refundable)</u>	<u>-----</u>	<b>Total:</b>	<b><u>Rs. 8,880/-</u></b>
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<b>Pharmacy</b> <b>(5 years)</b>  Total Dues for 5 Year <b>Rs. 51,560/-</b>	<b>1st Year:</b> i) <u>Adm: Fee.</u> Rs. 1200/- ii) <u>Tuition Fee.</u> Rs. 2880/- iii) <u>Security Money</u> (Non Refundable). Rs. 360/- iv) <u>Identity Card.</u> Rs. 60/- v) <u>Student Cultural</u> Rs. 180/- vi) <u>Sports Fee.</u> Rs. 600/- vii) <u>Computer Lab Fee.</u> Rs. 1200/- viii) <u>Transport Fee.</u> Rs. 960/- ix) <u>Field Work.</u> Rs. 1200/- x) <u>Library Fee.</u> Rs. 360/- xi) <u>Laboratory Fee.</u> Rs. 1200/- xii) <u>Library Security</u> 50% (Refundable) Rs. 2000/- <b>Total: Rs. 12,200/-</b>	<b>2nd, 3rd, 4th &amp; 5th per Year:</b> i) <u>Adm: Fee.</u> Rs. 1200/- ii) <u>Tuition Fee.</u> Rs. 2880/- iii) <u>Security Money</u> (Non Refundable). ---- iv) <u>Identity Card.</u> Rs. 60/- v) <u>Student Cultural</u> Rs. 180/- vi) <u>Sports Fee.</u> Rs. 600/- vii) <u>Computer Lab Fee.</u> Rs. 1200/- viii) <u>Transport Fee.</u> Rs. 960/- ix) <u>Field Work.</u> Rs. 1200/- x) <u>Library Fee.</u> Rs. 360/- xi) <u>Laboratory Fee.</u> Rs. 1200/- xii) <u>Library Security</u> 50% (Refundable) ---- <b>Total: Rs. 9,840/-</b>
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<b>BS Geology</b> Four Year Program  Total Dues for 4 Year <b>Rs. 81,080/-</b>	<b>1st Year</b> i) <u>Adm: Fee.</u> Rs. 1800/- ii) <u>Tuition Fee.</u> Rs. 5040/- iii) <u>Security Money</u> (Non Refundable). Rs. 360/- iv) <u>Identity Card.</u> Rs. 60/- v) <u>Student Cultural</u> Activities. Rs. 180/- vi) <u>Laboratory Fee.</u> Rs. 600/- vii) <u>Transport Fee.</u> Rs. 960/- viii) <u>Field Fee.</u> Rs. 2400/- ix) <u>Library Fee.</u> Rs. 360/- x) <u>Computer Lab:</u> Rs. 2880/- xi) <u>Library Security</u> 50% (Refundable) Rs. 2000/- xii) <u>Examination Fee</u> Rs. 4200/- <b>Total: Rs. 22,040/-</b>	<b>2nd, 3rd &amp; 4thPer Year</b> i) <u>Adm: Fee.</u> Rs. 1800/- ii) <u>Tuition Fee.</u> Rs. 5040/- iii) <u>Identity Card.</u> Rs. 60/- iv) <u>Student Cultural</u> Activities. Rs. 180/- v) <u>Sports Fee.</u> Rs. 600/- vi) <u>Laboratory Fee.</u> Rs. 1200/- vii) <u>Transport Fee.</u> Rs. 960/- viii) <u>Field Fee.</u> Rs. 2400/- ix) <u>Library Fee.</u> Rs. 360/- x) <u>Computer Lab:</u> Rs. 2880/- xi) <u>Library Security</u> 50% (Refundable) ---- xii) <u>Examination Fee</u> Rs. 4200/- <b>Total: Rs. 19,680/-</b>
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<b>Microbiology</b> BS 4 Year Program  Total Dues for 4 Year <b>Rs. 81,080/-</b>	<b>1st Year</b> i) <u>Adm: Fee.</u> Rs. 1800/- ii) <u>Tuition Fee.</u> Rs. 5040/- iii) <u>Security Money</u> (Non Refundable). Rs. 360/- iv) <u>Identity Card.</u> Rs. 60/- v) <u>Student Cultural</u> Activities. Rs. 180/- vi) <u>Laboratory Fee.</u> Rs. 600/- vii) <u>Transport Fee.</u> Rs. 960/- viii) <u>Field Fee.</u> Rs. 2400/- ix) <u>Library Fee.</u> Rs. 360/- x) <u>Computer Lab:</u> Rs. 2880/- xi) <u>Library Security</u> 50% (Refundable) Rs. 2000/- xii) <u>Examination Fee</u> Rs. 4200/- <b>Total: Rs. 22,040/-</b>	<b>2nd, 3rd &amp; 4thPer Year</b> i) <u>Adm: Fee.</u> Rs. 1800/- ii) <u>Tuition Fee.</u> Rs. 5040/- iii) <u>Identity Card.</u> Rs. 60/- iv) <u>Student Cultural</u> Activities. Rs. 180/- v) <u>Sports Fee.</u> Rs. 600/- vi) <u>Laboratory Fee.</u> Rs. 1200/- vii) <u>Transport Fee.</u> Rs. 960/- viii) <u>Field Fee.</u> Rs. 2400/- ix) <u>Library Fee.</u> Rs. 360/- x) <u>Computer Lab:</u> Rs. 2880/- xi) <u>Library Security</u> 50% (Refundable) ---- xii) <u>Examination Fee</u> Rs. 4200/- <b>Total: Rs. 19,680/-</b>
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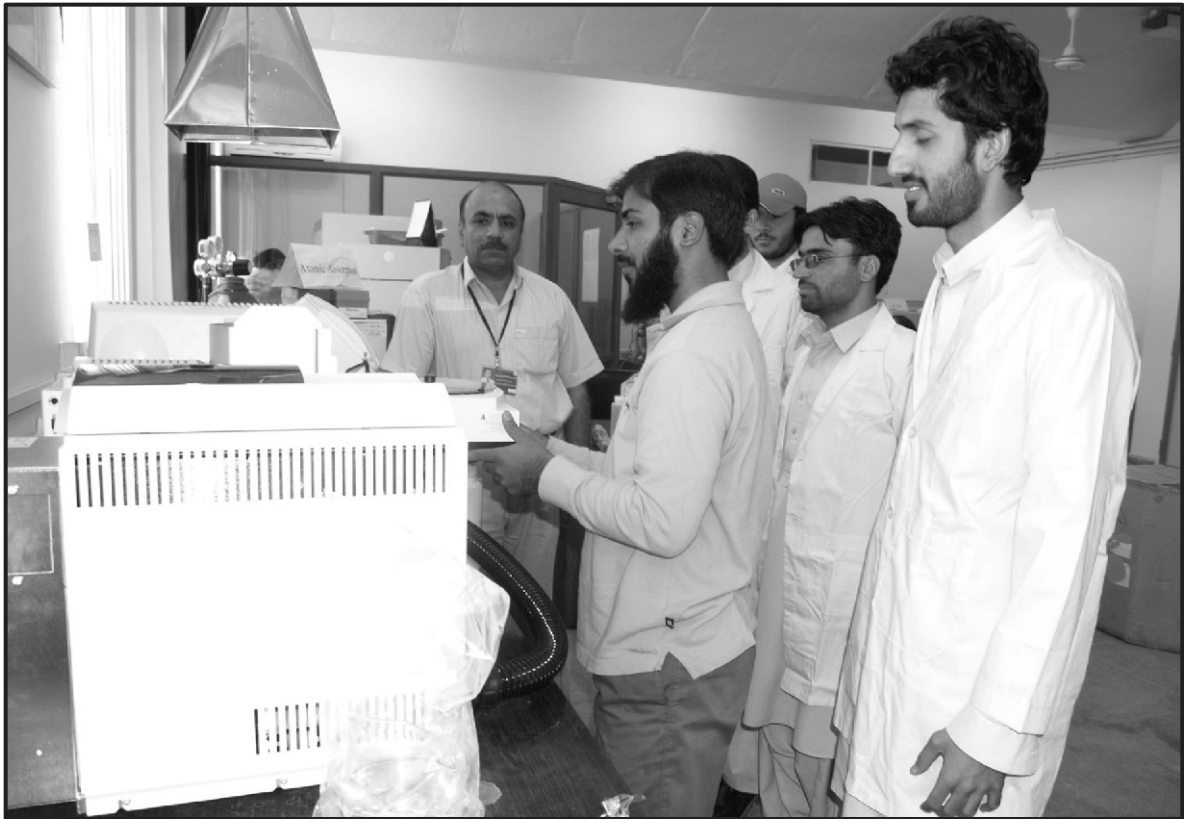
<b>Bio Technology</b> BS 4 Year Program  Total Dues for 4 Year <b><u>Rs. 81,080/-</u></b>	<b>1st Year</b>		<b>2nd, 3rd &amp; 4th Per Year</b>	
	i) <u>Adm: Fee.</u>	<u>Rs. 1800/-</u>	i) <u>Adm: Fee.</u>	<u>Rs. 1800/-</u>
	ii) <u>Tuition Fee.</u>	<u>Rs. 5040/-</u>	ii) <u>Tuition Fee.</u>	<u>Rs. 5040/-</u>
	iii) <u>Security Money</u> <u>(Non Refundable).</u>	<u>Rs. 360/-</u>	iii) <u>Identity Card.</u>	<u>Rs. 60/-</u>
	iv) <u>Identity Card.</u>	<u>Rs. 60/-</u>	iv) <u>Student Cultural</u> <u>Activities.</u>	<u>Rs. 180/-</u>
	v) <u>Student Cultural</u> <u>Activities.</u>	<u>Rs. 180/-</u>	v) <u>Sports Fee.</u>	<u>Rs. 600/-</u>
	vi) <u>Laboratory Fee.</u>	<u>Rs. 600/-</u>	vi) <u>Laboratory Fee.</u>	<u>Rs. 1200/-</u>
	vii) <u>Transport Fee.</u>	<u>Rs. 960/-</u>	vii) <u>Transport Fee.</u>	<u>Rs. 960/-</u>
	viii) <u>Field Fee.</u>	<u>Rs. 2400/-</u>	viii) <u>Field Fee.</u>	<u>Rs. 2400/-</u>
	ix) <u>Library Fee.</u>	<u>Rs. 360/-</u>	ix) <u>Library Fee.</u>	<u>Rs. 360/-</u>
	x) <u>Computer Lab:</u>	<u>Rs. 2880/-</u>	x) <u>Computer Lab:</u>	<u>Rs. 2880/-</u>
	xi) <u>Library Security</u> <u>50% (Refundable)</u>	<u>Rs. 2000/-</u>	xi) <u>Library Security</u> <u>50% (Refundable)</u>	<u>-----</u>
	xiii) <u>Examination Fee</u>	<u>Rs. 4200/-</u>	xii) <u>Examination Fee</u>	<u>Rs. 4200/-</u>
	<b>Total: <u>Rs. 22,040/-</u></b>		<b>Total: <u>Rs. 19,680/-</u></b>	

