

RIPHAH INTERNATIONAL UNIVERSITY
ISLAMABAD



SELF ASSESSMENT REPORT

MBBS

Faculty of Health and Medical Sciences

15th December 2011

Table of Contents

1.0	Executive Summary	5
1.1	Objectives	5
1.2	Execution	5
2.0	Introduction.....	8
2.1	University Mission Statement.....	8
2.2	Islamic International Medical College (IIMC)	8
2.3	Program Selected	8
2.4	Program Evaluation	9
3.0	Criterion 1: Program Mission, Objectives and Outcomes	9
3.1	Standard 1-1	9
3.1.1	Program Mission Statement.....	9
3.1.2	Program Objectives.....	9
3.1.3	Alignment of Program Objectives with Program & University Mission Statements.....	9
3.1.4	Main Elements of Strategic Plan.....	10
3.1.5	Program Objectives Assessment.....	11
3.2	Standard 1-2.....	12
3.2.1	Program Outcomes.....	12
3.3	Standard 1-3.....	13
3.3.1	Course Evaluation.....	13
3.3.2	Teachers Evaluation.....	15
3.4	Standard 1-4.....	18
3.4.1	Graduates/Undergraduates enrolled in last three years.....	18
3.4.2	Student Faculty Ratio.....	18
3.4.3	Average GPA per Semester	18
3.4.4	Average Completion Time.....	18
3.4.5	Employer Satisfaction	18
3.4.6	Students Course Evaluation Rate.....	18
3.4.7	Students Faculty Evaluation	18
3.4.8	Research.....	19
3.4.9	Community Service	19
3.4.10	Students/Teachers Satisfaction	19
4.0	Criterion 2: Curriculum Design and Organization.....	20
4.1	Title of Degree Program	20
4.2	Definition of credit hour:	20
4.3	Degree plan	20
4.4	Curriculum Breakdown.....	21
4.5	Courses Information.....	22
4.6	Standard 2-1	64
4.6.1	Group 1: Basic Medical Sciences (B.M.S)	64
4.6.2	Group 2: Clinical Specialties	64
4.6.3	Group 3 Humanities.....	64
4.6.4	Course Groups and Program Objectives.....	64
4.7	Standard 2-2.....	65
4.8	Standard 2-3.....	65

4.9	Standard 2-4.....	66
4.10	Standard 2-5.....	66
4.11	Standard 2-6.....	66
4.12	Standard 2-7.....	66
5.0	Criterion 3: Laboratories and Computing Facilities	67
5.1	Standard 3-1	74
5.2	Standard 3-2.....	75
5.3	Standard 3-3.....	75
6.0	Criterion 4: Student Support and Advising.....	75
6.1	Standard 4-1	76
6.2	Standard 4-2.....	76
6.3	Standard 4-3.....	76
7.0	Criterion 5: Process Control.....	77
7.1	Standard 5-1	77
7.2	Standard 5-2.....	78
7.3	Standard 5-3.....	79
7.4	Standard 5-4.....	79
7.5	Standard 5-5.....	80
8.0	Criterion 6: Faculty.....	82
8.1	Standard 6-1	82
8.2	Standard 6-2.....	82
8.3	Standard 6-3.....	83
9.0	Criterion 7: Institutional Facilities.....	84
9.1	Standard 7-1	84
9.2	Standard 7-2.....	85
9.3	Standard 7-3.....	85
10.0	Criterion 8: Institutional Support.....	86
10.1	Standard 8-1	86
10.2	Standard 8-2.....	87
10.3	Standard 8-3.....	87
11.0	Conclusion	89
11.1	Strong Areas.....	90
11.2	Weaknesses.....	91
11.3	Class Room Improvements.....	91
11.4	Laboratory Equipment	91
11.5	Regular Teacher Training	91
11.6	Facilities for Students	91
11.7	Faculty Development.....	92

List of Annexure

Annexure A:	Alumni Survey
Annexure B:	Employer Survey
Annexure C:	Students Course Evaluation
Annexure D:	Students Teacher Evaluation
Annexure E:	Research Papers List
Annexure F:	Graduating Students
Annexure G:	Faculty Survey
Annexure H:	Faculty Resume
Annexure I:	Lab Safety Precautions
Annexure J:	AT Findings
Annexure K:	Implementation Plan
Annexure L:	Faculty Course Review

1.0 Executive Summary

This report is being prepared almost at the end of the assessment cycle for 3 selected faculties of Riphah International University (RIU), as per requirements of Higher Education Commission (HEC). Quality Enhancement Cell (QEC) was formed in RIU in Oct 2009. Program Team Members of all three faculties, notified by University, worked with Dir QEC to pursue the application of Self Assessment Manual in their respective departments. From each faculty one program was selected.

In Riphah Institute of Pharmaceutical Sciences (RIPS), Pharmacy program was selected for self assessment, evaluation and improvements. A strong commitment of Respected Vice Chancellor to support QEC made the difference and resultantly, a cycle of assessment is about to complete.

1.1 Objectives

Following are the two main objectives of the self assessment report:-

- a To implement Self Assessment Manual in selected program with a view to improve quality in higher education.
- b To identify the areas requiring improvements in order to achieve objectives through desired outcomes.

1.2 Execution

A soft copy of self assessment manual was given to all faculty members. Quality Awareness Lectures and Workshops on preparation of Self Assessment Report (SAR) were arranged for the Deans/In-charge Programs and Program Team (PT) Members of the selected program. Hard copies of HEC issued 10 proformas, 8 criterion and 31 standards were provided to PT members to evaluate their respected program against defined standards. The PT members with an intimate support and follow up of QEC, completed the SAR and forwarded to QEC in given time frame.

After reviewing SAR, QEC arranged visit of Assessment Team to the selected program on 29 Nov 2011. Dir QEC accompanied the AT Team and participated in discussions with In-charge Program / Program Team members and available faculty members. Date for exit presentation was fixed as 2nd Dec 2011, as per availability of respected VC. Dean, In-charge Program, PT and AT members were invited. Prior to Chairman AT's presentation, Dir QEC gave 15 minutes presentation on "Why QEC in Higher Education"? The salient points of Dir QEC's presentation giving the advantages of joining QEC network are as under:-

- a. Eligibility for HEC funding proportionate to our ranking
- b. Preference for HEC scholarships for students and faculty
- c. Eligibility for evaluation by external evaluators
- d. Better ranking on website of HEC is a marketing tool for RIU
- e. Internal improvements (sense of achievements and satisfaction)

The Chairman AT during his presentation, indicated salient points of the SAR, account of his discussions with the faculty members, improvements required in the infrastructure, syllabi and training of the faculty and support staff (Annex-J).

The implementation plan (Annex-K) basing on the discussions in exit meeting of 2nd Dec 2011 have been made by In-charge Programs. They prepared it under following headings:-

- a. AT findings
- b. Corrective Actions required
- c. Implementation Dates
- d. Responsible Body
- e. Resources Needed

The implementation plan indicates the resources required to improve the infrastructure, environment in the classes and E-Learning. The recommended

target dates to complete the tasks observed by Assessment Team, presented in exit meeting on 2nd Dec, 2011 and approved by Vice Chancellor have been indicated in the implementation plan. The tasks will be carried out by the Registrar's Office.

At the completion of Self Assessment cycle, QEC is going to submit the hard and soft copy of SAR to HEC on 15th December 2011.

Director
Quality Enhancement Cell

Self Assessment Report

2.0 Introduction

Riphah International University (RIU) is a private university, chartered by the Federal Government of Pakistan in 2002. The university was established with a view to produce professionals with Islamic moral and ethical values. The Riphah International University is committed to promote and impart quality education with character building of the new generation in the light of Islamic principles and values. Riphah International University is committed to a value based integrated educational philosophy. It is running 10 faculties in 3 different campuses.

2.1 University Mission Statement

Establishment of state of the art educational institutions with a focus on inculcation of Islamic ethical values.

2.2 Islamic International Medical College (IIMC)

Islamic International Medical College (IIMC) is running the following programs:

- a. Bachelor of Medicine and Bachelor of Surgery (MBBS)
- b.

2.3 Program Selected

Riphah International University has selected the **Bachelor of Medicine and Bachelor of Surgery (MBBS)** as first model program for Self Assessment Report (SAR) for the year 2011-12 under the directives of HEC.

The selected program is accredited by Pakistan Medical and Dental Council (PMDC). The program has got inbuilt mechanism for the revision of syllabi, has competent faculty and adequate infrastructure. New and modern tools have been introduced in the program to conduct research and quality teaching.

