SHAHEED BENAZIR BHUTTO UNIVERSITY SHERINGAL, DIR UPPER



SELF ASSESSMENT REPORT PROGRAM BS BIOTECHNOLOGY

Submitted to **Quality Enhancement Cell**

Departmental Program Team:

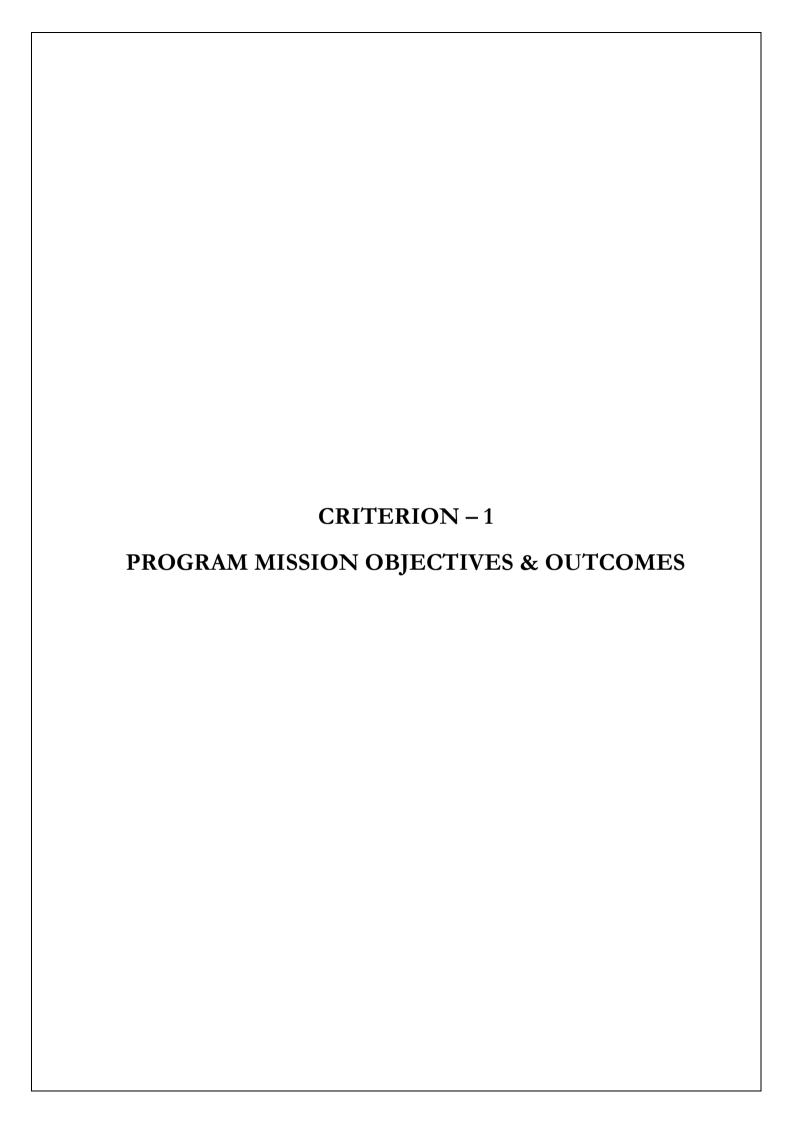
1. Dr. Midrar Ullah (Chairman / Head of PT)

2. Mr. Sikandar
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Lecturer
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INTRODUCTION

"Biotechnology is any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use." The fact that living organisms have evolved such an enormous spectrum of biological capabilities means that by choosing appropriate organisms it is possible to obtain a wide variety of substances, many of which are useful to man as food, fuel and medicines. Over the past 30 years, biologists have increasingly applied the methods of physics, chemistry and mathematics in order to gain precise knowledge, at the molecular level, of how living cells make these substances. By combining this newly-gained knowledge with the methods of engineering and science, what has emerged is the concept of biotechnology which embraces all of the abovementioned disciplines.

Dr. Midrar Ullah HoD Department of Biotechnology Shaheed Benazir Bhutto University, Sheringal



Program Mission, Objectives & Outcomes

This program is based on mission, measurable objectives, and expected outcomes for the graduates. Outcomes include competency and tasks graduates are expected to perform after completing the program.

University Mission and Objectives

- To enlighten the darkness of this remote area through education.
- To preserve & conserve the "Natural Resources" of this area through human resource development.
- To enlighten the youngsters, Girls & Boys with educational power to serve the nation in various fields.
- To act as an "Intellectual Fort" against anti-state mentality through education.
- To make the University one of the best institutes for learning and research

Program Mission

To develop and give practical shape to the ideas regarding sustainable development/modification of living organisms according to human needs, in the fields of Agriculture, Health and Environment.

Standard 1 - 1 The program must have documented measurable objectives that support faculty and institute mission statements.

Program Objectives

The course general objectives are:

- To preserve & conserve the "NATURAL RESOURCES" of this area through Biotechnology.
- 2. To enlighten the youngsters, with Biotechnological power, that will serve the nation in various fields.
- 3. To highly develop units in the institution for higher learning skills and intensive research capabilities.
- 4. To bring about improvement in the natural products at affordable prices for Health and Nourishment.

Program specific objective are:

- 1. To equip the students with the basics of biotechnology in order to explore the mysterious world in the field of Molecular biology and Genetics.
- 2. To enhance and develop the ability and skillfulness of the students in the fields of
 - Genetic engineering and Micro propagation
 - Research designing and conduction
 - Research interpretation and presentation
 - Sustainable development in various fields
- 3. There are various ethical concerns regarding biotechnology especially in the field of health and agriculture, therefore, the objective is to equip the students with the knowledge regarding ethical as well as social concerns, which in turn will help in the social awareness of a common man.

Each and every objective of the program is properly aligned with the Mission statement of Shaheed Benazir Bhutto University which is to provide excellence in academics, excellence in research and excellence in character for the uplift of socio-economic condition of the dwellers, based on the utilization of the Natural resources available in the area.

The program mission and objectives can be achieved

- By proper utilization of the natural resources as well as skillful hands are required, which our department is producing at the time.
- As biotechnology is Lab based program, therefore extensive research work will be assist the program mission and objective.

Standard 1-2 The program must have documented outcomes for graduate students. It must be demonstrated that the outcomes support the program objectives and that graduating students are capable of performing these outcomes.

On the completion of the program students will be able to:

- 1. Students shall have the capabilities to apply various techniques learnt in biotechnology industry.
- 2. Students shall have the potential to cope with various problems, coming in their way.
- 3. Students shall have a research oriented mind, in order to make new discoveries in the field of biotechnology.