<b>B.com</b> 2 Year Program  Total Dues for 2 Year <b><u>Rs. 14,360/-</u></b>	<b>1st Year</b>		<b>Final Year</b>	
	I) <u>Adm: Fee.</u>	<u>Rs. 1200/-</u>	I) <u>Adm: Fee.</u>	<u>Rs. 1200/-</u>
	ii) <u>Tuition Fee.</u>	<u>Rs. 2160/-</u>	ii) <u>Tuition Fee.</u>	<u>Rs. 2160/-</u>
	iii) <u>Security Money</u> <u>(Non Refundable).</u>	<u>Rs. 360/-</u>	iii) <u>Security Money</u> <u>(Non Refundable).</u>	<u>-----</u>
	iv) <u>Identity Card.</u>	<u>Rs. 60/-</u>	iv) <u>Identity Card.</u>	<u>Rs. 60/-</u>
	v) <u>Student Cultural</u> <u>Activities.</u>	<u>Rs. 180/-</u>	v) <u>Student Cultural</u> <u>Activities.</u>	<u>Rs. 180/-</u>
	vi) <u>Sports</u>	<u>Rs. 600/-</u>	vi) <u>Sports</u>	<u>Rs. 600/-</u>
	vii) <u>Transport Fee.</u>	<u>Rs. 960/-</u>	vii) <u>Transport Fee.</u>	<u>Rs. 960/-</u>
	viii) <u>Field Fee.</u>	<u>Rs. 480/-</u>	viii) <u>Field Fee.</u>	<u>Rs. 480/-</u>
	ix) <u>Library Fee.</u>	<u>Rs. 360/-</u>	ix) <u>Library Fee.</u>	<u>Rs. 360/-</u>
	x) <u>Library Security</u> <u>50% (Refundable)</u>	<u>Rs. 2000/-</u>	x) <u>Library Security</u> <u>50% (Refundable)</u>	<u>-----</u>
		<b>Total: <u>Rs. 8,360/-</u></b>		<b>Total: <u>Rs. 6,000/-</u></b>

- Note:-** i). Hostel Room Rent @ Rs.120/- Per Month. Rs.1440/- Per Year.  
 ii). Hostel Room Rent for Self Finances @ Rs.1200/- Per Month, **Rs.14400/-** Per Year.

**Note:-** All fee may be deposited after declaration of admission with in the stipulated time. If a candidate failed to deposit the fee his/her admission will stand cancelled and the student at the top of the waiting list will be considered for admission, he/she will be allowed to deposit the fee as prescribed.  
 As per University Policy admission etc dues will be increased each year. Which is liable to be paid by each student accordingly.

**\*\*\*Fee deposited in previous will be increased 10% in final year.\*\***



# Faculty of Life Sciences

**BS (Bio Tech/ Bio-Chemistry)**

*4 years*

**BS (Microbiology)**

*4 years*

**D. Pharmacy**

*5 years*







# IRRATIONAL USE OF ANTIBIOTICS IN CHILDREN BY MEDICAL PRESCRIBERS

**Byed Umar Jan, PhD (4th St)**  
 Department of Pharmacy, University of Valencia (Spain)

**Abstract**  
**Objectives:** To assess and obtain data on the present irrational use and prescribing habits of medical practitioners for prescribing antibiotics for children in general symptoms and diarrhea.

**Methods:** Prescriptions of child patients were analyzed from May 2010 to March 2012 from 7 public/private hospitals and 16 private clinics in different community areas and analyzed over the dispensing counters of Pharmacies by Hospital and Community Pharmacies.

**Results:** In public/general hospital 430 out of 560 (77%) patients were prescribed antibiotics for hospital and community pharmacies. The antibiotics were mainly Amoxicillin, Clavulanic acid (Pivmecillinam), Clindamycin, Penicillins (Penicillins), Cephalosporins and Cotrimoxazole. It was also observed that in some cases the antibiotics of choice were not recommended. This irrational prescribing habit of the medical practitioners was observed everywhere in the area both in public hospitals and in private clinics.

**Conclusion:** This study showed that the irrational antibiotic use in children is a common practice which is an alarming situation and needs strict regulatory strategies for control.

**Introduction:**  
 Drugs are important components of health care and play crucial role in saving life. The limited information available on drug use throughout the world indicated that drugs are not usually used. This inappropriate use has serious health and economic consequences for individuals, communities and for the success of national health care system. In general, the safe and effective use of drugs depends on prescribing pattern. So rational prescribing pattern, and providing correct information regarding dispensing is invaluable for proper utilization of drugs [1]. In the United States, antibiotics are among the most frequently prescribed drugs to children and almost three quarters of all outpatient antibiotic prescriptions are for acute respiratory infections [2]. Despite their importance, the continued efficacy of antibiotic therapies in children and almost three quarters of all outpatient antibiotic prescriptions are for acute respiratory infections [2]. Despite their importance, the continued efficacy of antibiotic therapies is threatened by the emergence of resistance. Much of this resistance has resulted in indiscriminate overuse of antibiotics [3]. The situation in developing countries is of particular concern because the use of antibiotics without medical guidance is largely facilitated by regulation of the distribution and sale of prescribed drugs [4,5]. The WHO and UN International Children Emergency Fund in 2004 recommended the use of low molecular weight along with First Aid Kit for acute diarrhea in children [6]. Whereas, antibiotics are not recommended for acute diarrhea in adults. Unfortunately, diarrhea is always treated with antibiotics in most parts of the world. This study was to assess the irrational antibiotics use and drug prescribing habits of medical practitioners for children in public/general hospitals and private clinics in Valencia, Spain from May 2010 to March 2012.

**Methods:** A community based survey conducted in the area.

**Results:** General Hospitals (tertiary care Hospitals) were selected in Quetta City. The study was run by medical/general practitioners in different community areas of Quetta (Baluchistan, Pakistan) and surrounding areas. The study was conducted in the area of children containing antibiotics for the treatment of diarrhea and general symptoms. The data were collected and analyzed over the dispensing counters of Pharmacies by Hospital Pharmacies and Community Pharmacies.

**Conclusion:** The study showed that the irrational antibiotic use in children is a common practice which is an alarming situation and needs strict regulatory strategies for control. The irrational use of antibiotics in children is a common practice which is an alarming situation and needs strict regulatory strategies for control.

# ISPOR 15TH Annual European Congress - Berlin 2012

## Ambulatory Pharmaceutical Spending Analysis Based on Risk Stratification in Patients With Chronic Conditions

Ruth Vico-Talamanca\*, José Luis Tello-Mateo\*, Nuria Gualdriano-Díez\*, David Vivero-Coscolluela\*, Carlos Sancho-Mejías\*\*

\*Valencian Community Government, Health Department (Conselleria de Sanitat), General Directorate of Pharmaceutical Products, Pharmaceutical Economics Office, Valencia, Spain  
 \*\*Hospital General de Valencia, Research Centre for Health Economics and Management

**RESULTS**  
**1. Patient stratification and pharmaceutical expenditure:**  
 The largest group of population (52%) are healthy and spend only 4.23% of pharmaceutical expenditure. Patients with chronic disease in 2 or more organ systems spend 48% of total primary health care pharmaceutical expenditure despite only representing 11% of population of the Valencian Community. Health status 5 (jungle disease) represents 26.4% of total pharmaceutical expenditure while only 1% of population of the Valencian Community. These two statuses together (Health status 5 and Health status 4) represent 74.4% of total expenditure.

**Regression model table**

Variable	Beta	Std. Error	t-Statistic	Prob. >  t
Constant	1.224	1.80	0.68	0.500
X1	0.178	0.236	0.75	0.452
X2	0.276	0.217	1.27	0.205
X3	0.271	0.216	1.25	0.215
X4	0.268	0.215	1.24	0.219
X5	0.265	0.214	1.23	0.222
X6	0.262	0.213	1.22	0.225
X7	0.259	0.212	1.21	0.228
X8	0.256	0.211	1.20	0.231
X9	0.253	0.210	1.19	0.234
X10	0.250	0.209	1.18	0.237

**Graph 3**



# **INSTITUTE OF BIOCHEMISTRY**

## **1. Introduction**

- 1.1. The Institute of Biochemistry, was established in 1986 initially as a research Institute entertaining only M.Phil / Ph.D students. Later in 1991 M.Sc. Program in Biochemistry was started. In 2006, BS (4 years) program in Biochemistry and Biotechnology was also started.
- 1.2. Biochemistry seeks to understand & explain living systems at the molecular level. It is a scientific discipline that finds applications across the Biomedical & Biological sciences & underpins the Biotechnology revolution. It is developing at a rapid pace and have become an exciting and challenging subject.
- 1.3. Biochemistry tries to answer questions that are fundamental to life. What are the molecules that constitute living organisms? How are they made & how is their synthesis regulated? How are they organized into cells? How they interact with each other and how is their synthesis regulated? What is the molecular basis of such processes as genetic inheritance, immunological recognition of self & non- self? What goes wrong to cause human diseases such as Cancer, Heart attacks, Alzheimer and diabetes and how can such errors be corrected? This knowledge finds practical application in medicine, agriculture, brewing and biotechnology. Biochemists devise new ways of diagnosing & treating human, animal and plant diseases.

## **2. Objectives**

- 2.1. To prepare graduates in modern Biological science such as Biochemistry/ Biotechnology who are able to make a valuable beginning to many different careers in their practical life.
- 2.2. To emphasis on research program exploring variety of technically feasible projects having socioeconomic importance, so as to be on the front line in solving our own problems in the area of Biological sciences.
- 2.3. To provide educational programs which encourage students to think creatively, constructively and to communicate their ideas effectively.
- 2.4. To foster an environment that promotes learning through quality teaching and research while encouraging mutual respect, tolerance and sensitivity.
- 2.5. To provide qualified and focused professionals in the subject of Bio Chemistry to meet the future needs of educational institutes and industry.
- 2.6. To prepare researchers to meet the needs of industry and research organizations, science and technology.

## **3. Vocational Job Opportunities/Marketability of Graduates**

- 3.1. Pharmaceutical /food industries.
- 3.2. Public/Private research Institutes/centers relating to medical and agriculture
- 3.3. Educational Institutions-College/University level.
- 3.4. Balochistan at present has become an active of socio-economic field. It is expanding its infrastructure and encourages development of industry. Numerous Food & Pharmaceutical Industries are recently established in Hub. The PCSIR laboratory in Quetta is currently being expanded creating new job opportunities. In the teaching sector, a number of new Universities and Colleges in Balochistan are offering opportunities to Biochemistry graduates. At National level also, research in Biomedical Sciences is attracting attention.



## 4. Faculty

4.1. The Institute has two main functioning units i.e Biochemistry and Biotechnology. In addition to this there are two units i.e Analytical Biochemistry and Bioorganic Chemistry to support the main units. The faculty of the Institute of Biochemistry is highly qualified and experienced. Details are given below.