2.4 Program Evaluation

The program is being evaluated based on 8 criterion and 31 standards as given in the Self Assessment Manual provided by Higher Education Commission (HEC).

3.0 Criterion 1: Program Mission, Objectives and Outcomes

3.1 Standard 1-1

The program must have documented measurable objectives that support institution mission statements.

3.1.1 Program Mission Statement

Bachelor of Medicine and Bachelor of Surgery (MBBS) program aims to impart theoretical, practical and clinical knowledge and skills to students to transform them into competent medical professionals along with sense of ethical and moral obligations.

3.1.2 Program Objectives

The program is designed to achieve the following objectives:

1. To prepare the students to pursue higher medical education in universities of repute.
2. To educate the students with diagnostic, clinical and team work skills.
3. To enable the students to pursue career in related field.
4. To enable the students to step into research and development (R&D) activities.
5. To prepare students to work within ethical values and betterment of the society at large.

3.1.3 Alignment of Program Objectives with Program & University Mission Statements

Program objectives intend to impart not only clinical and diagnostic skills but moral and ethical information as well. This is done through planned set of activities during the execution of the MBBS program. These activities include overall curriculum composition and its delivery, laboratory work and projects

performed at required stages and House Job Placements to expose students to professional environment.

3.1.4 Main Elements of Strategic Plan

The main elements as discussed above, of a strategic plan for the selected course are as under:

- a. Curriculum Composition
- b. Laboratory work and projects
- c. House Job Placements

3.1.4.1 Curriculum Composition

MBBS program comprises of core courses as per PMDC requirements. It has 33 core courses. Curriculum is divided into different segments that builds student's base through basic set of courses and imparts advance knowledge by using advance courses. List of courses is available in section 3.3.1.

3.1.4.2 Laboratory Work and Projects

Laboratory work and projects are planned at desired stages during the program execution to enhance the working skills of the students. Two laboratories are available for students to practice the laboratory work. At the end of their program, students are required to submit a final project that demonstrates their analysis, designing, solution building, implementation and report writing skills, in the form of designed project and its technical report.

3.1.4.3 House Job Placements

In-Charge House Job placements in IIMC maintains a list of potential hospitals that can offer placement work to RIU students. House Job provides students with the opportunity to work in professional environment along with experienced professionals and learn from their experiences. This aspect of program also opens the doors of opportunities for talented students to seek permanent position in the participant hospital.

3.1.5 Program Objectives Assessment

Objective	How Measured	When Measured	Improvement Identified	Improvement Made
1	Alumni Survey	August 2011		
2	Employer Survey	September 2011	Clinical skills	Under Review in Board of Faculties
3	Alumni Survey, Employer Survey	August 2011 September 2011	Emphasis on Diagnostic skills	Under Review in Board of Faculties
4	Alumni Survey,	August 2011	Research aptitude building	Under Review in Board of Faculty
5	Employer Survey	September 2011	Not Applicable	Not Applicable

Table 1: Program Objectives Assessment

Islamic International Medical College conducted different surveys to assess whether program objectives have been achieved or not? This assessment was done by checking whether graduates are performing the program's desired outcomes or not. The college conducted the Alumni Survey by contacting 70 graduates of the program and asked them to participate in the survey and provide their feedback. 50 responded to the survey and provided their feedback on HEC performa 7 (Alumni Survey). See Annexure A for cumulative results of Alumni Survey under different feedback categories.

Employer Survey of 20 hospitals was conducted, out of which, 15 provided their feedback. See Annexure B for cumulative results of Employers Surveys under different feedback categories.

3.2 Standard 1-2

The program must have documented outcomes for graduating students. It must be demonstrated that the outcome support the program objectives and that graduating students are capable of performing these outcomes.

3.2.1 Program Outcomes

1. Students shall be able to go for higher education (MCPS, FCPS, FRCS, MD, Ph.D) in clinical sciences / medical sciences / fields of interest.
2. The graduates will be able to apply to medical practice biomedical scientific principles, methods and knowledge relating to basic sciences studied.
3. The graduates will be able to apply psychological principles, method and knowledge to medical practice.
4. The graduates will be able to apply social science principles, method and knowledge to medical practice.
5. The graduate will be able to apply to medical practice the principles, method & knowledge of population health and the improvement of health and health care.
6. The graduates will be able to apply scientific method and approaches to medical research.
7. The graduates will be able to carry out a consultation with a patient.
8. The graduates will be able to diagnose and manage clinical presentations.
9. The graduates will be able to communicate effectively with patients and colleagues in a medical context.
10. The graduates will be able to provide immediate care in medical emergencies.
11. The graduates will be able to prescribe drugs safely, effectively and economically.
12. The graduates will be able to carry out practical procedures safely and effectively.
13. The graduates will be able to use information effectively in a medical context.

14. The graduates will be able to behave according to ethical and legal principles.
15. The graduates will be able to reflect, learn and teach others.
16. The graduates will be able to learn and work effectively within a multi-professional team.
17. The graduates will be able to protect patients and improve care.
18. Students shall be able to execute tasks in positive and constructive manner.

Following table shows the link between program objectives and program outcomes:

Program Objectives	Program Outcomes																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	x												X					X
2		X	X	X						x		X				X	X	
3		X		X	X	X	X	x						X	X		X	
4		X		X					x	X					X			
5											x			X				X

Table 2: Outcomes versus Objectives

3.3 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 program assessment has been done by launching HEC Performa number 1 and 10. The students of the program evaluated the courses and teachers in the program.

3.3.1 Course Evaluation

Courses evaluation is shown in the following graphical chart:

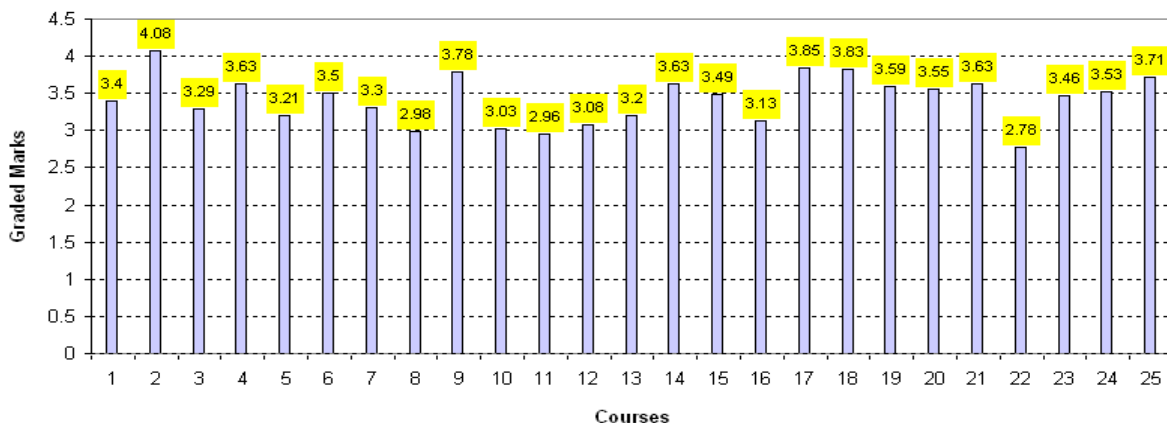


Figure 1: Course Evaluation Bar Chart

Students have graded the courses against the course structure, teaching methodology, learning objectives and outcomes and practical implementation of theory. The total graded marks are 5.

Following is the list of courses that are being evaluated by the students along with their course code and graded scores. See Annexure C (Course Evaluation Survey) for sample course evaluation results. The sample shows the results for one course only while same has been done for all courses listed below. The results of all other courses have been kept in a separate file for record purposes.