- 4. Students shall have the ability to use modern tools, equipments and techniques, in order to diagnose and solve different agriculture, health and environment related problems.
- 5. Students shall have the perception regarding the impact of biotechnology on the society and biotic as well as abiotic environment.
- 6. To understand professional and ethical responsibility in national and international environment.

Objectives versus Outcomes

	Program Outcomes					
Program Objective	1	2	3	4	5	6
1		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
2	1	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	
3	V				$\sqrt{}$	
4	V		$\sqrt{}$		$\sqrt{}$	
5	1	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
6				$\sqrt{}$	$\sqrt{}$	V

Standard 1 - 3: The results of program's assessment and the extent to which they are used to improve the program must be documented.

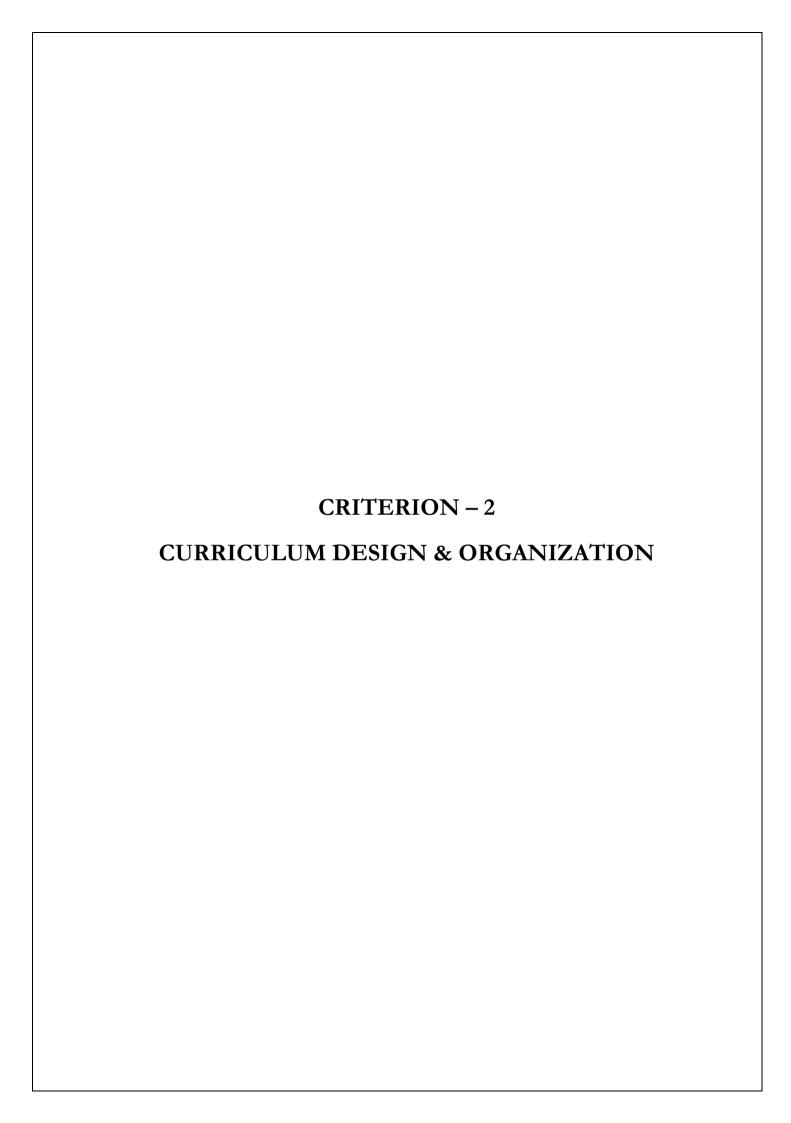
The university administration intends to assist and facilitate the Biotechnology department in the following areas.

- New building
- Laboratory equipment and chemicals
- Advanced curriculum
- Research opportunities
- 1. Strength
- a) Foreign and local highly qualified faculty
- b) Hands on practical knowledge transfer
- 2. Weaknesses
- a) Shortage of laboratory space
- b) Shortage of faculty
- 3. Future Plans
- a) Faculty hiring
- b) Expansion of the program

Standard 1 – 4: The department must assess its overall performance periodically using quantifiable measures.

Student Enrolment

Year	No. of graduating students	No. of Pass Out
2013		
2012	19	
2011	18	
2010	16	



Criterion 2: Curriculum Design & Organization

The curriculum is designed and organized to achieve the program objectives and outcomes. The course objectives are in line with program outcomes. The curriculum standards are specified in terms of credit hours of study.

- A. Title of Degree Program: BS biotechnology
- B. **Definition of credit hour:** A credit hour equals one class hour or two laboratory hours per week.

Standard 2 - 1: The curriculum must be consistent and supports the program's documented objectives.

The term wise details are given as under:

YEAR ONE / SEMESTER FIRST

S. No	Name of Subject	Credits
1	English-I	3+0
2	Pakistan Studies	2+0
3	Mathematics-I	3+0
4	Physical Chemistry (G)	2+1
5	Plant Diversity. (G)	2+1
6	Cell Biology (F)	2+1
	Total	17

YEAR ONE / SEMESTER SECOND

S. No	Name of Subject	Credits
1	English-II	3+0
2	Islamic Studies/Ethics	2+0
3	Mathematics-II	3+0
4	Inorganic Chemistry (G)	2+1
5	Animal Diversity (G)	2+1
6	Genetics. (F)	2+1
	Total	17

YEAR TWO/SEMESTER THIRD

S. No	Name of Subject	Credits
1	English-III	3+0
2	Introduction to Computer	3+0
3	Organic Chemistry (G)	2+1
4	Any subject from social sciences (G)	3+0
5	Biochemistry I (F)	2+1
6	Microbiology (F)	2+1
	Total	18

YEAR TWO /SEMESTER FOURTH

S. No	Name of Subject	Credits
1	English-IV/International Language*	3+0
2	Ecosystem & Environment (G)	2+1
3	Any subject from social sciences (G)	3+0
4	Analytical Chemistry & Instrumentation. (F)	2+1
5	Biochemistry II (F)	2+1
6	Mol. Biology I (F)	2+1
	Total	18

YEAR THREE /SEMESTER FIFTH

S. No	Name of Subject	Credits
1	Statistics. (F)	3+0
2	Immunology. (F)	2+1
3	Mol. Biology II (F)	2+1
4	Principles of Biochemical Engineering. (M)	2+1
5	Cell and Tissue Culture. (M)	2+1
6	Elements of Biotechnology (M)	2+0
	Total	17