S.No.	Name	Designation	Qualification	Field of Specialization
(a)	(b)	(c)	(d)	(e)
1	Prof. Dr. M. Anwer Panezai	Professor	Ph.D. (UOB)	Biochemistry
2	Prof. Dr. Masoom Yasinzai	Professor (on Extra ordinary Leave)	Ph.D (U.K)	Biochemistry
3	Dr. Muhammad Azam	Associate Professor (on Extra ordinary Leave)	Ph.D (UK)	Polymers Science
4	Mr. Zahid Mehmood	Assistant Professor <b>Director</b>	M.Phil (UOB)	Biochemistry
5	Mr. Khalid Mehmood	Assistant Professor (on Study Leave)	M.Phil. (UOB)	Biochemistry
6	Mr. M. Sharif Jamali	Lecturer	M.Sc. (QAU)	Biochemistry
7	Dr. Ashif Sajjad	Assistant Professor	Ph.D (Italy)	Biochemistry
8	Dr. Mohammad Ayub	Assistant Professor	Ph.D. (UOB)	Molecular Biology / Biochemistry
9	Dr. Dildar Ali	Assistant Professor	P.h.D. University of Karachi	Organic Chemistry
10	Mr. Mohammad Hashim Jan	Lecturer	M.Sc. (UOB)	Biochemistry
11	Mr. Noor Hassan	Lecturer (on Study Leave)	M.Sc. (UOB)	Biochemistry
12	Ms. Samira Khaliq	Lecturer (on Study Leave)	M.Sc. (UOB)	Biochemistry
13	Ms. Shahida Hussain	Lecturer (on Study Leave)	M.Sc (QAU)	Biochemistry
14	Mr. Sharif Hasni	Lecturer (on Study Leave)	M.S Sweden	Biochemistry
15	Mr. Zia-ur-Rehman	Lecturer (on Study Leave)	M.S (AIT) Thailand	Biochemistry
16	Mr. Imran Ali	Lecturer (on Study Leave)	M.S (AIT) Thailand	Biochemistry
17	Mrs. Pari Gul	Lectuer	M.Sc (UOB)	Biochemistry
18	Mr. Aamir Rasool	Lecturer (on Study Leave)	M.Sc University of Karachi	Biochemistry

## 5. Programs of Study

### 5.1. BS(4 YEARS) IN BIOCHEMISTRY & BIOTECHNOLOGY:

This comprises 8 semesters (4 years) with a total of 126 credit hours. In the first 4 semesters, Chemistry & Microbiology are taught as minor subjects. In the 4<sup>th</sup> year i.e in semester VII, students are given the choice to either opt for specialization in Biochemistry or Biotechnology.

## **6. Description of Courses**

### **6.1. B. S (4 years) in Biochemistry/Biotechnology**

#### **6.1.1. First Year**

<b>Paper #</b>	<b>Subjects</b>	<b>Marks</b>	<b>Practicals</b>	<b>Marks</b>
Paper-I	Biochemistry	75 Marks	Biochemistry Lab.	25
Paper-II	Chemistry	75 Marks	Chemistry Lab.	25
Paper-III	Microbiology	75 Marks	Microbiology Lab.	25
Paper-IV	English-I ( <i>Functional</i> )	50 Marks		
Paper-V	Islamic Studies	50 Marks		
Total:		325 Marks	Total:	75 Marks

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#### **First year Total Marks: 400**

#### **6.1.2. Second Year.**

<b>Paper #</b>	<b>Subjects</b>	<b>Marks</b>	<b>Practicals</b>	<b>Marks</b>
Paper-I	Biochemistry	75 Marks	Biochemistry Lab.	25
Paper-II	Chemistry	75 Marks	Chemistry Lab.	25
Paper-III	Microbiology	75 Marks	Microbiology Lab.	25
Paper-IV	English-II ( <i>Functional</i> )	50 Marks		
Paper-V	Pak. Studies	50 Marks		
Total:		325 Marks	Total:	75 Marks

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#### **Second year Total Marks: 400**

#### **6.1.3. Third Year.**

<b>Paper #</b>	<b>Subjects</b>	<b>Marks</b>	<b>Practicals</b>	<b>Marks</b>
Paper-I	Biochemistry-I	75 Marks	Biochemistry Lab.-I	25
Paper-II	Biochemistry-II	75 Marks	Biochemistry Lab.-II	25
Paper-III	Biotechnology	75 Marks	Biotechnology Lab.	25
Paper-IV	Math & Stat. ( <i>for Biochemists &amp; Biotechnologist</i> )	50 Marks		
Paper-V	Computer skills ( <i>for Biochemists &amp; Biotechnologist</i> )	50 Marks		
Total:		325 Marks	Total:	75 Marks

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#### **Third year Total Marks: 400**

#### **6.1.4. 4<sup>th</sup> Year.**

#### **SPECIALIZATION (BIOCHEMISTRY)**

<b>Paper #</b>	<b>Subjects</b>	<b>Marks</b>
Paper-I	Biochemistry-I	100 Marks
Paper-II	Biochemistry-II	100 Marks
Paper-III	Biochemistry-III	100 Marks
Paper-IV	Lab/Research	100 Marks
Total:		400 Marks

## **SPECIALIZATION (BIOTECHNOLOGY)**

<b>Paper #</b>	<b>Subjects</b>	<b>Marks</b>
Paper-I	Biochemistry-I	100 Marks
Paper-II	Biochemistry-II	100 Marks
Paper-III	Biochemistry-III	100 Marks
Paper-IV	Lab/Research	100 Marks
Total:		400 Marks

**Fourth year Total Marks : 400**

### **7. Eligibility Criteria for Admission**

#### **7.1. BS (4 years)**

- 7.1.1.** F.Sc. (Pre- Medical) / A- Levels (with Chemistry 2<sup>ND</sup> Division & Biology)  
Written test and interview to be qualified with 45% marks.(20% test + 10% Interview + 70% Marks, Age limit is of last course taken)

### **8 FACILITIES:**

Well-equipped, purpose built laboratories. Major equipment in the Institute include, High Performance liquid Chromatography(HPLC); Gas Liquid Chromatography (GLC); Scintillation Counter; Electrophoresis Units; Centrifuges; Spectrophotometers; Furnaces; Autoclaves; Laminar Flow hoods etc etc.

8.1 **Internet Facility.** Internet net facility is available in the laboratories.

8.2 **Computer Laboratory.** A Computer laboratory equipped with 25 Pentium 4 units connected to the inter net is available.

8.3 **Teaching Labs.** Three well equipped and modern labs., along with supporting staff are available for conducting practicals for BS and M.Sc program.

8.4 **Research Labs.** Four newly constructed labs., with all modern facilities and a central lab., with many modern and up to date research facilities are available for M.Phil / Ph.D research.

8.5 **Departmental Library.** A newly constructed departmental library with approximately 3000 books and scientific journals available for the students.

### **9 ACHIEVEMENTS :**

- .9.1 Our excellence in both teaching and research has been recognized by the quality assurance and the research assessment exercise by the Pakistan Council for Science and Technology.

### **10 FUTURE PLANS:**

10.1 The Institute is following its 15 years vision plan, whereby this Institute will be strengthened and equipped so that it turns into a full fledged School of Biological Sciences with established setups for:

10.1.1 Biochemistry & Molecular Biology

10.1.2 Biotechnology and Bioinformatics

10.1.3 Biochemical Parasitology

10.1.4 Drugs Development

11.1.5 Clinical Biochemistry.

11.1.6 To achieve this, we have already embarked upon the strengthening of our faculty and in-service training of our teachers.



# DEPARTMENT OF MICROBIOLOGY

## 1. Introduction

- 1.1. Microbiology is the study of microorganisms; include Bacteria, Fungi, Viruses, and Protozoa etc.(both useful and harmful for human beings Plants and fish etc) through applying different scientific technique/s, microorganisms and microbial enzymes can be used in industrial processes to carry out reactions that are not economically feasible by chemical means. Microbiology offers the possibility of major improvements in the way medicines are developed and manufactured.
- 1.2. Microbiologists are employed principally in health care (animal and Human beings), fine chemicals, brewing & distilling, food and food related industries, where they are involved in research and development, in process design & control, in management and in quality control. Therefore, various disciplines of Microbiology are prime choice of men and women, mainly because of its laboratory-based activities.
- 1.3. The Department of Microbiology was established in May 2006 and is aimed at the production of marketable and qualified product capable of finding solution / remedies against prevalent and new emerging diseases, production of different vaccines and preservation of different foods etc. through research and development.

## 2. Objectives

- 2.1. To foster an environment that promotes learning through quality teaching and research while encouraging mutual respect, tolerance and sensitivity.
- 2.2. To provide qualified and focused professionals in the subject of Microbiology to meet the future needs of educational institutes and/or industries.
- 2.3. To prepare researchers to meet the needs of industry and research organizations, science and technology.
- 2.4. To develop the department as a nursery for the advanced level degree program at CASVAB other institutions particularly in the province of Balochistan.

## 3. Vocational Job Opportunities / Marketability of Graduates

- 3.1. Food packaging and processing industry
- 3.2. Quality control operations of safe drinking water
- 3.3. Public Health Institutions
- 3.4. Pharmaceutical Industry
- 3.5. Diagnostic Laboratory Technicians / Experts
- 3.6. Biological production industry
- 3.7. Biotechnological interventions in environmental sciences like Bioremediation

## 4. Faculty

- 4.1 The details of faculty members is as

S.No	Name	Designation	Qualification	Field Specialization
01	Mr. Abdul Wadood Khan	Chairperson	M.Phil	Microbiology
02	Mr. Kifayatullah	Lecturer	M.Phil	Microbiology
03	Mr. Muhammad Khanzeb	Lecturer	M.Sc.	Bio-chemistry
04	Mr. Ali Akbar	Lecturer	M.Sc.	Microbiology
05	Mr. Shabir Ahmad Khan	Lecturer	M.Sc.	Microbiology
06	Mr. Kaleemullah	Lecturer	M.Phil	Microbiology
07	Ms. Sadia Tahir	Lecturer	MS	Microbiology & Molecular Genetics
08	Mr. Imran Nawaz Bugti	Lecturer	MS	Biotechnology
09	Dr. Fazal ur Rehman	Asst: Professor	PhD	Microbiology
10	Mr. Abdul Manan	Lecturer	M.Phil	Biotechnology
11	Mr. Muhammad Yasir	Lecturer	M.Sc	Microbiology
12	Miss Rozina Rashid	Lecturer	M.Sc	Microbiology
13	Miss Hasina Wali	Lecturer	M.Sc	Microbiology

## 5. Programs of Study

### 5.1. BS (4 years) (eligibility)

5.1.1 Students (Male/Female) with F.Sc (pre-medical) with at least 2nd division are eligible to apply for four years BS program system.

## 6. Description of Courses

### 6.1. BS-4 Years Program

### Marks Distribution

6.1.1. First Year		<u>Theory</u>	<u>P r a c t i c a l</u>	
<b>Total</b>				
Paper-I	Functional English	50	----	50
Paper-II	Pakistan Studies	50	----	50
Paper-III	Islamic Studies	50	----	50
Paper-IV	Microbial Toxonomy & Antimicrobial Drugs	75	25	100
Paper-V	Human Physiology	75	25	100
Paper-VI	Biochemistry	75	25	100
6.1.2 Second Year				
Paper-I	Functional English	50	----	50
Paper-II	Sociology	50	----	50
Paper-III	Computer Application	75	25	100
Paper-IV	Immunobiology	75	25	100
Paper-V	Cell Biology	75	25	100
Paper-VI	Plant Microbiology	75	25	100
6.1.3 Third Year				
Paper-I	General Microbiology	75	25	100
Paper-II	Microbial Genetics	75	25	100
Paper-III	General Immunology	75	25	100
Paper-IV	General Mycology	75	25	100
Paper-V	Environmenta Microbioogy & Biostatistics	75	25	100
Paper-VI	Genera Viroogy & Cell culture	75	25	100
6.1.4 Fourth Year				
Paper-I	Diagnostic Microbiology	75	25	100
Paper-II	Soi Microbiology	75	25	100
Paper-III	Marine Microbiology	75	25	100
Paper-IV	Medica Microbiology	75	25	100
Paper-V	Biotechnology & Bioinformatics	75	25	100
Paper-VI	Research Report/ Thesis	----	----	100

## 7. Facilities

7.1. **Teaching Laboratories:** - A laboratory has been established at the Department of Microbiology to teach basic techniques in bacteriology, immunology virology, hematology and mycology. The laboratories of the Department Zoology are being shared for teaching different micro-biological techniques, where desired equipment and other required facilities are available.