S. No	Course Name	Code	Score
1	Foundation Block I	10101	3.4
2	Foundation Block II	10102	4.08
3	Foundation Block III	10103	3.29
4	Blood and Immunology	10104	3.63
5	CNS & ANS	10105	3.21
6	Eye	10106	3.5
7	ENT	10107	3.3
8	Musculoskeletal	10108	2.98
9	Respiratory	20201	3.78
10	CVS	20202	3.03
11	Urology	20203	2.96
12	GIT	20204	3.08

13	Skin	20205	3.2
14	Eye	20206	3.63
15	ENT	20207	3.49
16	Endocrinology	20208	3.13
17	Endocrinology	30301	3.85
18	Reproduction	30302	3.83
19	Immunology	30303	3.59
20	Genetic	30304	3.55
21	Special Pathology	40401	3.63
22	Community Medicine	40402	2.78
23	Eye	40403	3.46
24	Surgery	50502	3.53
25	Pediatrics	50504	3.71

3.3.2 Teachers Evaluation

Teacher's evaluation is shown in the following graphical chart:

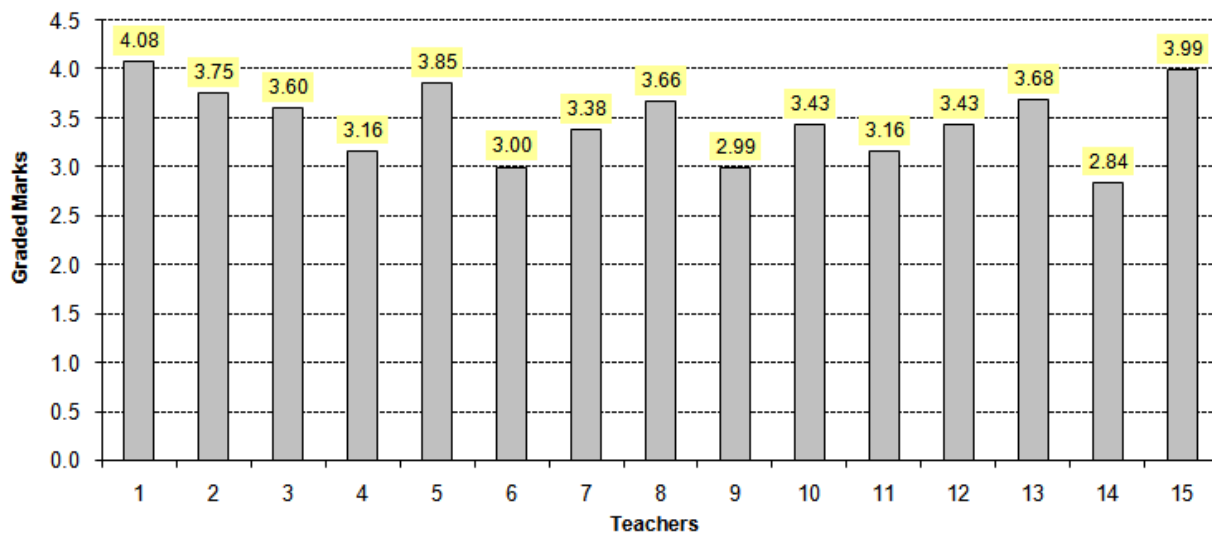


Figure 2: Teachers Evaluation Graph

Students have graded the teachers against their lecture preparation, punctuality, general behavior, subject knowledge and teaching methodology. The total graded marks are 5.

See Annexure D (Teachers Evaluation Survey) for sample teacher evaluation results. The sample shows the results for one teacher only while same has been done for all teachers listed below. The results of all other teachers have been kept in a separate file for record purposes.

Following is the list of teachers that are being evaluated by the students along with the serial number and graded scores.

Sr. #	Teachers Name	Graded Marks
Teacher 1	Dr. Inam	4.08
Teacher 2	Dr. Shahzad Akhtar Aziz	3.75
Teacher 3	Dr. Khadija	3.60
Teacher 4	Dr. Naveed Ahmed Khan	3.16
Teacher 5	Ms. Rehana Rana	3.85
Teacher 6	Dr. Zahra Naz	3.00
Teacher 7	Dr. Sundas	3.38
Teacher 8	Prof. Dr. Ayaz Bhatti	3.66
Teacher 9	Dr. Humaira	2.99
Teacher 10	Dr. Adnan	3.43
Teacher 11	Dr. Anila	3.16
Teacher 12	Dr. Shazia Ali	3.43
Teacher 13	Dr. Komal Zulfiqar	3.68
Teacher 14	Dr. Sadia Sultana	2.84
Teacher 15	Dr. Samia	3.99

This evaluation was carried out by Quality Enhancement Cell to ensure the unbiased feedback from students. QEC staff visited different classes and gathered feedback as

desired. QEC performed analysis of the data and submitted the results to Dean and In-Charge Program for further actions.

Students' feedback data regarding courses and teachers was analyzed using MS Excel software through data analysis techniques. Data was presented to Dean and in-Charge Program in graphical bar charts, who discussed and identified the improvement areas. The decision was made to present the findings in the Board of Studies that will discuss, make decision and forward the findings to next authority level if deemed appropriate. Next meetings of Board of Studies and Board of Faculties are planned during the summer vacations.

Like any other program, MBBS program has also some good and some weak areas. These are listed as under:

Strengths of the MBBS Program are:

- a. Properly scheduled and on time classes
- b. Trained and experienced faculty
- c. Up to date curriculum composition, meeting the market needs
- d. Strong interaction with industry
- e. Well equipped laboratories and computing facilities

Weaknesses of the MBBS Program are:

- a. Lack of emphasis on communication skills
- b. average classes infrastructure
- c. Training of laboratory staff
- d. Availability of senior teaching staff after class hours
- e. Guidance/Advisory Process for Students

International Islamic Medical College has identified some improvement that needs to be done on short and long term basis. Short Term program development plan, targets the points b, c and e as listed above in weaknesses while long term development plan, targets the points a and d as listed above in the weaknesses:

3.4 Standard 1-4

The department must assess its overall performance periodically using quantifiable measures.

3.4.1 Graduates/Undergraduates enrolled in last three years

Every year, the undergraduate program attracts a large number of students and is run on full capacity. During the last three years, 300 students enrolled in the program.

Following is the data as per requirements listed in standard 1-4 main section:

3.4.2 Student Faculty Ratio

MBBS program has 5:1 student faculty ratio.

3.4.3 Average GPA per Semester

The average GPA is 2.95

3.4.4 Average Completion Time

The MBBS program has average completion time of 5 years. The attrition rate in the program is 1.9%.

3.4.5 Employer Satisfaction

Islamic International Medical College conducted the employer survey to judge their satisfaction level which turned out to be 91%. See Annexure B for cumulative results.

3.4.6 Students Course Evaluation Rate

Students course evaluation rate for all courses is 12.92

3.4.7 Students Faculty Evaluation

QEC staff conducted the teachers' evaluation, in the absence of faculty members, to ensure unbiased feedback. The results showed that 7 out of 15 teachers (47%) scored more than 70% marks as graded by students while the rest of the faculty scored above 50%.

3.4.8 Research

The program faculty published 98 research papers in different journals. List of publications is attached in Annexure E.

3.4.9 Community Service

Islamic International Medical College staff and students worked with a NGO (Aghosh) and participated in number of community services as listed below:

- Raising of funds (Rs. 1 Million)
- Provision of books from class 5th to 10th (250 students were benefitted)
- Provision of uniforms (150 students were benefitted)
- Polio Campaign (20 teams of senior students administered polio drops to more than 1000 infants)
- Established 20 medical camps in different flood affected areas of KPK

3.4.10 Students/Teachers Satisfaction

As per HEC defined standard, a ratio of 4:1 for the academic and administrative non-technical staff is maintained by the International Islamic Medical College.

Students and teachers satisfaction is judged in different ways. For students this is done by faculty as well as QEC staff by conducting, in-class discussions to know students views and through feedback provided by them on HEC Performa number 1 & 10. While, teachers satisfaction is judged using the HEC defined Performa number 5 and their views during in person discussion with QEC staff.

4.0 Criterion 2: Curriculum Design and Organization

4.1 Title of Degree Program

Bachelor of Medicine and Bachelor of Surgery (MBBS)

4.2 Definition of credit hour:

One credit hour is 1 hour of theory lecture or 3 hours of laboratory work in a week. However the MBBS program is not run on credit hour basis.

4.3 Degree plan

Following is the complete list of courses/modules taught in the selected program. Section 4.5 shows the details about all the courses/modules taught in MBBS program, including pre-requisites and books.

S. No	Course Name	Code
1	Foundation Block I	10101
2	Foundation Block II	10102
3	Foundation Block III	10103
4	Blood and Immunology	10104
5	CNS & ANS	10105
6	Eye	10106
7	ENT	10107
8	Musculoskeletal	10108
9	Respiratory	20201
10	CVS	20202
11	Urology	20203
12	GIT	20204
13	Skin	20205
14	Eye	20206
15	ENT	20207
16	Endocrinology	20208
17	Endocrinology	30301
18	Reproduction	30302
19	Immunology	30303

20	Genetic	30304
21	Hematology	30305
22	Musculoskeletal	30306
23	Skin	30307
24	Respiration	30308
25	CVS	30309
26	Special Pathology	40401
27	Community Medicine	40402
28	Eye	40403
29	ENT	40404
30	Medicine	50501
31	Surgery	50502
32	Gynecology Obstetrics	50503
33	Pediatrics	50504

4.4 Curriculum Breakdown

MBBS program run on annual basis through modular system. The course load is designed based on weeks instead of credit hours. The table below shows the course/modules yearly breakdown in number of weeks.