YEAR THREE/SEMESTER SIXTH

S. No	Name of Subject	Credits
1	Genetic resources & Conservation (F)	2+1
2	Microbial Biotechnology	2+1
3	Agriculture Biotechnology. (M)	2+1
4	Food Biotechnology. (M)	2+1
5	Bioinformatics. (M)	0+2
	Total	14

YEAR FOUR /SEMESTER SEVENTH

S. No	Name of Subject	Credits
1	Health Biotechnology. (M)	3+0
2	Recombinant DNA Technology (M)	2+1
3	Skill Enhancement. (M)	0+1
4	Metabolomics, Proteomics and Genomics (M)	2+0
5	Elective-I	2+1
6	Elective-II	2+1
7	Research Dissertation, Research Project, Internship, Special Paper	3+0
	Total	18

YEAR FOUR /SEMESTER EIGHT

S. No	Name of Subject	Credits
1	Elective-III	2+1
2	Environment Biotechnology. (M)	2+1
3	Down Stream Technology (M)	1+0
4	Bio-safety & Bioethics (M)	1+0
5	Elective-IV	2+1
6	Research Dissertation, Research Project, Internship, Special Paper	3+0
	Total	14

Standard 2 - 2: Theoretical background, problems analysis and solution design must be stressed within the programs core material.

Categories	No of courses	Credit Hours
Compulsory Requirement (No Choice)	9	25
General Courses	7	24
Discipline Specific Foundation Courses	11	33
Major courses including research project	15	39
Elective within the major	4	12
Total	46	133

Standard 2-3: The curriculum must satisfy the core requirements for the program as specified by HEC, the respective accreditation body /councils.

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Compulsory Requirement (No Choice)	9	25
General Courses	7	24
Discipline Specific Foundation Courses	11	33
Major courses including research project	15	39
Elective within the major	4	12
Total	46	133

Standard 2-4: The curriculum must satisfy the major requirements for the program as specified by HEC, the respective accreditation body /councils.

The department follows the curriculum approved by HEC for BS Biotechnology program.

Standard 2-5: The curriculum must satisfy the general education, arts and professional and other discipline requirements for the program as specified by the respective accreditation body /councils.

The students are required to take all the subjects set in the course curriculum and recommended by the academic council.

Standard 2 - 6: The Information Technology component of the curriculum must be integrated throughout the program.

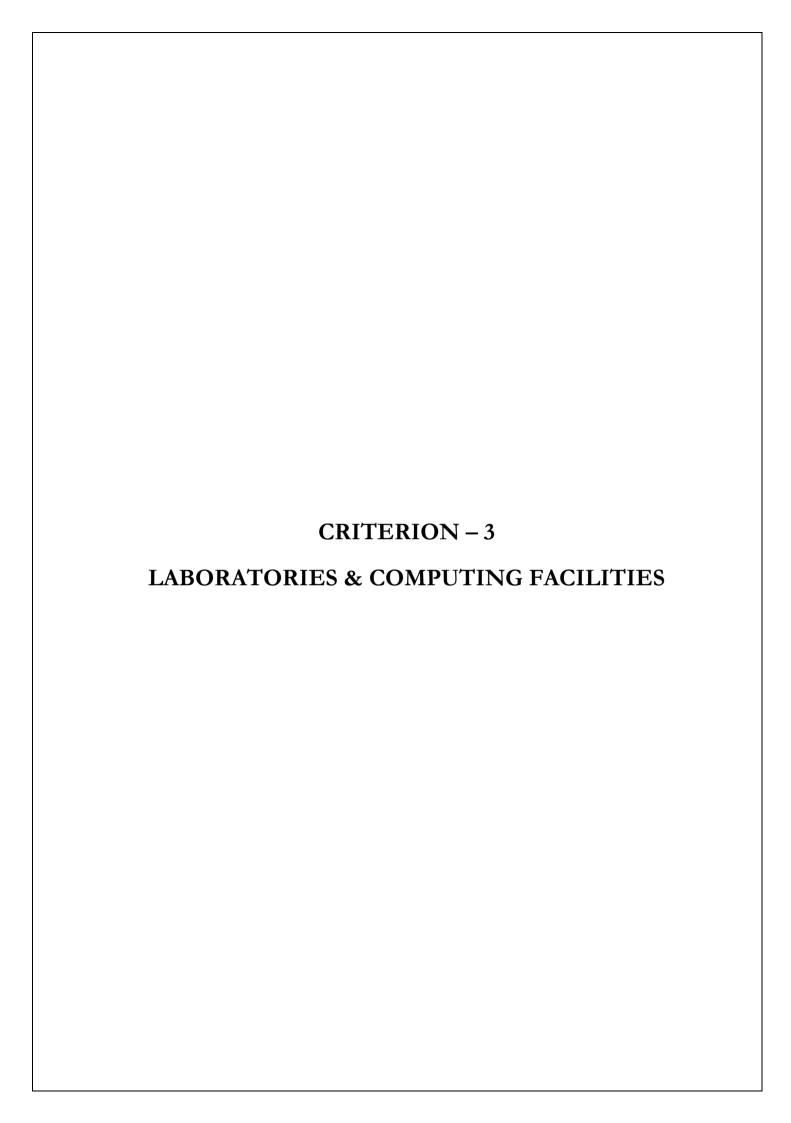
In order to equip the students with computer and IT skills subjects are offered as integral part of the program. In addition to this application of different subjects are set through laboratory practicals.

Courses for Information Technology Introduction to Computer: Semester -II

Standard 2-7: The Oral and written communication skills of the student must be developed and applied in the program.

In order to develop writing and communication skills the subject of communication skills has been introduced. Students give presentations as part of their preparations to remove out hesitation.

	English-I : Semester-I
	English-II: Semester-II
Courses for oral and written skills	English-III: Semester-III
	English-IV/International Language : Semester-IV



Standard- 3-1: (Lab manuals/documentation/instruction for experiments must be available and readily accessible to faculty and students

Laboratory title: Biotechnology labs

In the new academic block we have three labs, namely Plant Biotechnology or Tissue culture lab (20×24), Molecular Biology lab (20×24) and General purpose lab (20×14). Our labs also have facilities for microbiology research. However these are not fully equipped and lack basic facilities

Location and Area: Academic Block Shaheed Benazir Bhutto University, Sheringal

The current lab has very limited facilities, but the faculty and administration is trying to cover these shortages with some fund provided and the new academic block has provided large area for the labs. But still more fund is required to make the biotechnology lab, a standard one

Objectives: The objectives of the lab portion of the course are to:

- Develop the basic laboratory techniques of a biotechnology or bioscience lab
- Supplement and enrich the lecture portion of the course, which deals predominantly with biotechnology techniques
- Develop critical thinking skills in the students
- Encourage teamwork and accountability among the students
- Practice accuracy in calculations and in writing scientifically
- Develop multitasking skills
- Encourage students to take charge of their learning
- Learn the responsibilities associated with working in a company
- To provide faculty members and students to support teaching and research activities.