7.2. **Research Laboratories:** - The research laboratories of CASVAB are being utilized for the research projects till the establishment of full-fledged research laboratories with required facilities become available at the Department of Microbiology

### 7.2.1. Research is carried out in the fields/area of:-

- Bacteriology
- Virology
- Mycology
- Immunology
- Molecular Biology
- Public Health problems

- Disease Diagnosis (Viral, Bacterial, Fungal & Protozoan)
- Biological Product (vaccines etc) production
- Serology & modern diagnostic/ research techniques
- Food preservation techniques
- Drugs efficacy against diseases.

7.3 **Computer Laboratory:-** The central computer laboratory of the University is located in the department of Physics and could also be used by research scholars/ teachers of other department. An independent computer laboratory has also been established at the Department where the students are also allowed to avail the facility to acquaint with latest available knowledge through internet facility.

7.4 **Department Library:-** A department library has been established and about 100 books on different topic of basis microbiology subjects are available for the students. Purchase of relevant books is in progress. Facility of Central Library has also been extended to the students, to increase their desired knowledge. Further, the library of CASVAB has all the relevant text/ reference books and laboratory manual concerning to the subject which are also made available for the students enrolled at the Department of Microbiology.

7.5 **Internet Facility:-** 10 Computers along with internet facility are available at the Department and students are allowed to use the internet after university timings.

7.6 **Journals and Articles:-** A large number of international research journals and articles are also available on Digital Library provided by here Higher Education Commission and facility has been extended to the students for downloading research articles etc.

7.7 **Multimedia and overhead Projector Facility: -** For teaching subjects on modern lines facility of Overhead project is available at the department.



# DEPARTMENT OF PHARMACY

## **1. Introduction**

- 1.1 Pharmacy is the health profession that links the health sciences with the chemical sciences, and it is charged with ensuring the safe use of medication. The scope of Pharmacy practice includes more traditional roles such as compounding and dispensing medications, and it also includes more modern services related to patient care, including clinical services, reviewing medications for safety and efficacy, and providing drug information.
- 1.2 The significance of Pharmacy profession and the role of Pharmacists in uplifting health care system have been well established and acknowledged all over the world. The Pharmacy profession is well known as a ***“Life Saving Profession”***. The major emphasis of the World Health Organization (WHO) in the developing countries is to provide prompt and economical means for caring human health. This noble task can not be achieved with out Pharmacists because they are the only ones who know about drugs and related substances.
- 1.3 Department of Pharmacy was established in 1980 and due to high demand of its graduates; it is one of the most sought after discipline. It is very well staffed and equipped. Due to its high standard it is recognized by Pakistan Council of Pharmacy.

## **2. Objectives**

- 2.1 To prepare professional and focused pharmacists for the provision of high level pharmacy services in a range of services.
- 2.2 To provide an opportunity to students to acquire specialized knowledge and skills in pharmacy practice.
- 2.3 To provide qualified and focused professionals in the subject of pharmacy to meet the needs of health care system, clinical pharmacy, industry and society.
- 2.4 To prepare researchers to meet the needs of industry and research organization as community pharmacist, science and technology.
- 2.5 To impart knowledge of major disciplines of pharmacy, enabling the students to understand the principles of organization and inter-relationship in health with particular references to pharmacy.
- 2.6 To teach different methods for exploration, investigation, organization formulation of data and its utilization in practical life, particularly in health field.
- 2.7 To equip students with knowledge and skill for better planning and management of Hospital Pharmacy, Clinical Pharmacy, Community Pharmacy and Health Medicine.
- 2.8 To provide education programs, which encourage students to think creatively Medical Sales Officer, Medical Sales Representative etc.

### 3. Vocational Job Opportunities/Marketability of Graduates

- 3.1 Hospital Pharmacist, Clinical Pharmacist
- 3.2 Retail Pharmacist, Community Pharmacist
- 3.3 Production Pharmacist, Manager Quality Control
- 3.4 Sale Promotion Officer, Sale Manager, Marketing Director
- 3.5 Educational Institutes and research
- 3.6 Drug Inspector, Assistants Drugs Controller, Drugs Analyst

### 4. Faculty

S. #	Name of Teachers	Designation	Qualification	Specialization
1.	Dr. Naheed Haque	Assistant Professor Extra Ordinary Leave	B-Pharm, M-Phil & PhD	Pharmaceutics harmaceutical Chemistry
2.	Dr. Javeid Iqbal	Professor on long leave	M-Phil, PhD	Pharmacology Pharmacognosy
3.	Mrs. Bushra Aziz	Asstt: Professor	M.Sc., M.Phil (Reg)	Botany, Pharmacognosy
4.	Mr. Abdul Aziz Khan	Asstt: Professor /	B-Pharm, M-Phil Ph.D (Reg)	Pharmacy, Pharmaceutics
5.	Dr. Syed Umer Jan	Asstt: Professor Chairperson	B-Pharm, M-Phil, PhD	Pharmaceutics
6.	Mr. Nisar Ahmed	Lecturer	B-Pharm, M.Phil, (Reg)	Pharm, Chemistry
7.	Mr. Sarfaraz Khan	Lecturer on long leave	B-Pharm	Nil
8.	Mr. Ghulam Razaque	Lecturer	B-Pharm, M.Phil (Reg)	Pharmaceutics
9.	Mr. M. Younis	Lecturer	B-Pharm, M.Phil (Reg)	Pharmacology
10.	Mrs. Tehmina Rabani	Lecturer	B-Pharm, M.Phil	Pharmaceutics
11.	Mr. Haroon Arshad	Lecturer on long leave	B-Pharm, M-Phil	Pharmacology
12.	Mr. Fahad Saleem	Lecturer on study leave	B-Pharm, M Phil MBA	Pharmacology
13.	Mr. Noman ul Haq	Lecturer on study leave	B-Pharm, M-Phil, MBA	Pharmacology,
14.	Ms. Mahira Tabasum	Lecturer	B-Pharm	Nil
15.	Ms. Salma Malik	Lecturer on study leave	B-Pharm, M-Phil (Reg)	Nil
16.	Mr. Shafi Mohammad	Lecturer on study leave	B-Pharm, M.Phil, PhD (Reg)	Pharmacognosy
17.	Mr. Nafees Ahmed	Lecturer on study leave	B-Pharm, M.Phil (Reg)	
18.	Dr. Qaiser Iqbal	Lecturer	Pharm-D, M.Phil	Pharmaceutics
19.	Ms. Aysha Khalid	Lecturer	B-Pharm, M.Phil (Reg)	Pharmaceutical Chemistry
20.	Mr. Aleem Akhter	Lecturer	B-Pharm, PhD (Reg)	Pharmacology
21.	Dr. Zainab	Lecturer	Pharm-D	Nil
22.	Dr. Ahmed Tokhai	Lecturer	Pharm-D	Nil



## **5. Rules of Pharm-D Five Years**

The course is conducted according to the rules of Pharmacy Council of Pakistan.

- 5.1 No student shall be allowed to sit in the next Professional Examination without passing the previous Prof. Examination in all subjects.
- 5.2 Any student who fails to pass the 1<sup>st</sup> Prof. Examination in five chances shall cease to pursue further Pharmacy Education.
- 5.3 40% of the written exam shall consist multiple choice questions and the rest 60% of short structured essays, extended essays.
- 5.4 A student who appears for exam in any subject and passes in theory but fails in practical or vice versa shall reappear only in theory or in practical in which he fails.
- 5.5 75% attendance is mandatory for a student to appear in exam.

## **6. Rules for admission in Pharm-D**

- 6.1 The candidate must have passed F.Sc Pre-Medical
- 6.2 The candidate has to appear in the entry test conducted by NTS must be qualified.

## **7. Programs of Study**

- 7.1 Doctor of Pharmacy, 5 years morning and Self Supporting Evening Program
- 7.2 Doctor of Pharmacy, one year evening condense program
- 7.3 M.Phil. in Pharmacy
- 7.4 Ph.D in Pharmacy

## **8. Description of Courses**

- 8.1 **Duration; Five Years.** Each year terminates to a Professional Examination. The subjects in each professional year are approved by the Pharmacy Council of Pakistan. Higher Education Commission (HEC) and World Health Organization (WHO).
- 8.2 In addition, 1 year condense course is also offered to those pharmacists who have already graduated from Department of Pharmacy, University of Balochistan for the up gradation of B-Pharmacy into Doctor of Pharmacy
- 8.3 **Course of Doctor of Pharmacy 5 years Morning & Self Supporting Evening Program**
- 8.4 **First Professional Examination**
  - 8.4.1 Pharmaceutical Chemistry-I (Organic)
  - 8.4.2 Pharmaceutical Biochemistry
  - 8.4.3 Pharmaceutics-I (Physical Pharmacy)
  - 8.4.4 Physiology & Histology
  - 8.4.5 Anatomy
  - 8.4.6 Pharmaceutical Mathematics & Biostatistics
- 8.5. **Second Professional Examination**
  - 8.5.1 Pharmaceutics-II (Pharmaceutical Preparations)
  - 8.5.2 Pharmacology and Therapeutics-I
  - 8.5.3 Pharmacognosy-I
  - 8.5.4 Pharmaceutical Microbiology
  - 8.5.5 Pakistan Studies and Islamiyat (Comp.)

## **8.6 Third Professional Examination**

- 8.6.1 Pathology
- 8.6.2 Pharmacology and Therapeutics-II
- 8.6.3 Pharmacognosy-II
- 8.6.4 Pharmaceutics-III (Dispensing and Community Pharmacy)
- 8.6.5 Pharmaceutical Chemistry-II (Instrumentation)

## **8.7 Fourth Professional Examination**

- 8.7.1 Pharmaceutics-IV (Hospital Pharmacy)
- 8.7.2 Pharmaceutics-V (Clinical Pharmacy-I)
- 8.7.3 Pharmaceutics-VI (Industrial Pharmacy)
- 8.7.4 Pharmaceutics-VII (Biopharmaceutics)
- 8.7.5 Pharmaceutics-VIII (Pharmaceutical Quality Control)

## **8.8 Final Professional Examination**

- 8.8.1 Pharmaceutical Chemistry-III (Medicinal Chemistry)
- 8.8.2 Pharmaceutics-IX (Clinical Pharmacy-II)
- 8.8.3 Pharmaceutical Technology
- 8.8.4 Forensic Pharmacy
- 8.8.5 Pharmaceutical Management & Marketing
- 8.8.6 Computer and its Applications in Pharmacy

## **8.9 Course for Pharm-D 1 Year Condense Program**

- 8.9.1 Pharmaceutics-IV (Bio-Pharmaceutics)
- 8.9.2 Biostatistics
- 8.9.3 Pharmaceutics-II (Clinical Pharmacy)
- 8.9.4 Computer & its Application in Pharmacy
- 8.9.5 Pharmaceutics-I (Hospital Pharmacy)
- 8.9.6 Pharmaceutical Chemistry (Instrumentation)
- 8.9.7 Pathology
- 8.9.8 Pharmaceutics-III (Pharmaceutical Technology)