Semester (Year)	Course Number	Category (Credit Hours)				
		Math and Basic Science		Core Courses	Humanities and Social Sciences	Technical Electives / Others
		Math	Basic Science			
1	10101,10102,10103, 10104,10105,10106, 10107,10108			33 (weeks)	1 week	
2	20201,20202,20203, 20204,20205,20206, 20207,20208			33 (weeks)	1 week	
3	30301,30302,30303, 30304,30305,30306, 30307,30308,30309			36 (weeks)	1 week	
4	40401,40402,40403, 40404			36 (weeks)	1 week	
5	50501,50502,50503, 50504			26 (weeks)	1 week	

Table 3: Curriculum Course Requirements

4.5 Courses Information

Study Guides of 1st Year MBBS

1.

Name of Module	Blood Module
Year	1st Year MBBS-2011
Module Code	10102 (Year code- 1, semester code- 01, module code 02)
Module Duration	05 Weeks
Module Rationale	<p>Blood is selected as a Second module in MBBS curriculum because, being liquid connective tissue, it is in communication with all living tissues and body fluids. All other tissues are dependants on it for their survival and any change in its composition adversely affects their function.</p> <p>Therefore a clear understanding of blood and its disorders will help students in understanding other systems of body. The commonest diseases prevailing in the community in both sexes regarding the hematology block are the anemia's for which the students must have clear insight and understanding of the mechanism of actions and management at community level.</p> <p>The hematology module will be taught in four blocks Block A: Anemias Block B: Immunology Block C: Haemostasis</p> <p>The normal structure and function of the hematological system and its self-regulating mechanisms will be covered in this module. The abnormalities of structure and function underlying diseases processes will be explored.</p>
Module Outcomes	<ol style="list-style-type: none">1. Describe the structural, developmental and functional organization of the blood & its components and immunity.2. Apply the basic sciences knowledge in order to understand the molecular basis, pathophysiology, prevention, drug therapy of common medical problems (related to blood) existing in our community.3. Incorporate participatory approaches to learning that encourages both independent and critical thinking, as well as the development of communication skills.
Learning Resource	<p><u>Physiology:</u></p> <ul style="list-style-type: none">• Text book of Medical Physiology by Guyton and Hall (12th edition).

- Human Physiology: From Cells to Systems by L Sherwood (7th-edition).
- Medical Physiology by Ganong (23th-edition).
- Human Physiology by Dee Unglaub Silverthorn (4th-edition).

Anatomy:

- Clinical Anatomy for Medical Students by Richard Snell (8th edition).
- Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition).
- Medical Embryology by Langman (11th edition).
- Essential Clinical Anatomy by KeithbMoore (6th edition).
- The Developing Human (clinical oriented embryology) by Keith Moore (8th edition).
- Clinical Neuroanatomy by Snell (7th edition).

Pathology:

- Pathologic Basis of Disease by Robbins and Cotran (8th edition)
- Clinical Chemistry (Chemical Pathology) by William. J. Marshall (5th edition).
- Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition.
- Lippincott's Illustrated Review on Microbiology (2th edition).

Pharmacology:

- Lippincott's Pharmacology (4th edition).
- Katzung's Pharmacology (11th edition).
- Pharmacological Basis of Therapeutics Goodman & Gillman (12th edition)

Biochemistry:

- Lippincott's Biochemistry (5th edition)

Behavioural Sciences:

- Introduction to Psychology by Edward. E Smith (14th edition)
- Behavioural Sciences by Lippincott Williams.
- Health Psychology by Douglas Carroll

Community Medicine:

- J- Park Community Medicine textbook of community medicine by Dr. John Evert Park (21th edition).
- Mohammad Iliyas Ansari (7th edition).

Medicine:

- Principle and Practice of Medicine by Davidson (20th edition).

2.

Name of Module	CNS & ANS
Year	1st Year MBBS-2011
Module Code	
Module Duration	08 Weeks
Module Rationale	<p>The human nervous system is the most complex and versatile achievement of the process of evolution. The nervous system of all animals functions to detect changes in the external and internal environment and to bring about appropriate responses in the muscles, organs and glands.</p> <p>The anatomical, physiological, biochemical and molecular foundation of some of these aspects of neural function are well understood, while others continue to occupy the professional lives of many thousands of researchers in both the basic and clinical sciences.</p> <p>The nervous system is often damaged by inherited or developmental abnormalities by disease processes and by traumatic injury. The prevention, diagnosis and management of neurological disorders are therefore of immense socioeconomic importance.</p> <p>This module is expected to build the student's basic knowledge about the normal structure, organization, functions and development of nervous system. This knowledge will serve as a fabric on which the student will weave further knowledge about the etiology, pathology and pathogenesis of diseases of nervous system and the principles of their management.</p>
Module Outcomes	<p>Each student will acquire the basic knowledge and terminology about nervous system. It will help to understand the structural and functional organization of nervous system. Functions of various components of central and peripheral nervous system and biochemical roles of neurotransmitters will be learnt in depth in this module.</p> <p>It will also introduce to the students, the Pathophysiology and clinical features of major clinical problems related to nervous system that are prevalent in our society. Also the principles of management of CNS diseases (to be dealt in depth in second spiral) with emphasis on Pathophysiology and the pharmaceutical agents required in the management of neurological disorders.</p> <p>IMPORTANT NOTE: <i>The CNS-ANS Module in first spiral includes the structural and functional aspects of nervous system with important clinical considerations excluding higher mental functions that will be covered in second spiral of this module.</i></p>

<p>Learning Resources</p>	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith.L.Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by R Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William. J. Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott's Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott's Pharmacology (4th edition). • Katzung's Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward. E Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by John Evert Park (21th edition). • Mohammad Iliyas Ansari (7th edition). <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition).
----------------------------------	---

3.

Name of Module	ENT
Year	1st Year MBBS-2011
Module Code	10305 Year Code-1 ,Semester Code-02, Module Code-05
Module Duration	03 Weeks
Module Rationale	Otorhinolaryngology module is designed to study the basic structure and functions of ear, nose and throat along with its embryological development and anomalies and pathophysiology of common clinical problems. This module (1 st spiral) consist of the following themes: 1. Deafness: Anatomy and physiology of external, middle and inner ear, pathophysiology of deafness and tuning fork tests. 2. Pain Throat: Anatomy of oral cavity and pharynx and its functions. 3. Nasal Obstruction: Structure and functions of nose and paranasal sinuses.
Module Outcomes	At the end of this module the students should be able to: KNOWLEDGE: <ul style="list-style-type: none"> • Explain the Physiology ,anatomy and pathogenesis of E.N.T problems • Apply basic sciences to understand the causes of common E.N.T problems • Comprehend different clinical presentations to formulate provisional diagnosis and consider relevant differential diagnosis • Formulate the plan of investigations in partnership with patient. • Identify the risk factors for preventable E.N.T diseases. SKILL: <ul style="list-style-type: none"> • Examine the ear and Perform audiological tests • Examine the oral cavity and oropharynx • To perform posterior rhinoscopy & indirect laryngoscopy • To assess the nasal obstruction & to perform anterior and posterior rhinoscopy & transillumination tests. ATTITUDE: Demonstrate effective communication skill strategies while history taking and examining the patients with ear, nose and throat problems.
Learning Resource	Physiology: <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems (7th-edition). • Medical Physiology (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). Anatomy: <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition).

- **Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition).**
- **Medical Embryology by Langman (11th edition).**
- **Essential Clinical Anatomy by Keith Moore (6th edition).**
- **The Developing Human (clinical oriented embryology) by Keith Moore (8th edition).**
- **Clinical Neuroanatomy by Snell (7th edition).**

Pathology:

- **Pathologic Basis of Disease by Robbins and Cotran (8th edition)**
- **Clinical Chemistry (Chemical Pathology) by William. J. Marshall (5th edition).**
- **Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition.**
- **Lippincott's Illustrated Review on Microbiology (2th edition).**

Pharmacology:

- **Lippincott's Pharmacology (4th edition).**
- **Katzung's Pharmacology (11th edition).**
- **The Pharmacological Basis Therapeutics by Goodman & Gillman (12th edition).**

Biochemistry:

- **Lippincott's Biochemistry (5th edition)**

Behavioural Sciences:

- **Introduction to Psychology by Edward. E Smith (14th edition)**
- **Behavioural Sciences by Lippincott Williams.**
- **Health Psychology by Douglas Carroll**

Community Medicine:

- **J- Park Community Medicine Textbook of Community Medicine by John Evert Park (21th edition).**
- **Mohammad Iliyas Ansari (7th edition).**

ENT:

- **Diseases of ENT by PI dhingra (4th edition).**

4.