Adequacy for instruction:

Our labs have some facilities which are somewhat adequate for instruction of few of the subjects but it does not support the practical requirements of all the subjects taught.

Biotechnology Laboratory Security & Safety Regulations:

Performance in a lab will be satisfactory when we are able to:

- Discuss security and safety rules for the laboratory
- Recognize the correct procedure for storing and handling hazardous materials.
- Find information on the classifications of chemical hazards, what types of health hazards a chemical may pose, what levels of medical attention are required following exposure to a hazardous chemical, and what personal protective equipment is required for handling a hazardous chemical.
- Locate the lab safety equipment.
- Locate online Material Safety Data Sheet (MSDS) databases.

Biotechnology laboratories are equipped with supplies and equipment that may pose a hazard if used carelessly and it is important to learn how to handle them properly. It is often the responsibility of a bio technician to make sure that safety rules are followed, and anyone working in a laboratory must pay attention to what they are doing and use common sense to avoid hazardous situations. While the science safety rules are designed to provide protection to while working in laboratories. Lab technicians are frequently entrusted with ensuring compliance with safety precautions in the biotechnology workplace.

General Safety Precautions in Handling Hazardous Chemicals in the Lab

There are generally four routes to exposure to hazardous chemicals that you should keep in mind while handling them:

- Inhalation: avoid by the use of fume hoods and masks
- Skin & eye contact: avoid by the use of lab coats, gloves, and goggles
- Ingestion: avoid eating or drinking in the lab or leaving the lab without removing gloves and washing hands
- Injection: dispose of broken glass and
- Treat all chemicals as if they were hazardous until you learn otherwise
- Label all containers with contents, including concentrations and date that they were transferred
- If a hazardous material is contained, label it with a warning
- Think through your experiment BEFORE doing it, making sure that you will not combining incompatible chemicals
- Clean your bench top before and after use
- Wash hands often and ALWAYS before leaving the lab
- Take off lab coats and gloves before leaving the lab
- Always remove gloves before touching phones, doorknobs, light switches, etc.
- Ensure proper waste disposal and labeling.

Standard 3-2: There must be adequate support personal for instruction and maintaining the computing laboratories.

Support personnel information:

We have well experienced staff having a great command on practical aspects of molecular biology, tissue culture and microbiology. Mr. Bilal is lab assistant in molecular biology lab, there is a need of lab assistants and attendants for improving the research activities in other biotech labs.

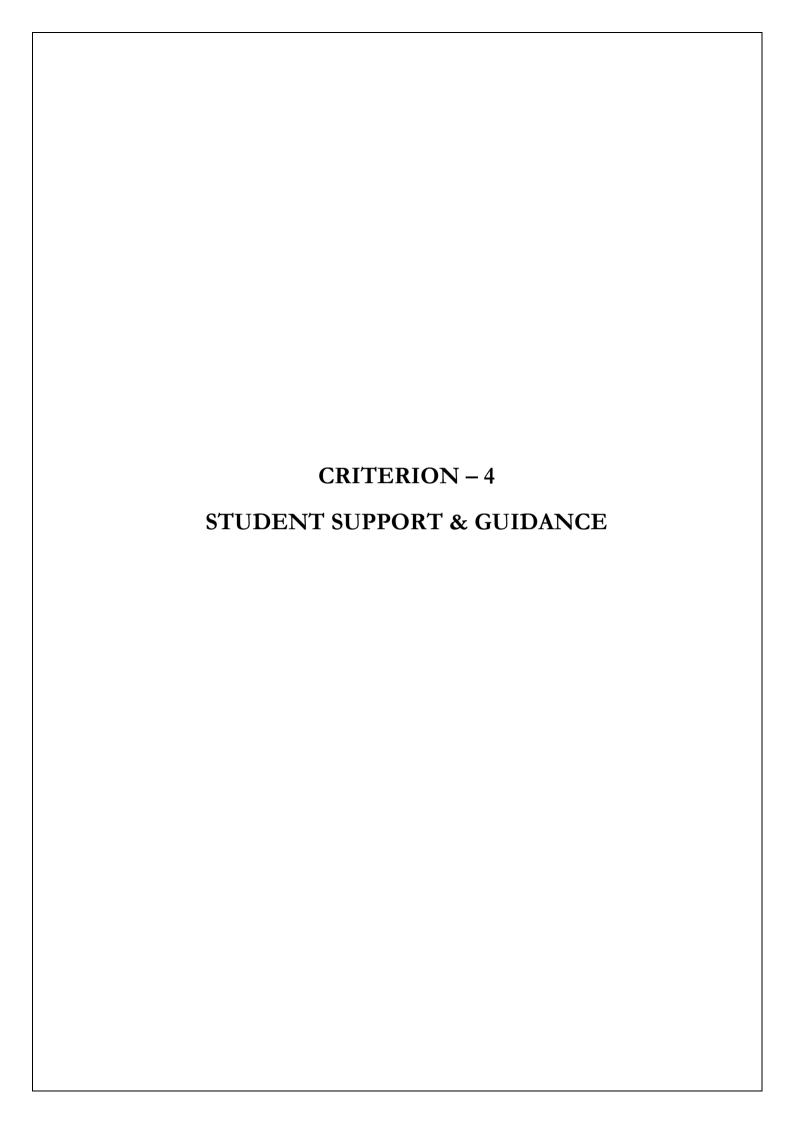
Standard 3-3: The university computing infrastructure and facilities must be adequate to support programs objectives.

The university computing infrastructure and facilities are adequate to some extent to support program's objectives, however this area need more attention.

Computing Facilities: We have two computers in biotechnology office but not in the lab. **Courses taught:** All the compulsory and elective courses in the respective subjects involving practical work have been taught. (Given in Criterion II)

Major Apparatus and Equipments: The following apparatus and equipments are available, some are functioning and some are not. Main limitation is electricity.

S. No	Names of apparatus and equipments	Number
01	Laminar air flow cabinet	02
2	Autoclave	01
3	Microcentrifuge	01
4	Macrocentrifuge 4000 rpm	01
5	Orbital shaker	01
6	Tube vortex mixer	01
7	Hot plate Magnetic stirrer (Non-functional)	01
8	Electronic balance (Non-functional)	01
9	Micro wave oven	01
10	Ultra low temperature refrigerator (-80°C)	01
11	UV- transilluminator	01
12	Horizontal gel electrophoresis system	01
13	Verticalal gel electrophoresis system	01
14	Colony counter	01
15	Isoelectric focussing equipment	01
16	Oven	02
17	Light microscope	02
18	Petri dishes	28
19	Test tubes	40
20	Test tube racks	02
21	Beakers	05
22	Graduated cylinder	05
23	Micropipettes	04



Criterion 4: STUDENT SUPPORT AND ADVISING

The students have adequate support to complete the bachelors program in a timely manner and have sufficient support and opportunities to interact with faculty members for advice about program, academics, and career options. There exist students advising facilities through which the students are benefited.