## **8.10. Course for M.Phil Pharmacy (Pharmaceutics)**

- 8.10.1 Pharmaceutics-I
- 8.10.2 Pharmaceutics-II
- 8.10.3 Biostatistics
- 8.10.4 Pharmaceutics-I (Practical)
- 8.10.5 Pharmaceutics-II (Practical)
- 8.10.6 Thesis

## **8.11. Course for M.Phil Pharmacy (Pharmacognosy)**

- 8.11.1 Pharmacognosy-I
- 8.11.2 Pharmacognosy-II
- 8.11.3 Biostatistics
- 8.11.4 Pharmacognosy-I (Practical)
- 8.11.5 Pharmacognosy-II (Practical)
- 8.11.6 Thesis

## **8.12. Course for M.Phil Pharmacy (Pharmacology)**

- 8.12.1 Major Pharmacology-I

- 8.12.2 Major Pharmacology-II
- 8.12.3 Biostatistics
- 8.12.4 Major Pharmacology-I (Practical)
- 8.12.5 Major Pharmacology-II (Practical)
- 8.12.6 Thesis

**8.13. Course for M.Phil Pharmacy (Pharmaceutical Chemistry)**

- 8.13.1 Pharmaceutical Chemistry-I
- 8.13.2 Pharmaceutical Chemistry-II
- 8.13.3 Biostatistics
- 8.13.4 Pharmaceutical Chemistry-I (Practical)
- 8.13.5 Pharmaceutical Chemistry-II (Practical)
- 8.13.6 Thesis

**9. Eligibility Criteria (for admission in M.Phil/Ph.D).**

9.1 The candidates should have passed GRE examination with at least 50% marks. For M.Phil, candidate has to appear in course work examination after one year of classes of their respective subjects of registration in the Department and the next year has to perform the research. The synopsis can be placed at the time of registration of after six months but before the initiation of the research of the relevant topic.

9.2 Ph.D in Pharmacy, the minimum criteria for Ph.D is M.Phil in Pharmacy; candidate should have passed GRE examination. Ph.D candidate has to appear in course work examination in the Department and the next year has to perform the research. The synopsis can be placed at the time of registration or after six months but before the initiation of the research of the relevant topic.

**10. Facilities.**

**10.1 Teaching Laboratories.**

10.1.1 The Department of Pharmacy has 6 well-equipped and modern laboratories along with the supporting staff to cater the needs of Pharmacy students.

**10.2 Research Laboratory.**

10.2.1 A separate well equipped laboratory has been developed for M.Phil and Ph.D students

**10.3 Computer Laboratory.**

10.3.1 Computer laboratory is established which can be used by students and research scholars of the Department.

**10.4 Departmental Library.**

10.4.1 The Departmental library is managed by a qualified librarian and has over 800 books covering a wide range of disciplines in Pharmacy for teaching and research purposes. These books are in addition to more than 1000 titles of Pharmacy books stocked in Central library of the University. The Departmental library also has a vast collection of International Research Journals. A complete list of these Journals can be obtained from the librarian.

**10.5. Internet Facility.**

10.5.1 The internet facility is also available in all laboratories and library number of International research journals are available on Digital Library provided by Higher Education Commission and research articles of interest can also be downloaded.

**10.6. Microbiology Research Laboratory.**

10.6.1 A separate well equipped Laboratory has been developed for subject of microbiology and higher research students.

# Faculty of Earth & Environmental Sciences

**BS (Geology)**

*4 years*









# DEPARTMENT OF GEOLOGY

## 1. Introduction

- 1.1. Geology is the science of earth dealing with rocks, minerals, the origin, history and structure of the earth. It plays an important role in the economy of a nation. It is one of the most important subjects of basic and applied sciences, particularly with reference to the Balochistan province, which provides excellent opportunities for the development and exploitation of natural resources. Balochistan has high prospects for geological research and exploration of economic mineral deposits, petroleum, groundwater and other natural resources.
- 1.2. The Department of Geology is one of the seven departments, established at the raising of the University of Balochistan in 1971. During the initial years, the department offered only M.Sc. courses. Now BS 4-Years (Applied Geology) Program is also offered.

## 2. Objectives

- 2.1. To prepare high quality professionals in the field of geology through 4-Years B.S. (Applied Geology) and 2-Years M.Sc. (Geology) programs in order to meet the national and international needs.
- 2.2. To prepare professional and skilled manpower in the field of Applied Geology, capable of carrying out geological field and analytical work independently.
- 2.3. To provide training to plan and conduct goal-oriented research projects and assess their socio-economic aspects, achieve targets, write technical reports and scientific research papers and provide consultancy services.

## 3. Vocational Job Opportunities / Marketability of Graduates

- 3.1. The graduates will have opportunities to work in the following organizations:  
Geological Survey of Pakistan (GSP),  
Pakistan Atomic Energy Commission,  
Hydrocarbon Development Institute of Pakistan,  
Water and Power Development Authority (WAPDA),  
Oil and Gas Sector,  
Pakistan Mineral Development Corporation (PMDC),  
Balochistan Development Authority (BDA),  
Public Health Engineering Department,  
Various educational institutions (mostly Universities and Colleges) and  
Various national and international mineral exploration companies.
- 3.2. The opening of new projects, such as Saindak Metals Limited, Rikho-Dic Copper-Gold Project, Gawadar Port, construction of dams, development of gas pipeline from Iran to India, development of water reservoirs and thermal (coal-based) power stations in the country, have high potential for new job opportunities.

## 4. Faculty

S. No.	Name	Designation	Qualification	Specialization
1.	Prof. Dr. Akhter Muhammad Kasi	Professor	Ph.D. UK	Sedimentology
2.	Prof. Dr. Mehrab Khan Baloch	Professor	Ph.D. UoB	Igneous & Metamorphic
3.	Prof. Dr. Abdul Tawab Khan	Professor/ Dean Students Affairs	Ph.D. UOB	Igneous Petrology
4.	Dr. Muhammad Ibrahim Baloch	Associate Professor	Ph.D. Ukraine	Hydrogeology
5.	Mr. Mohammad Ayub Baloch	Assistant Professor <b>Chairperson</b>	M.Phil UoB	Petroleum Geology

6.	Mr. Din Mohammad Kakar	Assistant Professor	M.Phil UoB	Sedimentology
7.	Mr. Nasir Karim	Asstt. Professor	M.Sc. UoB	Sedimentology
8.	Mr. Rahim Jan	Asstt. Professor	M.Phil. UoB	Sedimentology
9.	Mr. Mohibullah	Lecturer (S.L.)	M.Sc. UoB	Biostratigraphy
10.	Mr. Rahim-ud-Din	Lecturer	M.Sc. UoB	Petroleum Geology
11.	Mr. Tahir Iqbal	Lecturer	M.Sc. UoB	Hydro-Geology
12.	Ms. Khadija Nadimi	Lecturer (Study Leave)	M.Sc. Qaid-i- Azam University, Islamabad.	Geophysics
13.	Ms. Shazia Fareed	Lecturer (Adhoc)	M.Sc. UoB	Physics
14.	Ms. Nazima Yousuf	Lecturer (Adhoc)	M.Sc. SBKWU, Quetta	Chemistry
15.	Mr. Aminullah	Museum Curator	M.Sc. UoB	Petroleum Geology

## **5. Programs of Study**

### **5.1 B.S. (Applied Geology) Program**

5.1.1. **Duration:** B.S. (Applied Geology) is a 4-years program. During 1<sup>st</sup> year and 2<sup>nd</sup> year beside geology, allied subjects are also taught. During 3<sup>rd</sup> year, core subjects of geology are covered. During 4<sup>th</sup> year, students can opt for their fields of interest from amongst several groups of optional courses.

## **6. Description of Courses**

6.1. Presently the 4-Years BS (Applied Geology) program is being run under the Annual System of examinations.

6.2 B.S. (Applied Geology) Programme Annual System

6.2.1 Schedule of Courses in Annual System

### **Schedule of Courses**

<b><u>Course No.</u></b>	<b><u>Title</u></b>	<b><u>Marks</u></b>
<b>1<sup>st</sup> Year</b>		
Geol-101	Islamic Studies	50
Geol-102	English	100
Geol-103	Applied Mathematics-I	100
Geol-104	Applied Physics-I	75+25
Geol-105	Applied Chemistry-I	75+25
Geol-106	General Geology	75+25
Geol-107	Zoology	75+25
Geol-108	Botany	75+25
<b>2<sup>nd</sup> Year</b>		
Geol-201	Pak. Studies	50
Geol-202	Applied Mathematics-II	100
Geol-203	Applied Physics-II	75+25
Geol-204	Applied Chemistry-II	75+25
Geol-205	Paleontology & Stratigraphy	75+25
Geol-206	Crystallography, Optical Mineralogy	75+25
Geol-207	Computer & Geostatistics	50+50
Geol-208	Field Work	100

<u>Course No.</u>	<u>Title</u>	<u>Marks</u>
<b>3<sup>rd</sup> Year</b>		
Geol-301	Geotectonics & Structural Geology	75+25
Geol-302	Sedimentology	75+25
Geol-303	Economic & Field Geology	75+25
Geol-304	Igneous and Metamorphic Petrology	75+25
Geol-305	Micropaleontology & Biostratigraphy	75+25
Geol-306	Minerology	75+25
Geol-307	Geophysics and Geomorphology	75+25
Geol-308	Field Geology, Field Mapping, Report and Viva Voce (Fieldwork is compulsory)	50+50
<b>4<sup>th</sup> Year</b>		
Geol-401	Geology of Pakistan	75+25
Geol-402	Research Project and Thesis	100
Geol-403-Geol-406	<b>Four courses</b> to be chosen from a number of Groups of Specialization, depending on the availability of facilities in the Department. Two courses (out of the 4 chosen) must Be directly relevant to the Thesis.	Each 75+25

## 7. Eligibility Criteria

### 7.1. 4-Years B.S. (Applied Geology) Programme

- 7.1.1. Candidates should have passed Fsc Pre-Eng/Pre Medical/ ICS Groups.
- 7.1.2. Candidate should have sound Physique and capable of undertaking climbing heights during fieldwork and should not suffer from color blindness for the purpose of optical Work.
- 7.1.3. Should qualify the entry test securing 45% marks.

## 8. Facilities

8.1. **Departmental Library** Library of the Department contains more than 2500 textbooks, reference books, geological encyclopedias, field reports and audiovisual materials (i.e. geological videos, CDs, slides and Transparencies).

### 8.2. Laboratories

- 8.2.1. **Geochemistry Laboratory:** This laboratory has some facilities for geochemical analysis. It is \ equipped with glassware and chemicals.
- 8.2.2. **Petrography Laboratory:** The petrography lab has facilities for megascopic analysis of minerals and rocks.
- 8.2.3. **Microscopic Laboratory:** This laboratory is well equipped for the microscopic analysis of the rocks and minerals. It contains transmitted and reflected research microscopes, polarizing microscopes and projected microscopes. One of the research microscope has attached computer, display monitor and camera for obtaining microphotographs.