Name of Module	EYE
Year	1st Year MBBS-2011
Module Code	
Module Duration	03 Weeks
Module Rationale	<p>Eye module has been designed to study the basic structure and functions of EYE along with its embryological development and anomalies. EYE is a complex structure. Therefore it has to be broken into different anatomical, physiological and biochemical aspects</p> <p>Orbital region. This term is used to describe the structures which are present in the orbital cavity (orbital walls, eyelids, Lacrimal gland, lacrimal drainage system)</p> <p>Eye ball: Three layers (cornea, sclera and retina) of the eye ball including their anatomy, embryology, histology and physiology.</p> <p>Vision: Recording of visual acuity using Snellen's chart, different states of refraction, and dynamics of intraocular fluids and photochemistry of visual cycle.</p>
Module Outcomes	The students should be able to describe the development of eye and role of accommodation and various aspects of errors of refraction. Apply the basis science knowledge to understand patho physiology, drug therapy, surgery & prevention of common eye problems.
Learning Resources	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition). • Basic Histology Text and Atlas by Carlos and Junqueira (12th edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith.L.Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition).

	<p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott's Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott's Pharmacology (4th edition). • Katzung's Pharmacology (11th edition). • Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) • Behavioural Sciences by Lippincott Williams • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by Dr. John Evert Park (21th edition) <p><u>Ophthalmology:</u></p> <ul style="list-style-type: none"> • Textbook of ophthalmology by S. Jatoi (2nd edition) • Parson book of Ophthalmology
--	--

5.

Name of Module	Foundation Module –I
Year	1st Year MBBS-2011
Module Code	10101 (Year code- 1, semester code- 01, module code 01)
Module Duration	07 Weeks
Module Rationale	This module has been selected to impart the student basic knowledge about the normal structure, organization, functions and development of human body. This knowledge will serve as a fabric on which the student will weave further knowledge about the etiology, pathology and pathogenesis of diseases and the principles of their therapeutics and management. It will also familiarize the students with the importance of medical ethics in the light of Quran and Sunna, effective speaking, presentation skills and the terminology used to understand the diseases and their prevalence in the community.

Module outcomes	<p>Each student will; Acquire the basic science knowledge and terminology necessary to understand the normal structure and function of human body from biochemical to organ system level, as well as the concepts of diseases in the community, drug dynamics. Acquainted with some of the issues related to Medical Ethics and the importance of following these ethics as guided by Quran and Sunna.</p>
Module Learning Resource	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William. J. Marshall (5thedition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11thedition. • Lippincott’s Illustrated Review on Microbiology (2thedition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott’s Pharmacology (4thedition). • Katzung’s Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott’s Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p>

	<ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p>Community Medicine:</p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by Dr. John Evertt Park (21th edition). • Mohammad Iliyas Ansari (7th edition). <p>Medicine:</p> <ul style="list-style-type: none"> • Davidson principle and practice of medicine (20th edition).
--	---

6.

Name of Module	Foundation Module – II
Year	1st Year MBBS-2011

7.

Name of Module	Foundation Module – III
Year	1st Year MBBS-2011

8.

Name of Module	MUSCULOSKELETAL
Year	1st Year MBBS-2011
Module Code	10205 (Year code- 1, semester code- 02, module code05)
Module Duration	08 Weeks
Module Rationale	<p>This module has been designed to unfold the structural organization, functions, congenital anomalies and some of the disorders of the limbs and back. It explains the mechanism of neuromuscular transmission, its biochemical basis and the importance of Ca⁺⁺ in the body along with drugs acting at this level. It also highlights the main components of primary survey in a trauma patient along with identification of common fractures of long bones on radiographs and examination of musculoskeletal system along with joint examination. Teaching methodology includes lectures, PBL as a tool where appropriate, SGD and demonstrations on models and dissection of the limbs along with teaching in Histology labs to enable the students to recognize different types of muscle and bone tissue under microscope.</p>
Learning outcome	Describe the structural, developmental and functional organization of musculoskeletal system. Apply the basic knowledge of bones, joints and cartilage in order to understand the pathophysiology of musculoskeletal disorders.

<p>Learning Resources</p>	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Langmans Medical Embrology (11th edition). • Essential Clinical Anatomy by Keith.L.Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith.L.Moore(8th edition). • Clinical Neuroanatomy by Snells (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William Marshall (5thedition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11thedition. • Lippincott's Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott's Pharmacology (4th edition). • Katzung's Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by John Evert Park (21th edition). • Mohammad Iliyas Ansari (7thedition). <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition). <p><u>Surgery:</u></p> <ul style="list-style-type: none"> • Bailey and love, Short Practice of Surgery, 25th edition
----------------------------------	---

Study Guides of 2nd Year MBBS

1.

Name of Module	CVS
Year	2nd Year MBBS-2011
Module Code	20302 (Year code- 2 , semester code- 03, module code – 02)
Module Duration	06 Weeks
Module Rationale	The main role of the cardiovascular system in the body is to transport oxygen to all tissues in the body and for removing, from these same tissues, metabolic waste products. The system itself consists of the blood, the medium for exchanging oxygen, nutrients and waste products throughout the body, the blood vessels, the pipes through which the blood flows and the heart, the pump which forces blood to flow through the blood vessels. Cardiovascular health is important in maintaining overall health and wellness. This module will teach how heart and cardiovascular system work when healthy, and what happens when diseased. We will explore through lectures, SGDs and skill lab normal anatomy, physiology, biochemistry of CVS. This module wills briefly discuss the common CVS diseases & their prevention, therapeutic drug treatment, behavioral aspects, radiological findings.
Module outcome	The students should be able to describe the physiology ,anatomy and biochemistry of cardiovascular system. They should understand the pathophysiology and clinical features of major clinical problems related to cardiovascular system that are prevalent in our society along with pharmaceutical agents required in the management of these diseases.
Learning Resources	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (latest edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (latest edition). • Medical Embryology by Langman (Latest edition). • Essential Clinical Anatomy by Keith Moore (latest edition). • The Developing Human (clinical oriented embryology) by Keith Moore.

	<ul style="list-style-type: none"> • Clinical Neuroanatomy by R Snell. <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William. J. Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott's Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott's Pharmacology (4th edition). • Katzung's Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (5th edition). <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition).
--	---

2.

Name of Module	Endocrinology
Year	2nd Year MBBS-2011
Module Code	
Module Duration	04 Weeks
Module Rationale	The endocrine system is one of the two control systems of the body. It consists of many small organs responsible for the release of hormones. The endocrine system regulates metabolism, growth and development, tissue function and mood of a person. This system acts by means of hormones secreted into the blood to control process that require duration rather than speed e.g. metabolic activities and water and electrolyte balance. In this module we will concentrate on the integrating functions of the endocrine system and focus our teaching on the interaction of hormones and their integration to produce homeostatic regulation. This module has various themes which are e.g. introduction to endocrinology, endocrine control of growth, endocrine control of metabolisms etc.
Module outcome	At the end of this module the students should be able to : KNOWLEDGE:

	<ul style="list-style-type: none"> • Acquire the knowledge of physiology, anatomy biochemistry and endocrinology to explain the common endocrine abnormalities. • Apply the knowledge of basic sciences in order to diagnose the causes of endocrine abnormalities. • Comprehend different clinical presentations to formulate provisional diagnosis and consider relevant differential diagnosis. • Formulate a plan of investigations. • Understand the use of important drugs in treatment of common abnormalities.
Learning Resources	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (edition). • Human Physiology: From Cells to Systems (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard Snell (latest edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (latest edition). • Medical Embryology by Langman (Latest edition). • Essential Clinical Anatomy by Keith Moore (latest edition). • The Developing Human (clinical-oriented embryology) by Keith Moore. • Clinical Neuroanatomy by Snell. <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William. J. Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott’s Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott’s Pharmacology (4th edition). • Katzung’s Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott’s Biochemistry (latest edition) <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition).

3.