Standard 4-1: Courses must be offered with sufficient frequency and number for students to complete the program in a timely manner.

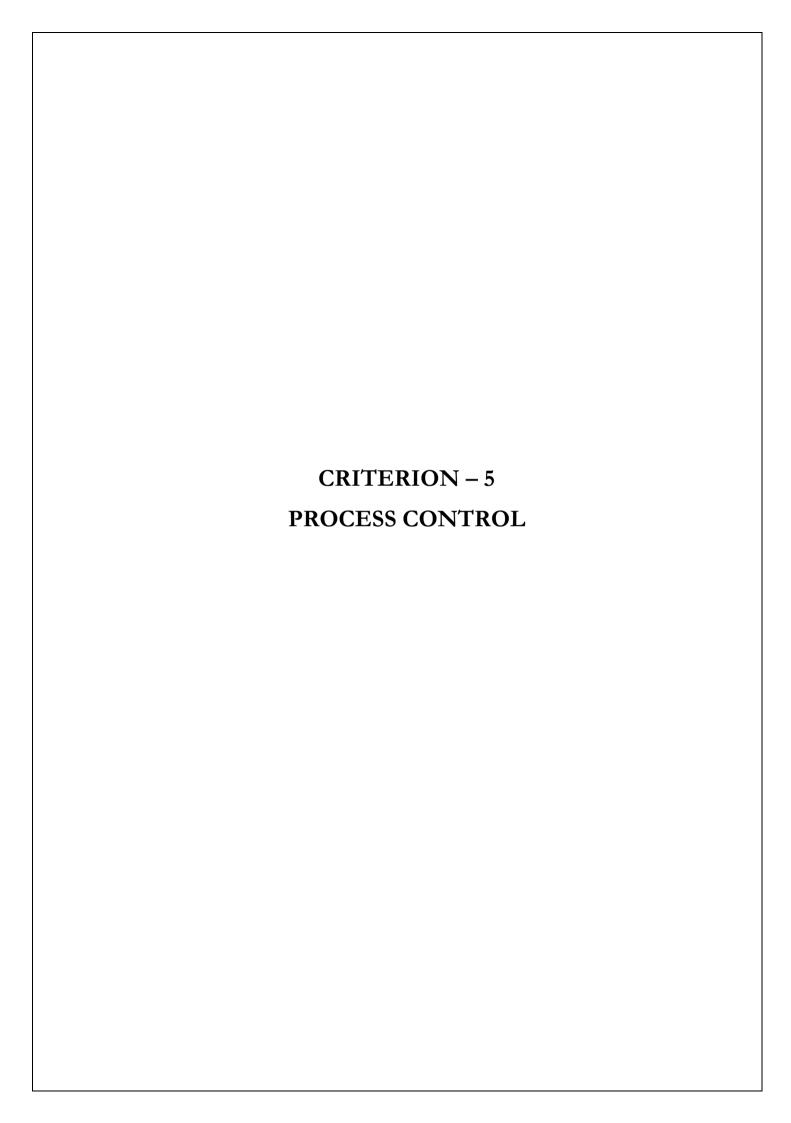
The course is offered regularly as per schedule. The degree consists of eight semester's two terms per year. The department offers core courses in first six semesters of BS Program; while elective courses are offered in the last two semesters. Minimum 15 students in a batch are required to offer the course. This condition was relaxed in just 3 years of the university. Maximum 30 students are taken in a class.

Standard 4-2: Courses in the major area of study must be structured to ensure effective interaction between students, faculty and teaching assistants.

All the courses are assigned to the faculty members by the chairman of the department according to their field of specialization. Every course offered in the program carry assignments, class presentations and practical work. Students have close interaction with their teachers for the guidance related to prepare their assignments and presentations. Each instructor adopts his way to interact with his students either in the class or during the office hours. However no proper procedure is adopted for student teacher interaction. Improvement needs in this area to fulfill the requirements.

Standard 4-3: Guidance on how to complete the program must be available to all students and access to academic advising must be available to make course decisions and career choices.

An orientation class is conducted in the start of every semester. In the orientation class, concerned faculty members provide a document containing program mission, objectives, outcomes, curriculum design & organization, assessment-methodology and attendance criteria. Similarly, the contents of the document having program mission, objectives, outcomes are available to all students of the concerned course in shape of module description. The same document is also shared with the concerned Chairman/ HoD, Office of the QEC and Director Academics. Professional counseling is usually carried out by Student Career Counseling Committee constituted for the purpose. The students can also consult with the chairman of the department or with the office of the registrar. A faculty member is assigned responsibility to discuss and coordinate with students in taking the right decision about their career.



Criterion 5: Process Control

The execution of the major functions, such as student admission and registration, faculty recruitment, teaching, and graduation are documented and conducted in a well-organized manner. These processes are controlled, periodically reviewed and evaluated continuously.

<u>Standard 5-1</u>: The process by which students are admitted to the program must be based on quantitative and qualitative criteria and clearly documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

The admission criterion is set by the university and it is revised periodically. However, the admission of the students is the responsibility of the Director Academics office and the department is not directly involved in this process. The admission office gives admissions according to the criteria set by the university.

Rules and Procedures for admissions:

- The admission notice for BS (Hons) Program (4 years) is advertised in the national
 and local newspapers soon after the result declaration of FA/FSc of all Boards of
 Intermediate & Secondary Education of Khyber Pukhtunkhwa. All the eligible
 candidates fulfilling the requirement can apply for the courses offered by the
 university.
- The prospective applicants are asked to submit their admission forms, complete in all respects, within the prescribed period of time.
- After a thorough scrutiny and sorting, the names of eligible candidates are notified.
- A candidate may apply for three disciplines/subjects on a single form, but he/she
 must prioritize his/her options in the admission form.
- Once submitted, no changes/modifications are acceptable in the admission form.
- A candidate gets to lose his/her right for admission, if he/she provides false
 information in the admission form. Moreover, if the documents attached were found
 fake they would be considered guilty of gross misconduct and such act shall be highly
 condemned.
- The applicant having 3rd division or having obtained marks less than 45% are not eligible to apply.

Criteria for Admission:

Students with FSc pre-medical or Equivalent with at least 45% marks are eligible to apply. The selected candidates for admission must present their original documents before the committee on the announced date.