- 8.2.4. **Thin Section Workshop:** This workshop contains facilities for preparation of thin sections of rocks and is equipped with rock cutting machine, polishing machine, grinder with different mesh sizes, abrasive sands and other chemicals used for the preparation of thin sections of rocks. Other equipments include crusher, water distal plant, and micro grinder.
- 8.2.5. **Computer Laboratory:** This laboratory is equipped with fifteen computers, a Laser Printer, a Scanner and a Photocopier. Computers have connection with the main network of the University and internet. A large number of international research journals are also available on the Digital Literary provided by the Higher Education Commission, where students can download research articles of their interests.
- 8.2.6. **Museum** is one of the attractive places of the University. It contains about 1000 specimens of Rocks, minerals and fossils of foreign and local collections.



# Faculty of Management Sciences, Business & Information Technology

**BS (Computer Science)**

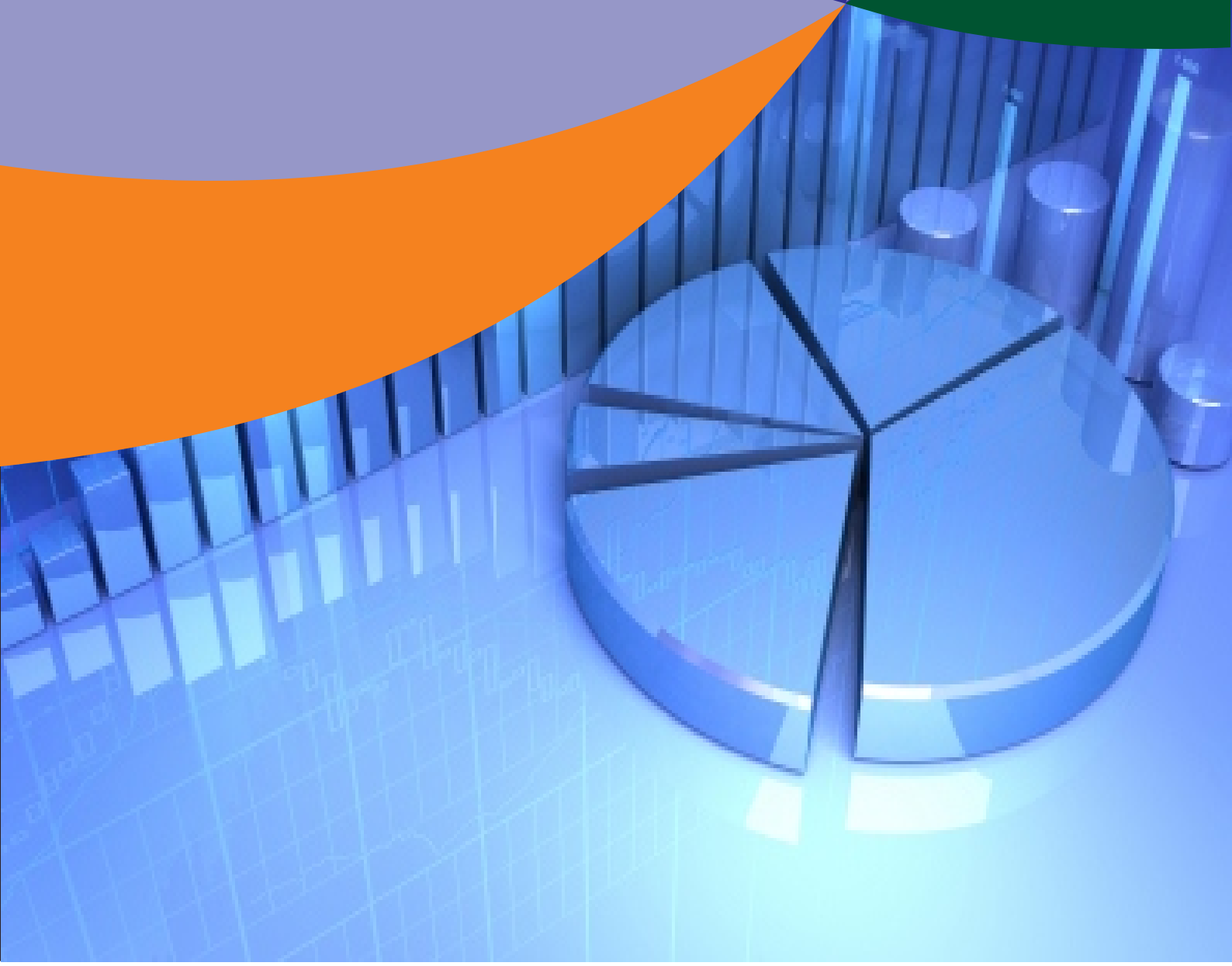
*4 years*

**BS (Information Technology)**

*4 years*

**B.Com (Self Finance)**

*2 years*







# DEPARTMENT OF COMPUTER SCIENCES AND INFORMATION TECHNOLOGY

## 1. Introduction

### 1. INTRODUCTION.

- 1.1. The invention of microprocessor started influencing every facet of life in the 1970's. With the birth of personal computers and its use became Common. A post graduate diploma was started with the raise of a computer section in the department of physics in 1984.
- 1.2. This section has raised to Department level in during early 90's.
- 1.3. The department has started teaching Master in Computer Science (MCS) classes since 2001 and BS(CS/IT) classes since 2002.

### 2. OBJECTIVES.

- 2.1. To produce qualified professionals in the field of CS and IT.
- 2.2. To inculcate an academic culture aimed at professionals grooming and creative thinking.

### 3. VOCATIONAL JOB OPPORTUNITIES

- 3.1. I.T based services, Commercial and financial public and private organizations.
- 3.2. Computer Hardware/Software suppliers/users in public/private sector.
- 3.3. Telecom Sector.
- 3.4. Multi-National Companies.

## 4. Faculty

S.N O	FACULTY MEMBER NAME	DESIGNATION	QUALIFICATION	FIELD OF SPECIALIZATION
1	Mr. Muhammad Khalid Badini	Lecturer/ Chairperson	MCS. MS	Operating System and Web Programming & DBMS.
2	Dr. Altaf Hussain Bouk	Professor (HEC Approved Phd Supervisor)	PhD.( University of Parma, Italy) B.Sc (Hons) & MSc	Optical Fiber Telecommunication Systems, Networks
3	Mr. Syed Amjad Hussain Jafri	Asst: Prof	M.Sc. (Computer Science), M.Sc. (Statistics)	Automata Theory, Data Structure and Programming Languages
4	Dr. Atiq Ahmed	Asst: Prof (HEC Approved Phd Supervisor)	PhD. (France) MS (France) MCS	Wireless Networks, Telecommunication Systems, Multiagent Systems, AI
5	Dr. Uzma Mukhtar	Asst:Prof	PhD (Thailand) M.Com, MBA	HRM, Financial Management
6	Mr. Syed Mohammad Zubair	Asst:Prof	BS(CS), MS	JAVA
7	Dr. Ihsan Ullah	Lecturer	PhD. (France) MS (France) MCS	P2P Networks, Telecommunication Systems,



8	Mr. Muhammad Shumail Naveed	Lecturer	BCS, MCS, MPhil	Computation Theory, Software Engineering
9	Mr. Irfan Baseer	Lecturer	B.E (CE)	Computer Architecture
10	Mr. Liaquat Ali	Lecturer	BCS, MCS.MS	DBMS, Data Mining
11	Mr. Zia-ur-Rehman	Lecturer	M.Sc. (Applied Math), MCS	Computer Graphics & AI
12	Dr. Waheed Noor	Lecturer	MCS, Ms, Phd	DBMS, Data Mining
13	Ms. Tayyaba Noreen	Lecturer	M.Com	Economics
14	Mr. Muhammad Raza	Lecturer	MCS	.NET
15	Mr. Jalaluddin Qureshi	Lecturer	BE (CE)	Data Structure
16	Mr. Anwar Ali Sanjarani	Lecturer	B.E (CE), MBA	AI
17	Ms. Maheen Bakhtyar	Lecturer	BS(CS)	Development / DB
18	Ms. Shafaque Saira Malik	Lecturer	BCS, MCS	Artificial Intelligence
19	Mr. Abdul Momin	Lecturer	BS(IT)	OOP, DB
20	Mr. Abdul Basit	Lecturer	MCS.MS	Software Engineering
21	Mr. Imran Ali	Lecturer	MCS	Software Engineering
22	Mr. Junaid Babar	Lecturer	BS(CS)	S.E /D.B

## 5. Other staff

01	Mr. Muhammad Sajid	Lab Instructor	MIT, MPhil	DBMS
02	Mr. Muhammad Rehan	Lab Instructor	MCS	DBMS
03	Mr. Shafiq-ur-Rehman	Examination Incharge	MCS	Programming languages
04	Mr. Zulfiqar Ali	Lab Instructor	MCS	S.E, DBMS

## 6. PROGRAM OF STUDIES OFFERED

6.1. **Morning Program.** B.S. (Computer Science) & B.S. (Information Technology) which is a four years degree programs.

### 6.2. Outline of Subjects

6.2.1. Both Morning & Evening program's various courses are offered over a wide range of topics, including Algorithms development and analysis, Advanced Computer Architecture, Theory of Formal Languages, Theory of Computation, Design of Automation, Data Communication & Networking, Operating Systems, Software Engineering, Computer Graphics, Database Management Systems, Artificial Intelligence.

6.2.2. Apart from above programs, various workshops, seminars and specialized professional courses are also organized to cover most recent technological developments in hardware and software, and CASE (Computer Aided/Assisted Software/System Engineering) tools.

## 7. DESCRIPTION OF COURSES

### 7.1. B.S (Computer Science & Information Technology)

- 7.1.1. Duration of Program. Four Years
- 7.1.2. Number of Semesters . Eight (Two semester Per Year)
- 7.1.3. Number of Courses. Twelve courses every Year Maximum
- 7.1.4. Credit hours per course. Three Credit Hours per course
- 7.1.5. Total Credit hours. 135
- 7.1.6. Total number of Course. ~44
- 7.1.7. In each semester students will be taught maximum six courses including compulsory course such as Islamic and Pakistan Studies, English, and Humanities according to the existing rules of the University. All courses will be taught at the Computer Science Department.

## 8. NUMBER OF AVAILABLE SEATS.

## 9. Eligibility Criteria for Admission.

9.1. BS (CS) Program: Candidate must have passed any of the following with at least 45% marks.

9.1.1. H.S.C (Pre-Engineering group), or

9.1.2. H.S.C (Mathematics, Statistics, Computer Science), or

9.1.3. H.S.C. (Mathematics, Statistics, Economics) or DAE (Computer, Science)

1.1.4. GCE O-Levels (Computing/ Mathematics)

9.2 BS (IT) Program: Candidate must have passed the H.S.C or DAE with at least 45% Marks.

## 1. FACILITIES

1.1.1. The Department of Computer Science has three well equipped labs (fully Air-conditioned with 90 on line workstations)

1.1.2. **Computing Labs.**

Name	Equipment / Facilities	Location
LAB.1	30 Pentium III PCs, Multimedia Projector, Server, LAN, all time Internet connectivity	Computer Science Building
LAB 2	30 Pentium IV PCs, Multimedia Projector, Server (Dual Processor Xeon), LAN, all time Internet connectivity	Computer Science Building
LAB 3	30 Pentium IV PCs, Multimedia Projector, Server (Dual Processor Xeon), LAN, all time Internet connectivity	Computer Science Building

1.1.3. **Departmental Library.** The Departmental library has over 1500 books covering a wide range of disciplines in computer science & information technology for teaching and research purpose.

1.1.4. **Internet Facility.** The internet facility is also available in all Computer Labs & Teachers Offices. A large number of research journals are also available on Digital Library provided by HEC and research articles of interest can also be down loaded.