Name of Module	ENT
Year	2nd Year MBBS-2011
Module Code	
Module Duration	03 Weeks
Module Rationale	Otorhinolaryngology module is designed to study the basic structure and functions of ear, nose and throat along with its embryological development and anomalies and pathophysiology of common clinical problems. This module (1 st spiral) consist of the following themes: 1. Deafness: Anatomy and physiology of external, middle and inner ear, pathophysiology of deafness and tuning fork tests. 2. Pain Throat: Anatomy of oral cavity and pharynx and its functions. 3. Nasal Obstruction: Structure and functions of nose and paranasal sinuses.
Module outcome	At the end of this module the students should be able to: KNOWLEDGE: <ul style="list-style-type: none"> • Explain the Physiology ,anatomy and pathogenesis of E.N.T problems • Apply basic sciences to understand the causes of common E.N.T problems • Comprehend different clinical presentations to formulate provisional diagnosis and consider relevant differential diagnosis • Formulate the plan of investigations in partnership with patient. • Identify the risk factors for preventable E.N.T diseases. SKILL: <ul style="list-style-type: none"> • Examine the ear and Perform audiological tests • Examine the oral cavity and oropharynx • To perform posterior rhinoscopy & indirect laryngoscopy • To assess the nasal obstruction & to perform anterior and posterior rhinoscopy & transillumination tests. ATTITUDE: Demonstrate effective communication skill strategies while history taking and examining the patients with ear, nose and throat problems.
Learning resources	Physiology: <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th- edition). • Medical Physiology by Ganong (23th-edition).

- Human Physiology by Dee Unglaub Silverthorn (4th-edition).

Anatomy:

- Clinical Anatomy for Medical Students by Richard Snell (8th edition).
- Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition).
- Medical Embryology by Langman (11th edition).
- Essential Clinical Anatomy by Keith Moore (6th edition).
- The Developing Human (clinical oriented embryology) by Keith Moore (8th edition).
- Clinical Neuroanatomy by Snell (7th edition).

Pathology:

- Pathologic Basis of Disease by Robbins and Cotran (8th edition)
- Clinical Chemistry (Chemical Pathology) by William Marshall (5th edition).
- Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition.
- Lippincott's Illustrated Review on Microbiology (2th edition).

Pharmacology:

- Lippincott's Pharmacology (4th edition).
- Katzung's Pharmacology (11th edition).
- The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition)

Biochemistry:

- Lippincott's Biochemistry (5th edition)

Behavioural Sciences:

- Introduction to Psychology by Edward Smith (14th edition)
- Behavioural Sciences by Lippincott Williams.
- Health Psychology by Douglas Carroll

Community Medicine:

- J- Park Community Medicine textbook of community medicine by Dr. John Evert Park (21th edition).
- Mohammad Iliyas Ansari (7th edition).

ENT:

- Diseases of ENT by PI dhingra (4th edition).

4.

Name of Module	EYE
Year	2nd Year MBBS-2011
Module Code	20304 Year Code-2 ,Semester Code-04, Module Code-04
Module Duration	03 Weeks
Module Rationale	<p>Eye module has been designed to study the basic structure and functions of EYE along with its embryological development and anomalies. EYE is a complex structure. Therefore it has to be broken into different anatomical, physiological and biochemical aspects</p> <p>Orbital region. This term is used to describe the structures which are present in the orbital cavity (orbital walls, eyelids, Lacrimal gland, lacrimal drainage system)</p> <p>Eye ball: Three layers (cornea, sclera and retina) of the eye ball including their anatomy, embryology, histology and physiology.</p> <p>Vision: Recording of visual acuity using Snellen's chart, different states of refraction, dynamics of intraocular fluids and photochemistry of visual cycle.</p>
Module outcome	The students should be able to describe the development of eye and role of accommodation and various aspects of errors of refraction. Apply the basis science knowledge to understand patho physiology, drug therapy, surgery & prevention of common eye problems.
Learning Resources	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard Snell (latest edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (latest edition). • Medical Embryology by Langman (Latest edition). • Essential Clinical Anatomy by Keith Moore (latest edition). • The Developing Human (clinical oriented embryology) by Keith Moore. • Clinical Neuroanatomy by Snell <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William. J. Marshall

	<p>(5th edition).</p> <ul style="list-style-type: none"> • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott's Illustrated Review on Microbiology (2th edition). <p>Pharmacology:</p> <ul style="list-style-type: none"> • Lippincott's Pharmacology (4th edition). • Katzung's Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p>Biochemistry:</p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (5th edition) <p>Behavioural Sciences:</p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward. E Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p>Medicine:</p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition). <p>Ophthalmology:</p> <ul style="list-style-type: none"> • Textbook of Ophthalmology by S.Jatoi (2nd edition) • Parson's Text book of Ophthalmology
--	---

5.

Name of Module	GIT
Year	2nd Year MBBS-2011
Module Code	20304 Year Code-2 ,Semester Code-04, Module Code-04
Module Duration	08 Weeks
Module Rationale	<p>GIT module has been designed to unravel the basic structure function of the alimentary system along with its embryological development and anomalies. The composition of the food is complex and little of it is water soluble. Therefore it cannot enter body fluids. Hence it needs to be broken down into its chemical components before it can be absorbed. Four activities of the GIT tract can be identified for this process to occur. These are: Motility: The term is used to describe the movements of the GIT tract. These movements are responsible for breaking down and pushing the food along the alimentary tract and to its final destination as feces. Secretion: Different secretions of the GIT are concerned with break down of food into its digestive particles Digestion: Break down of food into small pieces. It is produced by the mechanical activity of the alimentary tract. The surface of the food is</p>

	<p>exposed to the enzymatic activity. Absorption: The transfer of nutrients or the digestive products from the lumen to blood or the lymph. Disruption of any of its activities can lead to disease states such as pain, peptic ulceration, diarrhea & constipation. Coordination of all these functions is brought about hormones of GIT and exocrine pancreas.</p>
<p>Module outcome</p>	<p>At the end of this module the student should be able to:</p> <p>KNOWLEDGE:</p> <ol style="list-style-type: none"> 1. Explain the structural & developmental organization of GIT. 2. Explain the composition, functions, mechanism & control of following gastrointestinal secretions: salivary, gastric, pancreatic, biliary, small & large intestines. 3. Explain the swallowing and motility patterns in the GIT & its role in mixing, propulsion & evacuation of feces. 4. Describe the mechanism of absorption of various nutrients and their role in malabsorption syndrome. 5. Explain the physiological anatomy, biochemistry functions and dysfunctions of Liver. 6. Explain the formation, function & control of secretion of bile. 7. Explain the GIT hormones (structure, function) & their role in secretion and motility. 8. Apply the knowledge of the basic sciences to understand pathophysiology of common GIT diseases. <p>SKILL:</p> <ol style="list-style-type: none"> 1. Dissect various parts of GIT, and related structures including peritoneum, to demonstrate their gross Anatomy and relationship to each other. 2. Demonstrate effective skills of history taking. 3. Perform abdominal examination on subjects/ simulators. 4. Perform lab procedures of common GIT disease in order to Interpret & understand the lab reports. <p>ATTITUDE:</p> <p>Demonstrate effective communication skill strategies while history taking and examining the patients/simulators with GIT problems.</p> <p>NOTE: Dissection is a part of SGD where applicable</p>
<p>Learning Resources</p>	<p>Physiology:</p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p>Anatomy:</p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard Snell (latest edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (latest edition). • Medical Embryology by Langman (Latest edition).

	<ul style="list-style-type: none"> • Essential Clinical Anatomy by Keith Moore (latest edition). • The Developing Human (clinical oriented embryology) by Keith Moore. • Clinical Neuroanatomy by Snell. <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippicott’s Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott’s Pharmacology (4th edition). • Katzung’s Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott’s Biochemistry (latest edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) <ul style="list-style-type: none"> • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition).
--	--

6.

Name of Module	Respiration
Year	2nd Year MBBS-2011
Module Code	20301 (Year - 2 , semester number- 03, module number – 01)
Module Duration	04 Weeks
Module Rationale	A respiratory system's function is to allow gas exchange. The space between the alveoli and the capillaries, the anatomy or structure of the exchange system, and the precise physiological uses of the exchanged gases vary depending on the organism. In humans respiratory system include airways, lungs, and the respiratory muscles. Molecules of oxygen and carbon dioxide that are passively exchanged, by diffusion, between the gaseous external environment and the blood. This exchange process occurs in the alveolar region of the lungs. In this present module has been designed to unfold structural organization function congenital anomalies and diseases of

	<p>respiration. It explains the anatomy, control, gases exchange, reflexes, and diseases traumatic injuries of respiratory system. It also helps to include the radiological and clinical examination of the respiratory system.</p>
<p>Module outcome</p>	<p>At the end of this module the students should be able to:</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none"> • Explain the Physiology ,anatomy and pathogenesis of respiratory problems. • Apply basic sciences to understand the cusses of common respiratory problems. • Comprehend different clinical presentations to formulate provisional diagnosis and consider relevant differential diagnosis • Formulate the plan of investigations in partnership with patient. • Identify the risk factors for preventable respiratory diseases. <p>SKILL:</p> <ul style="list-style-type: none"> • Auscultate the chest. • Perform spirometry. <p>ATTITUDE:</p> <p>Demonstrate effective communication skill strategies while history taking and examining the patients with respiratory problems.</p>
<p>Learning Resources</p>	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (14th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th- edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard Snell (latest edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (latest edition). • Medical Embryology by Langman (Latest edition). • Essential Clinical Anatomy by Keith Moore (latest edition). • The Developing Human (clinical oriented embryology) by Keith Moore. • Clinical Neuroanatomy by Snell <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren

	<p>Levinson (Microbiology) 11th edition.</p> <ul style="list-style-type: none"> • Lippincott's Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott's Pharmacology (4th edition). • Katzung's Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (Latest edition) <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition). <p><u>Surgery:</u></p> <ul style="list-style-type: none"> • Short Practice of Surgery by Bailey & Love, 25th edition. <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward. E Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll
--	--

7.