Documents to be submitted with admission form:

The following documents must be submitted with the completed application form:

- 1. Three recent color passport size photographs, duly attested
- 2. Attested photocopies of Detailed Marks Certificates (DMCs)
- 3. Attested photocopies of provisional /original certificates
- 4. Attested photocopy of character certificate
- 5. Attested photocopy of CNIC of the Applicant/Father/Guardian
- 6. Migration certificate, either board to university or university to university (for admitted candidates only)
- 7. Original undertaking on judicial stamp paper of RS. 20/- each, duly attested by political agent/DCO/ First class magistrate as PS specimen provided in the prospectus (for admitted candidates only)
- 8. Candidates applying against the reserved seats of disabled or Afghan students must also attach the relevant documents of eligibility with the form

Distribution of seats in each department is given as under:

Open merit	26
Reserved Seats:	
Female	2
Afghan	01
Disabled/Handicapped	01
Total:	30

Displaying of merit lists:

After the closing date of admission forms submission, the provisional merit lists are prepared on the basis of the following points:

- Percentage of marks obtained in FA/FSc
- In case of a tie in any merit position, SSC marks percentage is considered. In case of further tie, the age of the applicants is the determining criteria and the older candidate is to get preference.
- Separate merit list are prepared for the reserved seats of female, Afghan students and disabled following the above criteria.
- All the merit lists for admission are displayed on the main notice board of the university campus and on the university website http://www.sbbu.edu.pk

Interview of specified seats:

• Interview for the specified seats of Afghan students and disabled are held on the dates specified by the office of the Director Academics.

- All the applicants will ensure their presence and signature in the attendance sheet on the day of test/interview, even if they are on waiting list.
- The university fee is to be deposited in HBL Sheringal Branch, adjacent to university campus. After depositing the prescribed fee, the applicant must bring the original bank receipt to the account section of the university.
- In case a student wants to shift from one discipline to another within a certain time period, the fee and other charges shall be adjusted accordingly.
- Any reserved seat remaining unfilled, at the prescribed time, shall be filled through open merit.

<u>Standard 5-2</u>: The process by which students are registered in the program and monitoring of students progress to ensure timely completion of the program must be documented This process must be periodically evaluated to ensure that it is meeting its objectives.

Each department shall send details of the admitted students to the controller of examinations on the prescribed proforma for registration within one month of the finalization of 1st term/part-1/previous admissions. The office of the controller of examinations shall maintain record of all the registered students in manner which shall contain the Name, Father's Name, Date of Birth, Permanent address, CNIC No. of the candidate, DMC of SSC and intermediate Examination, details of any other examination and result of every University Examination.

Academic Progress of Students:

In semester system, monitoring of student progress is evaluated by tests, surprise quizzes, assignments, class presentation, projects and final exam at the end of the semester.

Internal Evaluation:

Attendance + Class participation	=5 %
Class Presentation	=10 %
Home Assignment	=10 %
Test and Quizzes	=10 %
Mid Term	= 25 %
Final Term	= 40 %

In addition to the above criteria, the experts of the subject can add any addition modes of evaluation as required by the nature of the subject. Similarly, if required, a teacher can have 3 to 5 tests and 1 -3 Mid Term tests.

<u>Standard 5-3</u>: The process of recruiting and retaining highly qualified faculty members must be in place and clearly documented. Also processes and procedures for faculty evaluation, promotion must be consistent with institution mission statement. These processes must be periodically evaluated to ensure that it is meeting with its objectives.

Recruitment of the faculty members is done on open merit by inviting the applications through newspapers. Written screening test is conducted for short listing. The candidates are required to appear before the selection board for interview. The names of selected candidates are recommended to syndicate for approval. After the approval, the registrar issues the offer letters for the appointment. Faculty members are made in accordance to the policy approved by HEC.

Faculty's Recruitment, Training, and Evaluation

Faculty	Policy	Process
Recruitment	As per HEC guidelines	Through selection board (for permanent seats) and approval by the University Syndicate. Through HOD & VC (on contract basis)
Evaluation	As per HEC guidelines (Periodically)	Evaluation by students through Quality Enhancement Cell (QEC) and Self-assessment by the faculty. (At the end of each semester)
Promotion	As HEC criteria for faculty promotion and service statute of SBB University.	Through selection board and approval by the University Syndicate

The performance of the faculty members is monitored regularly and continuously by the Chairman/HoD of the department, and it is evaluated annually through ACRs. (Annual Confidential Report) There was no systematic process before to evaluate the faculty members, now after establishment of QEC each faculty member is evaluated by the students via "Teacher Evaluation Questionnaire" at the end of each semester.

<u>Standard 5-4</u>: The process and procedures used to ensure that teaching and delivery of course material to the students emphasizes active learning and that course learning outcomes are met. The process must be periodically evaluated to ensure that it is meeting its objectives.

Process to ensure teaching and delivery of course material:

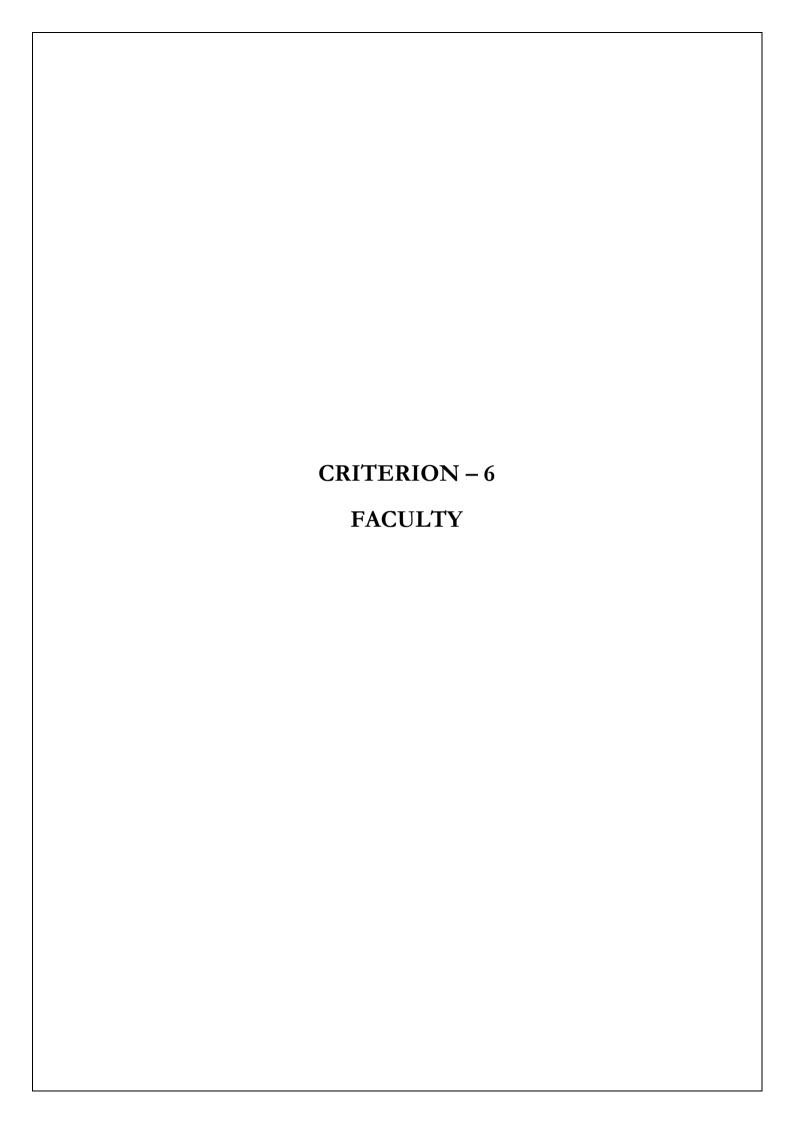
• Time table is strictly followed by all faculty members. The Chairperson of the department frequently gets feedback from the students during the semester.