## **5. COURSE OUTLINE & COURSE OF BS (CS) PROGRAM**

- 5.1 All the course codes of the BS CS program courses are modified by the prior approval of the members of the Board of Studies.
- 5.2 CS 301 Introduction to Computers has been replaced by CS 301 Introduction to Computing in Semester 1. Credit Hours of CS 301 are emended to 4 Credit Hrs.
- 5.3 CS 302 Fundamentals of Algorithms is replaced by CS 307 Data Structures and algorithms from Semester 1 to Semester 3.
- 5.4 MG 301 Introduction to Financial Accounting is removed from Semester 1 and the syllabus of BS CS.
- 5.5 MT 301 Mathematical Methods is removed from Semester 1 and the syllabus of BS CS.
- 5.6 HG 308 Functional English and Composition is replaced by EG 301 Functional English in Semester 1.
- 5.7 MT 303 Calculus and Analytical Geometry is shifted from Semester 2 to Semester 1 as MT 301 Calculus and Analytical Geometry.
- 5.8 CS 302 Programming Fundamentals is added to Semester 1. Credit Hours of CS 302 are emended to 4 Credit Hrs.
- 5.9 MG 308 Human Resource Management is shifted to Semester 2 from Semester 3 as MG 301 Human Resource Management.
- 5.10. CS 304 Object Oriented Programming is shifted to Semester 2 from Semester 3 as CS 304 Object Oriented Programming.
- 5.11. MT 302 Discrete Mathematics is renamed as CS 303 Discrete Structures in Semester 2.
- 5.12. ST 303 Probability and Statistics is shifted from Semester 5 to Semester 2 as MT 302 Probability and Statistics.
- 5.13. HG 309 Communication Skills and Technical Writing is replaced by EG 302 Communication Skills.
- 5.14. MG 304 Fundamentals of Management is removed from Semester 2.
- 5.15. EL 302 Digital Logic and Design is replaced by CS 306 Digital Logic Design in Semester.
- 5.16. CS 308 Data Structures is renamed as CS 307 Data Structures and Algorithms in Semester 3.
- 5.17. CS 306 DBMS is shifted to Semester 4 as CS 308 Introduction to Database Systems. Credit 5.18 Hours of CS 308 are emended to 4 Credit Hrs.
- 5.18. EL 303 Circuit Theory is removed from Semester 3.
- 5.19. IT 303 Web Programming is replaced by CS 317 Web Engineering and shifter to Semester 5.
- 5.20. CS 310 Software Engineering I is renamed and modified as CS 310 Introduction to Software Engineering in Semester 4.
- 5.21. EL 301 Basic Electronics is shifted from Semester 4 to Semester 3.
- 5.22. MT 305 Linear Algebra is shifted from Semester 4 to Semester 3 as MT 303 Linear Algebra.
- 5.24. CS 320 Software Engineering II is replaced by CS 313 Advanced Software Engineering in Semester 5.



- 5.23 IT 305 Visual Programming is removed from Semester 5.
- 5.24 CS 313 Computer Organization and Architecture is replaced by CS 316 Computer Organization and Assembly Language in Semester 5.
- 5.25 MT 304 Numerical Computing is shifted from Semester 5 to Semester 4 as CS 309 Numerical Computing.
- 5.27 CS 314 Operating Systems is shifted to Semester 4 as CS 312 Operating Systems. CS 312 Assembly Language is merged with CS 316 Computer Organization and Assembly Language.
- 5.29 IT 309 Data communication and Networks is shifted from Semester 6 to Semester 5 as CS 314 Computer Communication and Networks.
- 5.30 CS 315 Theory of Automata is shifted from Semester 6 to 5 and modified as CS 318 Theory of Automata and formal languages.
- 5.31 CS 317 Computer Graphics is shifted from Semester 7 to 8 as CS 327 Computer Graphics.
- 5.32 Elective I is shifted from Semester 7 to 6.
- 5.33 HG 310 Introduction to Psychology is removed from Semester 8.
- 5.34 CS 327 Advanced Artificial Intelligence is removed from Semester 8.
- 5.35 Project is renamed as CS 329 Senior Design Project in Semester 8.
- 5.37 CS 319 Computer Architecture and SS 301 Economics are added to Semester 6.
- 5.38 CS 325 Human Computer Interaction and Elective II are added to Semester 7.
- 5.39 CS 328 Research Methodology is introduced along with ELECTIVE III and IV in Semester 8.

## BS (Computer Science)

### Semester 1

S.No	Code	Pre-Requisite	Subjects	Total Credit Hrs	Theory/Lab
1	CS 301	-	Introduction to Computing	4	3+1
2	CS 302	-	Programming Fundamentals	4	3+1
3	MT 301	-	Calculus & Analytical Geometry	3	0
4	EG 301	-	Functional English	3	0
5	PK 301	-	Islamic Studies / Pakistan Studies	3	0
<b>Total:</b>				<b>17</b>	

### Semester 2

S.No	Code		Subjects	Credit Hrs	Theory/Lab
6	MG 301	-	Human Resource Management	3	0
7	CS 303	-	Discrete Structures	3	0
8	MT 302	-	Probability and Statistics	3	0
9	CS 304	1	Object Oriented Programming	3	2+1
10	EG 302	-	Communication Skills	3	0
<b>Total:</b>				<b>15</b>	

### Semester 3

S.No	Code		Subjects	Credit Hrs	Theory/Lab
11	CS 306	9	Digital Logic Design	3	2+1
12	ST 301	3	Differential Equations	3	0
13	EL 301	-	Basic Electronics	3	0
14	CS 307	9	Data Structure and Algorithms	3	0
15	MT 330	-	Linear Algebra	3	0
<b>Total:</b>				<b>15</b>	

### Semester 4

S.No	Code		Subjects	Credit Hrs	Theory/Lab
16	CS 308	7	Introduction to Database Systems	4	3+1
17	CS 309	3	Numerical Computing	3	0
18	CS 310	2	Introduction to Software Engineering	3	0
19	CS 311	9	Advance Object Oriented Programming	3	2+1
20	CS 312	7	Operating Systems	4	3+1
<b>Total:</b>				<b>17</b>	

### Semester 5

S.No	Code		Subjects	Credit Hrs	Theory/Lab
21	CS 313	18	Advanced Software Engineering	3	0
22	CS 314	11	Computer Communication and Networks	3	2+1
23	CS 315	14	Design & Analysis of Algorithm	3	0
24	CS 316	11	Computer Organization and Assembly	3	2+1
25	CS 317		Language	3	0
26	CS 318	-	Web Engineering	3	0
		7	Theory of Automata and Formal languages		
<b>Total:</b>				<b>18</b>	

### Semester 6

S.No	Code		Subjects	Credit Hrs	Theory/Lab
27	CS 319	-	Computer Architecture	3	2+1
28	SS 301	-	Economics	3	0
29	CS 320	16	Distributed Database Systems	3	2+1
30	CS 321	19	Advanced Programming Languages	3	2+1
31		-	Elective – I	3	
<b>Total:</b>				<b>15</b>	

### Semester 7

S.No	Code		Subjects	Credit Hrs	Theory/Lab
32	CS 322	26	Compiler Construction	3	0
33	CS 323	-	Operations Research	3	0
34	CS 324	-	Artificial Intelligence	3	0
35	CS 325	-	Human Computer Interaction	3	0
36			Elective-II	3	
<b>Total:</b>				<b>15</b>	

### Semester 8

S.No	Code		Subjects	Credit Hrs	Theory/Lab
37	CS 327		Computer Graphics	3	2+1
38	CS 328		Research methodology	3	
39			Elective-III	3	
40			Elective-IV	3	
41	CS 329		Senior Design Project	6	3+3
<b>Total:</b>				<b>18</b>	

### BS (INFORMATION TECHNOLOGY)

### Semester 1

S.No	Code		Subjects	Credit Hrs	Theory/Lab
1	IT 301	-	Introduction to ICT	3	2+1
2	CS 302	-	Programming Fundamentals	4	2+2
3	MT 301	-	Calculus & Analytical Geometry	3	0
4	EG 301	-	Functional English	3	0
5	PK 301	-	Islamic Studies / Pakistan Studies	3	1.5 + 1.5
<b>Total:</b>				<b>16</b>	

### Semester 2

S.No	Code		Subjects	Credit Hrs	Theory/Lab
6	MG 301	-	Human Resource Management	3	0
7	CS 303	-	Discrete Structures	3	0
8	IT 302	-	Fundamentals of IT	3	0
9	CS 305	1	Object Oriented Paradigm	3	0
10	EG 302	-	Communication Skills	3	0
	MT 302		Probability and Statistics	3	
<b>Total:</b>				<b>18</b>	

### Semester 3

S.No	Code		Subjects	Credit Hrs	Theory/Lab
11	CS 306	9	Digital Logic Design	3	2 3
12	EG 303		Technical Report Writing	3	3
13	EL 301	-	Basic Electronics	3	3
14	CS 307	9	Data Structure and Algorithms	3	2 3
15	MT 303	-	Linear Algebra	3	
<b>Total:</b>				<b>15</b>	

### Semester 4

S.No	Code		Subjects	Credit Hrs	Theory/Lab
16	CS 308	7	Introduction to Database Systems	3	2+1
17	MG 302	3	Organizational Behavior	3	3
18	CS 310	2	Introduction to Software development	3	3
19	CS 311	9	Advance Object Oriented Programming	3	2 3
20	CS 312	7	Operating Systems	4	2+2
<b>Total:</b>				<b>16</b>	

### Semester 5

S.No	Code		Subjects	Credit Hrs	Theory/Lab
21	CS 313	18	Advanced Software Engineering	3	
22	CS 314	11	Computer Communication and Networks	3	
23	CS 315	14	Design & Analysis of Algorithm	3	
24	IT 303		E biz (E commerce)	3	
25	CS 317	-	Web Engineering	3	
26	CS 318	7	Theory of Automata and Formal languages	3	
<b>Total:</b>				<b>18</b>	

### Semester 6

S.No	Code		Subjects	Credit Hrs	Theory/Lab
27	MG 303		Management information systems	3	3
28	SS 301	-	Economics	3	3
29	CS 320	16	Distributed Database Systems	3	2 +3
30	CS 321	19	Advanced Programming Languages	3	2 +3
31	CS 319		Computer Architecture	3	2 + 1
32		-	Elective	3	3
<b>Total:</b>				<b>18</b>	

### Semester 7

S.No	Code		Subjects	Credit Hrs	Theory/Lab
32	CS 322	26	Compiler Construction	3	3
33	CS 323	-	Operations Research	3	2 +3
34	CS 324	-	Artificial Intelligence	3	2 +3
35	CS 325	-	Human Computer Interaction	3	3
36	CS 326		Software project management	3	
37			Elective-II		
<b>Total:</b>				<b>18</b>	

### Semester 8

S.No	Code		Subjects	Credit Hrs	Theory/Lab
38	CS 327		Computer Graphics	3	
39	CS328		Research methodology	3	3
40			Elective-III	3	
41			Elective-IV	3	
42	IT 304		IT Project	6	3+3
<b>Total:</b>				<b>18</b>	

### Comprehensive Exam

Comprehensive Exam Paper of BS(CS) include following subjects.