Name of Module	Skin
Year	2nd Year MBBS-2011
Module Code	20407 (Year code- 2, semester code- 04, module code07)
Module Duration	02 Weeks
Module Rationale	<p>Skin is the largest organ of the body. Being an exposed organ, it is prone to many mechanical, chemical, thermal, radiological and microbial insults. It performs very important functions like protection of body, temperature regulation, Vit. D synthesis and, above all, cosmetic function with lot of psychosocial impact. It is also affected in many systemic disorders and, hence, acts as window to diagnosis of systemic disorders. A comprehensive and thorough training in dermatology is an essential part of undergraduate medical education. Skin diseases form a substantial part (about 20%) of everyday general practice; It is surely reasonable to equate roughly the proportion of student time given to dermatology with the proportion of skin diseases in practice. The elements of dermatology should form part of the basic training of all doctors. This module has been designed to unfold the structural organization, functions and common disorders of the SKIN. This module (1st spiral) consists of the following</p>

	<p>themes</p> <p>1. ITCHING</p> <p>2. PAPULES & BLISTERS</p> <p>3. PIGMENTATION DISORDERS</p>
Module outcomes	<p>At the end of this module the students should be able to</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none"> • Explain the structural organization and development of skin. • Explain the various functions of skin & mechanism of central control of temperature regulation. • Explain the etiology and pathogenesis of common skin conditions. • Apply the knowledge of the basic sciences to, prevent, diagnose and manage the common skin problems. • Identify the risk factors for preventable skin diseases. <p>SKILL:</p> <ul style="list-style-type: none"> • Demonstrate effective skills of history taking in skin disorders • Perform dermatological examination on patients. <p>ATTITUDE:</p> <ul style="list-style-type: none"> • Demonstrate effective communication skill strategies while history taking and examining the patients
Learning Recourses	<p><u>Dermatology :</u></p> <ul style="list-style-type: none"> • ABC Of Dermatology By Tahir Saeed Haroon • Andrew’s Textbook of Dermatology <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition). <p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith Moore (6th edition).

	<ul style="list-style-type: none"> • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition). <p>Pathology:</p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott's Illustrated Review on Microbiology (12th edition). <p>Pharmacology:</p> <ul style="list-style-type: none"> • Lippincott's Pharmacology (4th edition). • Katzung's Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p>Biochemistry:</p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (5th edition) <p>Behavioural Sciences:</p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p>Community Medicine:</p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by Dr. John Evert Park (21th edition). • Mohammad Iliyas Ansari (7th edition).
--	---

8.

Name of Module	Urinary
Year	2nd Year MBBS-2011
Module Code	20302 (Year code- 2 , semester code- 03, module code – 03)
Module Duration	04 Weeks
Module Rationale	<p>The present module has been designed to unfold structural organization, function, congenital anomalies along with clinical and pathological aspects of 3 diseases of urinary system. It also includes the radiology and Pharmacology as they relate to urinary system. Kidney is the principal organ in the urinary system. It is an essential viscous concerned with maintenance of homeostasis.</p> <p>It performs its function through formation of urine in which hazardous waste products of metabolism, drugs, toxins and excess amounts of water and electrolytes are excreted. Kidneys also help in controlling</p>

	<p>body fluid volume, arterial blood pressure and acid base balance. From the kidneys, urine is conducted to exterior through a system of tubes and a reservoir without any further change in its composition as this conductive pathway is the only absolutely non-absorptive and non-secretory place in body. Willfully timed voiding is made thus possible, giving us a sense of hygiene and social dignity. This module will include prostate gland also which strictly speaking is concerned with production of semen. Reason for considering prostate here with urinary system is its profound relation with urinary pathologies. Role of kidney and rest of urinary system is important in maintaining overall health and wellbeing. Effects produced by renal failure are not compatible with life. This module will teach how kidney and rest of urinary system works when healthy, and what happens when diseased. We will explore through lectures, SGDs and skill lab normal anatomy, physiology, biochemistry pathology of system.</p>
Module outcome	<ol style="list-style-type: none"> 1) Describe the structural, developmental & functional organization of urinary system 2) Apply the basic science knowledge to understand pathophysiology, drug therapy, surgery & prevention of common urinary problems 3) Integrate the clinical applications of basic science concepts 4) Perform different lab procedures to identify the normal & abnormal patterns and their clinical significance
Learning resources	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th - edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren

	<p>Levinson (Microbiology) 11th edition.</p> <ul style="list-style-type: none"> • Lippincott's Illustrated Review on Microbiology (12th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott's Pharmacology (4th edition). • Katzung's Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by Dr. John Evert Park (21th edition). • Mohammad Iliyas Ansari (7th edition). <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition). <p><u>Surgery:</u></p> <ul style="list-style-type: none"> • Short Practice of Surgery by Bailey & Love, 25th edition
--	---

Study Guides of 3rd Year MBBS

1.

Name of Module	CVS
Year	3rd Year MBBS-2011
Module Code	
Module Duration	
Module Rationale	<p>Cardiovascular disorders are the most commonly encountered diseases in clinical practice and are a leading cause of morbidity and mortality worldwide. Timely prevention, diagnosis and management of these disorders would prevent the high rate of morbidity.</p> <p>It is important for the medical students to have a clear concept of common cardiac diseases including ischemic heart diseases, hypertension, congenital and acquired heart diseases and their complications including cardiac failure, arrhythmias and infective endo-carditis.</p> <p>The basic knowledge acquired will enable the students to develop</p>

	appropriate preventive and therapeutic plan of management for various common cardiac diseases.																											
Outcomes	By the end of this module students should be able to: <ol style="list-style-type: none"> 1. Integrate the basic sciences knowledge with clinical sciences about cardiovascular diseases. 2. Practice history taking, clinical examination to diagnose different congenital and acquired heart diseases. 3. Enlist investigations and interpret echocardiogram. 4. Enlist managements of commonly encountered cardiovascular emergencies. 5. Diagnose and refer specific diseases to specialists. 																											
	<table border="1"> <thead> <tr> <th>REFERENCES S.No</th> <th>DISCIPLINE</th> <th>LEARNING RESOURCES</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>Surgery</td> <td>1. Text book of Surgery by Bailey & Love 2. Norman browse methods of surgery</td> </tr> <tr> <td>02</td> <td>Pediatrics</td> <td>1. Illustrated Textbook of Pediatrics 2. Basis of Pediatric 7th Ed 3. Nelson's Text book of pediatrics 18th Ed</td> </tr> <tr> <td>03</td> <td>Forensic medicine</td> <td>Parikh's Text Book of jurisprudence and toxicology. 6th Ed</td> </tr> <tr> <td>04</td> <td>Pharmacology</td> <td>Katzung's Text Book of Pharmacology, 11thEd</td> </tr> <tr> <td>05</td> <td>Community medicine</td> <td>Community Medicine by M. Ilyas</td> </tr> <tr> <td>06</td> <td>psychiatry</td> <td></td> </tr> <tr> <td>07</td> <td>medicine</td> <td>Clinical Medicine, Kumar & Clark 6th Ed</td> </tr> <tr> <td>08</td> <td>Pathology</td> <td>1. Robbins and Cotran Pathologic basis of disease 8th Edition, Chapters on heart, blood vessels. 2. Review of Medical Microbiology Immunity by Warren Levinson 11th Edition –</td> </tr> </tbody> </table>	REFERENCES S.No	DISCIPLINE	LEARNING RESOURCES	01	Surgery	1. Text book of Surgery by Bailey & Love 2. Norman browse methods of surgery	02	Pediatrics	1. Illustrated Textbook of Pediatrics 2. Basis of Pediatric 7 th Ed 3. Nelson's Text book of pediatrics 18 th Ed	03	Forensic medicine	Parikh's Text Book of jurisprudence and toxicology. 6 th Ed	04	Pharmacology	Katzung's Text Book of Pharmacology, 11 th Ed	05	Community medicine	Community Medicine by M. Ilyas	06	psychiatry		07	medicine	Clinical Medicine, Kumar & Clark 6 th Ed	08	Pathology	1. Robbins and Cotran Pathologic basis of disease 8 th Edition, Chapters on heart, blood vessels. 2. Review of Medical Microbiology Immunity by Warren Levinson 11 th Edition –
REFERENCES S.No	DISCIPLINE	LEARNING RESOURCES																										
01	Surgery	1. Text book of Surgery by Bailey & Love 2. Norman browse methods of surgery																										
02	Pediatrics	1. Illustrated Textbook of Pediatrics 2. Basis of Pediatric 7 th Ed 3. Nelson's Text book of pediatrics 18 th Ed																										
03	Forensic medicine	Parikh's Text Book of jurisprudence and toxicology. 6 th Ed																										
04	Pharmacology	Katzung's Text Book of Pharmacology, 11 th Ed																										
05	Community medicine	Community Medicine by M. Ilyas																										
06	psychiatry																											
07	medicine	Clinical Medicine, Kumar & Clark 6 th Ed																										
08	Pathology	1. Robbins and Cotran Pathologic basis of disease 8 th Edition, Chapters on heart, blood vessels. 2. Review of Medical Microbiology Immunity by Warren Levinson 11 th Edition –																										