- Students are show their test and papers in the show off session after every test and quiz, this process in made sure by the HoDs. Students can see their papers marked by the teacher and view it.
- All the relevant materials (Tests, Assignments and Quizzes) of evaluation are submitted to the office of the HoD. It purpose to ensure that the grading is transparent
- Award list of all sessional and final term papers is submitted to the controller of examination and copies are left in the department.

In order to ensure that the teaching is effective a quarterly survey is conducted by the university QEC and the findings are communicated to the concerned faculty members. After completion of Survey Assessment Team meeting is called to assess the process and make implementation plan for the said department.

<u>Standard 5-5</u>: The process that ensures that graduates have completed the requirements of the program must be based on standards, effective and clearly documented procedures. This process must be periodically evaluated to ensure that it is meeting its objectives.

Currently there is no proper procedure to assure that whether the graduates meet the program requirements or not. This area needs concentration to develop this procedure. Plan required for this area. As no graduates are yet produced. So no proper procedures to assure that the graduates meet the program requirements or not. This area needs concentration to develop this procedure. Further planning is required for this area.



Standard 6-1: There must be enough full time faculty who are committed to the program to provide adequate coverage of the program areas/courses with continuity and stability. The interests and qualifications of all faculty members must be sufficient to teach all courses, plan, modify and update courses and curricula. All faculty members must have a level of competence that would normally be obtained through graduate work in the discipline. The majority of the faculty must hold a Ph.D. in the discipline.

Full time faculty is committed to the program development and course coverage in addition to maintaining continuity and stability of academic standard. The interest and qualifications of department faculty members are sufficient to plan, teach, modify, and update all offered courses and curriculum. Following are the brief details of the departments' faculty members.

Faculty members of the Shaheed BB University are active in teaching and research activities and have the necessary technical depth to support the program. Teachers attempt to cover the curriculum adequately and in case of need hold extra classes.

Pen Picture of Faculty Members

S.No	Name	Designation	Qualification
1	Dr. Midrar Ullah	Assistant Professor	Ph.D
2	Miss. Haseena Gulzar	Lecturer	M.Phil
3	Mr. Sikand	Lecturer	BSBT
4	Mr. Sami Ullah	Lecturer	BSBT

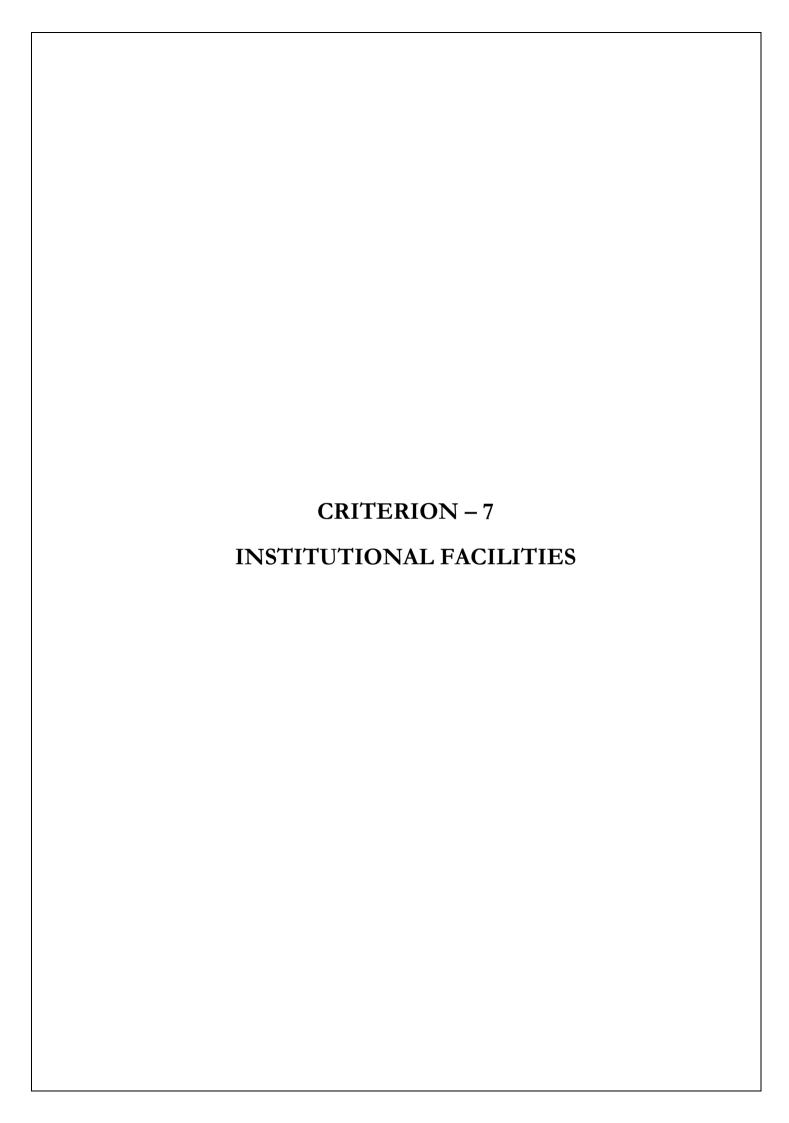
<u>Standard 6-2</u>: All faculty members must remain current in the discipline and sufficient time must be provided for scholarly activities and professional development. Also, effective programs for faculty development must be in place.