- CS-301 Introduction of Computers
- CS-302 Fundamentals of Algorithms
- CS-308 Data Structure
- CS-310 Software Engineering I & II
- CS-313 Computer Organization and Architecture
- CS-314 Operating System
- IT-309 Data Communication and Networks
- CS-315 Theory of Automata
- CS-316 Compiler Construction
- CS-311 Artificial Intelligence I & II
- CS-317 Computer Graphics.

Comprehensive Exam Paper of BS(CS) include following subjects:

- IT-310 Telecommunication System
- CS-310 Software Engineering I & II
- CS-308 Data Structure
- CS-314 Operating System
- CS-313 Computer Organization and Architecture
- IT-307 Computer Networks
- CS-328 Software Project Management
- IT-306 Multimedia Technologies
- CS-311 Artificial Intelligence I.



# **DEPARTMENT OF COMMERCE**

## **1. Introduction**

Department of Commerce , University of Balochistan is one of the oldest Department of University. The Department was established in 1973 as undergraduate Department .It is presently one to the largest department of the University of Balochistan, Quetta with respect to the number of students enrolled in the courses offered by the department and the number of courses taught in the department. In view of better job opportunities for Commerce graduates, a graduate course was also initiated leading to master degree in Commerce . Currently a two year graduate course leading to the degree of M.Com .

M. Phil and Ph. D programs are also offered by the department for only to those teachers who are in service.

Department has started Bachelor and Master level Programs ( B. Com) on Self-Finance basis in the evening session. This is a hope of light are for those who cannot continue their education due to certain reasons in the morning and performing jobs in the morning . Therefore , program was a successful launch and got tremendous appreciation

## **2. Objectives**

The main objective of Commerce Department is to produce professional managers , accountant and businessman for the nation . the other objectives expected form M.Com students are follow:

It possesses scientific knowledge and understanding of accounting , marketing human resource management financial management , Quantitative Techniques for business and also known socio-economic Condition of the country.

Students are also able to make plan for the development of industry and for the welfare of working people .

The Students of Commerce today occupy key position both public and private sector.

They are able to prove themselves as a good manager and have a creative and helpful attitude in problem solving.

They are able to play leadership role or institute a mechanism that can targeted performance in terms of time, cost or some other measure of effectiveness from the plan.

Students of Commerce possess a decision ability to face a various problems

Students possess clear idea of their path of development where they stand and where they are going .

They possess ability and power to develop new ideas and are able to implement these ideas.

### **Contact Information:**

Department of Commerce, University of Balochistan, Quetta

Phone: +92-81-9211236, Email: commerce@uob.edu.pk

## **3. Job Opportunities / Marketability of Graduates**

Every Public and Private Sector organization needs our graduate, Especially in field of Finance, Marketing, Human Resource Development, Management, Accounting etc.

## **4. Program of Study**

B. Com Two years Self-finance Evening Program run on annual bases. Entry Test & Interview conducted by the Department, which has to be qualified with 45% marks.

## 5. Description of Courses

B.Com subjects. (Each subject has 100 marks)

- 1 Islamic Education and Pakistan Studies.
- 2 Business Communication.
- 3 Fundamental of Business.
- 4 Principal of Business Economics.
- 5 Business Law.
- 6 Banking and Finance.
- 7 Principles of Accounting.
- 8 Economics of Pakistan.
- 9 Fundamental of Cost Accounting.
- 10 Advance Accounting.
- 11 Business Mathematics.
- 12 Business Statistics

## 6. Faculty

Sr. No	Name	Designation	Qualification	Specialization
1	Abdul Latif Khan Durrani	Assistant Professor/ Dean IT & Management Sciences	M.Phil., M. Sc	Management Science, Business Mathematics & Statistics for Management
2	Abdul Rasheed Khan	Assistant Professor/ Chairperson	M.Phil , M.A.	Economic, Research Methodology
3	Mr.Mohammad Ali	Assistant Professor	M.Phil , M.Com	Accounting (Cost / Advance)
4	Inayatullah Khan Durrani	Assistant Professor	M. Phil M.Com	Management, Business Organization, Research Methodology
5	Tahira Jabeen	Lecturer	M.Phil M.Com	International Business, Marketing Management
6	Nadeem Malik	Lecturer	Ph.D	Advance Accounting, Research Methodology, Business Communication
7	Abdul Quddus	Lecturer	M. Com	Administrative Duties
8	Muhammad Shafiq	Lecturer	M. Phil Commerce	Finance & Business Law, Economics, Management, Accounting,
9	Shakira Bukhari	Lecturer	M. Com	Personal Management, Management, Economics
10	Amina Khuda Dad	Lecturer	M. Com	Marketing Management, Accounting, Personal Management
11	Dilawar Khan Durrani	Lecturer	M.B.A	Business Research
12	Syed Jameel Ahmed	Lecturer	M. B.A	Accounting

## **7. Part Time Teaching Faculty for B.Com**

<b>Name of Faculty Member</b>	<b>Designation</b>	<b>Name of Courses taught along with hours during 2010-11</b>	<b>Highest Degree Obtained</b>
Dr. Ghulam Muhammad Jaffer	Professor	Islamiat(40 hrs)	Ph.D
Asia Rasheed	Visiting Lecturer	Business Communication,	M.Com
Saleh Muhammad Kasi	Visiting Lecturer	Banking and Finance.	MBA
Azhar Ali Marri	Lecturer	Business Statistics	M.Sc
Husan Ara	Lecturer	Pakistan Studies	MA

## **8. Eligibility Criteria for Admission**

D Com/F.A/F.Sc/ICS or its equivalent.

## **9. Facilities**

Computer Lab is recently approved and will be functioning within two months, having internet connectivity

Departmental Library is providing variety of books relating to B.Com and other business discipline



# Faculty of Education & Humanities

## Fine Arts, Bachelor Program

*4 years*









# DEPARTMENT OF FINE ARTS

## 1. Introduction

- 1.1. The Department of Fine Arts deals with Painting, Drawing, Sculpture and Graphic Art as well as historical theories of human development through ages.
- 1.2. The Department of Fine Arts was established in March 1984 with four faculty members Mr. Jamal Shah, Mrs. Faryal Ghouhar, Mr. Akram Dost and Mr. Kaleem Khan.
- 1.3. In 1986 this certificate course was upgraded to four year full time Bachelor degree course (BFA).
- 1.4. The Department of Fine Arts is playing very important role in introducing Balochistan's heritage and its indigenous art, crafts and Architecture. Since the civilization of Maher Garh (9000 B.C) is a great source of inspiration for researchers and provide linkage with the other world of Art and Craft. The Department of Fine Arts is also providing facility to study in depth the cultural heritage of Balochistan.

## 2. Objectives

- 2.1. To foster an environment that promotes learning through quality teaching and research while encouraging mutual respect, tolerance and sensitivity.
- 2.2. To produce Artists of caliber who can compete both at national and international levels.
- 2.3. To produce Art teachers/good researchers.
- 2.4. To produce skilled Book illustrators.
- 2.5. To provide qualified and focused professionals in the subject of Fine Arts to meet the future needs of educational institutes or industry.

## 3. Vocational Job Opportunities / Marketability of Graduates

- 3.1. Layout designer.
- 3.2. Free lance Artist.
- 3.3. Book illustrator.
- 3.4. Education and Research Institute.
- 3.5. Print and electronic Media.
- 3.6. Carpet Designer
- 3.7. T.V. Stage Designer

## 3. Faculty

S.no	Name	Designation	Qualification
1	Dr. M. Akram Dost (Pride of Performance)	Chairperson	Ph.D (Fine Arts)
2	Muhammad Ayub	Assistant Professor	MFA
3	Syed Mubarak Shah	Lecturer	M.A (Fine Arts)
4	Muhammad Saleh	Lecturer	M.A (Fine Arts)
5	Ambreen Hussain	Lecturer	M.A(Fine Arts)
5	Nisar Ahmed	Lecturer	M.A(Fine Arts)

## **5. Programs Study**

- 5.1. The Department of Fine Arts provides four year BFA with four major areas i.e. Painting, Sculpture, Graphic Art and Miniature Paintings.
- 5.2. The Topic of thesis is selected by the students their own choice, however their skill and approach is motivated and guided by the jury of the Department at the time when the mini-thesis is displayed.
- 5.3. The final year students will submit thesis report (research of his selected topic).

## **6. Courses for B.F.A**

### **6.1. First Year**

#### **6.1.1. Practical:**

6.1.1.1.	(Drawing)	100
6.1.1.2.	(Sculpture)	100
6.1.1.3.	(Design)	100
6.1.1.4.	(Drafting)	100

#### **6.1.2. Theory:**

6.1.2.1.	(History of Culture)	50
6.1.2.2.	(Anthropology)	50
6.1.2.3.	(Visual Arts)	50
6.1.2.4.	Research paper /Seminar	50
6.1.3.	Total Marks: -	<b>600</b>

### **6.2. Second Year**

#### **6.2.1. Practical:**

6.2.1.1.	(Drawing, Miniature and Painting)	100
6.2.1.2.	(Sculpture)	200
6.2.1.3.	(Painting)	200
6.2.1.4.	(Graphics)	100

#### **6.2.2. Theory:**

6.2.2.1.	(Art History)	100
6.2.2.2.	(Art Appreciation)	100
6.2.2.3.	Research/Seminar	100

6.2.3. Total Marks: - **900**

### **6.3. Third Year:**

#### **6.3.1. Practical:**

6.3.1.1.	(Drawing)	100
6.3.1.2.	Minor (Painting, Sculpture, Graphics. Miniature)	100
6.3.1.3.	Major (Painting, Sculpture, Graphics Miniature)	300

#### **6.3.2. Theory:**

6.3.2.1.	(History of Muslim Painting with special emphasis on Mughal painting)	100
6.3.2.2.	(Techniques of Painting)	100
6.3.2.3.	(History of Western Art various schools)	100
6.3.2.4.	(Entrepreneurship)	

6.3.3. Total Marks: - **800**

6.4.	<b>Fourth Year</b>	
	PRACTICAL:	
6.4.1.	(Drawing)	100
6.4.2.	Major (Painting, Sculpture, Graphics, Miniature)	300
6.4.3.	Minor (Painting, Sculpture, Graphics Miniature)	100
6.5.	<b>Theory:</b>	
6.5.1.	(History of Muslim Architecture in Sub-Continent with special emphasis on Mughal Architecture)	100
6.5.2.	(Techniques of Graphic Arts, Molding and casting)	100
6.5.3.	(History of Modern Art from French School to Present)	100
6.5.4.	Thesis report / Research Paper	100
6.6.	<b>Total Marks</b>	<b>900</b>
6.7	<b>BFA Grand Total Marks</b>	<b>3200</b>

## 7. Eligibility Criteria

- 7.1. F.A/F.Sc or its equivalent and drawing test is essential, which has to be qualified with 45% marks.

## 8. Facilities

- 7.1. Four large studios for Drawing, Painting, Sculpture, Graphics and Miniature and a Display Hall.
- 7.2. **Departmental Library.** Managed by a qualified Assistant Librarian, it consists of some precious books of great Modern Artists, Classical and on Renaissance period.
- 7.3. **Internet Facility.** The Internet facility is available.
- 7.4. **Multimedia.** Lecturer delivered through multimedia.

## 9. Future Plans

In future the Department of Fine Arts wishes to introduce two years M.F.A course is being prepared on the guide line of the National College of Arts, Lahore, which is already approved by HEC. The admission in MFA will be given to those students only whose performance had been out standing in (BFA) Bachelor of Fine Arts.







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