Faculty members of Shaheed BB University are considered updated in the discipline based on the following criteria:

- All teachers meet the HEC criteria for appointment in their respective cadre.
- Teachers generally participate in seminars, conferences at National /International levels.
- Teachers take interest in teaching and involve themselves in research activities
- A number of teacher training and refresher courses are conducted by QEC, and other academic departments in the university.

<u>Standard 6-3</u>: All faculty members should be motivated and have job satisfaction to excel in their profession.

Every year university awards (Best University Teacher Award) to faculty members for their outstanding performances. Outstanding Teachers are selected based on Students Teacher Evaluation Questioner, Peer Evaluation and HoD Evaluation. For job satisfaction the university ensures fair, timely selection, appointment/promotion as per HEC criteria



Criterion 7: INSTITUTIONAL SUPPORT

Institutional facilities, including library, class rooms and offices need improvement to support the objectives of the overall programs of the University. Class rooms and offices must be adequate to enable faculty to carry out their responsibilities.

<u>Standard 7-1</u>: The institution must have the infrastructure to support new trends in learning such as e-learning.

Electronic library books and journals are not available for learning purpose.

- Insufficient facilities regarding the infrastructure to support new trends in learning.
- Insufficient library's technical collection of books.
- Recommended books, relevant journals of the programs are not available to the students.
- However, this aspect needs to be strengthened for overall university departments.

Following facilities are available at the department at the University Campus:

Internet Facility

Limited internet facility is available for students.

Hostel Facility

Limited hostel facilities for boys are available.

Canteen

Separate girl's canteen is present for girl students within the campus.

Medical Facility

Though currently there is no medical practitioner in the BHU. It is run by a pharmacist who is assisted by a dispenser.

Sports Facility

Directorate of sports is present in the campus

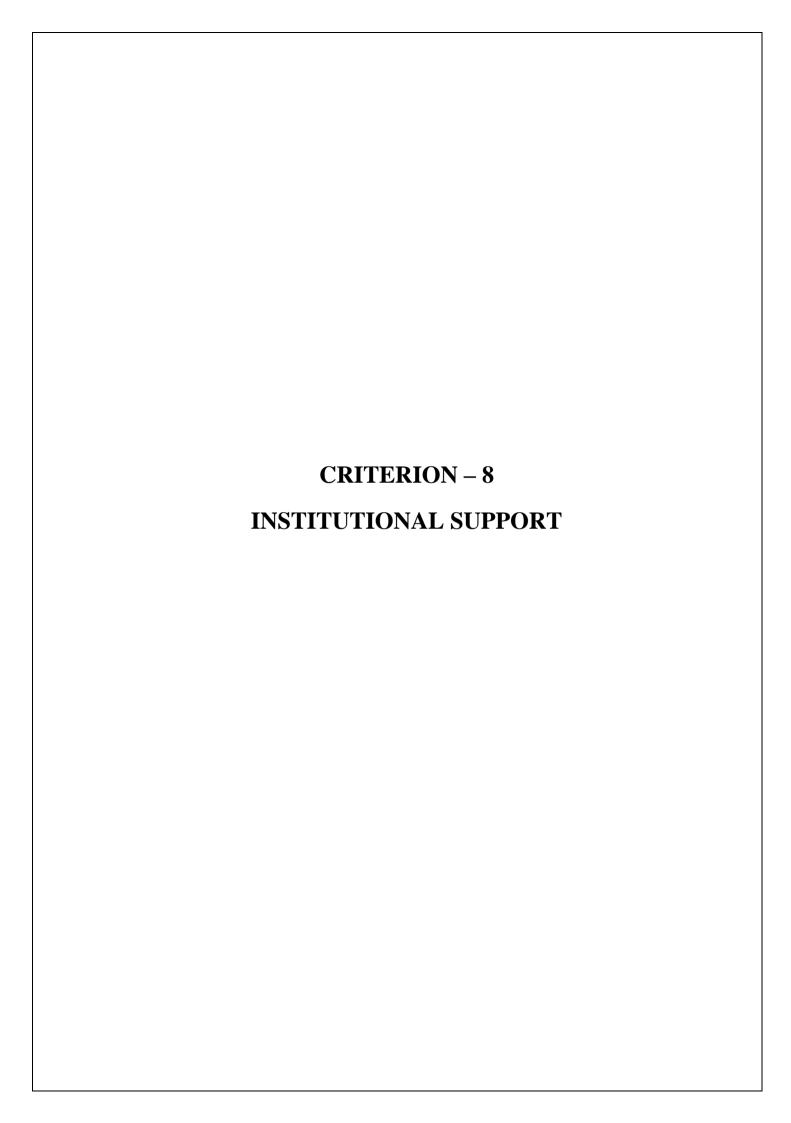
Faculty Offices

Offices with in adequate facilities are available for the faculty

<u>Standard 7-2</u>: The library must possess an up-to-date technical collection relevant to the program and must be adequately staffed with professional personnel.

The library space and books are not sufficient for university and is also not updated regularly according to the academic and research needs of the university staff. The university Central Library has very limited number of books and journals. It does not meet the standards of a university library. Departments itself does not have any library. The Library is not registered to any on-line journal or database cataloging and abstracting engines.

	class rooms are avai				
male nor for fer offices mostly sha	male students) are ared offices are available.	also missing. The clable and class ro	e department la om facilities are a	cks individual facu llso not sufficient.	ıltie



Criterion 8: INSTITUTIONAL SUPPORT

The university administration is trying to provide all the possible facilities to the departments and has been struggling hard for the up gradation of departments and establishing new faculties and institutes.

Standard 8-1: There must be sufficient support and financial resources to attract and retain high quality faculty and provide the means for them to maintain competence as teachers and scholars.

In order to groom the faculty, university usually offers various trainings, workshops and seminars for faculty. The University is also trying to attract highly qualified faculty. All the financial matters of the overall department are managed by University finance Directorate and Registrar office with no involvement of the department. Last year, the university arranged 10 trainings for in service teachers both in main and sub campus at Chitral. These training were of various length duration ranging from 3 days to one month period.

Faculty Pay is as per the institution & universities in the public sectors.

Standard 8-2: There must be an adequate number of high quality graduate students, research assistants and Ph.D. students.

The university is newly established so there is no research assistant. There are currently only five PhDs in the university. Moreover they have no research allowance and get only 5000/-PhD allowance which is not equal to other universities. This area highly needs the concentration or focus of the authority.

<u>Standard 8-3</u>: Financial resources must be provided to acquire and maintain Library holdings, laboratories and computing facilities.

All the financial matters of the overall department are managed by the university Finance Directorate and Registrar office with no involvement of the department.