			Pl see the index and study the important causative organisms 3. Tietz's Fundamentals of Clinical Chemistry 5th Ed 4. A Guide to Diagnostic Clinical Chemistry 3 rd Ed
--	--	--	--

2.

Name of Module	Dermatology
Year	3rd Year MBBS-2011
Module Code	
Module Duration	03 Weeks
Module Rationale	<p>Skin is the largest organ of the body. Being an exposed organ, it is prone to many mechanical, chemical, thermal, radiological and microbial insults. It performs very important functions like protection of body, temperature regulation, Vit. D synthesis and, above all, cosmetic function with lot of psychosocial impact. It is also affected in many systemic disorders and, hence, acts as window to diagnosis of systemic disorders. A comprehensive and thorough training in dermatology is an essential part of undergraduate medical education. Skin diseases form a substantial part (about 15%) of everyday general practice; It is surely reasonable to equate roughly the proportion of student time given to dermatology with the proportion of skin diseases in practice. The elements of dermatology should form part of the basic training of all doctors. This module has been designed to unfold the structural organization, functions and common disorders of the SKIN. This module (2nd spiral) consists of the following themes</p> <p>Block No. 1 SCALY DISORDERS Block No. 2 PAPULES & ULCERS Block No. 3 NODULAR LESIONS Block No. 4 RASHES Block No. 5 HAIR AND NAIL DISORDERS</p>
Outcomes	<p>At the end of this module the students should be able to:</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none"> • Explain the etiology and pathogenesis of common skin conditions. • Apply the knowledge to, prevent, diagnose and manage the common skin problems. • Clinical features and management of hyperthermic and hypothermic insults on human skin • Identify the medico legal issues related to skin injuries. <p>SKILL</p> <ul style="list-style-type: none"> • identification and differentiation of microscopic features of hairs

	<p>and nails</p> <ul style="list-style-type: none"> • identification of morphological features(gross and microscopic) of BCC, SCC and malignant melanoma • scraping for fungus and interpretation of microscopic features on glass slide <p>ATTITUDE:</p> <ul style="list-style-type: none"> • Demonstrate effective communication skill strategies while interacting with the patients
<p>Learning Resources</p>	<p><u>Dermatology :</u></p> <ul style="list-style-type: none"> • ABC Of Dermatology By Tahir Saeed Haroon • Andrew’s Textbook of Dermatology <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition). <p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8thedition) • Clinical Chemistry (Chemical Pathology) by William. J. Marshall (5thedition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11thedition. • Lippincott’s Illustrated Review on Microbiology (2thedition).

	<p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott's Pharmacology (4th edition). • Katzung's Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward. E Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by John Evert Park (21th edition). • Mohammad Iliyas Ansari (7th edition).
--	--

3.

Name of Module	Endocrinology
Year	3rd Year MBBS-2011
Module Code	30501 (Year - 3 , semester number- 05, module number – 01)
Module Duration	03 Weeks
Module Rationale	<p>The endocrine system is one of the two control systems of the body. It consists of many small organs responsible for the release of hormones. The endocrine system regulates metabolism, growth and development, tissue function and mood of a person. This system acts by means of hormones secreted into the blood to control process that require duration rather than speed e.g., metabolic activities and water and electrolyte balance. In this module we will concentrate on the integrating functions of the endocrine system and focus our teaching on the interaction of hormones and their integration to produce homeostatic regulation. This module has various themes which are, introduction to endocrinology, endocrine control of growth, endocrine control of metabolisms.</p>
Learning Resources	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard Snell (8th

	<p>edition).</p> <ul style="list-style-type: none"> • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith Moore (6th edition). • The Developing Human (clinical-oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott’s Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott’s Pharmacology (4th edition). • Katzung’s Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott’s Biochemistry (latest edition) <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition).
--	--

4.

Name of Module	HAEMATOLOGY
Year	3rd Year MBBS-2011
Module Code	10103(Year code- 1, semester code- 01, module code03)
Module Duration	04 Weeks
Module Rationale	<p>Haematological disorders are quiet common in our clinical practice. It is important to have a clear concept of common haematological diseases including iron deficiency anaemia, megaloblastic anaemia, various types of hereditary and acquired haemolytic anaemias and aplastic anaemia.</p> <p>Hereditary and acquired bleeding disorders e.g. hemophilia A & B, Von Willebrand disease and disseminated intravascular coagulation are also common in children as well as adults. Haematological malignancies especially childhood acute leukaemia, acute and chronic adult leukaemias and malignant lymphomas are also quiet common in</p>

	<p>our population. The medical graduates should have a sound knowledge of pathogenesis, clinical presentation, investigations and lab diagnosis of all these haematological diseases. This basic knowledge will help the students to integrate the application of this skill in their clinical practice for timely diagnosis and successful management of these patients.</p>
<p>Outcomes</p>	<ol style="list-style-type: none"> 1. By the end of the module the student should be able to; 2. Integrate the basic science knowledge with clinical sciences in order to describe the pathogenesis, clinical presentations, investigations, lab diagnosis, and management of following common haematological disorders: megaloblastic anaemia, aplastic anaemia, hemolytic anaemia, thalassemias, sickle cell anaemia, leukaemias, lymphomas, hereditary and acquired bleeding disorders, 3. Enlist & discuss the measures needed for safe blood donation and transfusion of blood products. 4. Describe the process of preparation, storage, and indications of whole blood and its products along with their dosage. 5. Practice the primary management and important aspects of secondary management of common haematological disorders.
<p>Learning resources</p>	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith nMoore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott’s Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott’s Pharmacology (4th edition). • Katzung’s Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman

	<p style="text-align: center;">(12th edition)</p> <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by Dr. John Evert Park (21th edition). • Mohammad Iliyas Ansari (7th edition). <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition).
--	---

5.

Name of Module	IMMUNOBIOLOGY AND MICROBIOLOGY
Year	3rd Year MBBS-2011
Module Code	30503 Year Code-3, Semester Code-05,
Module Duration	05 Weeks
Module Rationale	<p>Infectious disease affects all our lives to varying degrees This course approaches infectious disease from several perspectives – exploring the underlying biology, epidemiology, ecology, and evolution of pathogens in relation to the extraordinary immune defenses of their human hosts.</p> <p>Infectious diseases are responsible for one third of deaths world-wide, and new infectious agents such as HIV, SARS, MRSA, and swine influenza are emerging all the time. In addition, micro-organisms are increasingly linked to inflammatory disorders. The Infectious diseases and Immunobiology module examines these issues, and explores the human host's interaction with bacteria viruses, fungi, helminths and protozoa.</p> <p>This module provides students with knowledge and understanding of key molecular, cellular and tissue disease processes in the context of clinical infections and immunologically-mediated diseases. It also equips them with skills in understanding and investigating clinical infections.</p> <p>This module has been designed to unfold the structural features of different microbial agents including bacteria, viruses fungi, protozoa and helminths., their pathogenesis, diseases caused by these, actions of antimicrobial agents to combat these infections and mechanisms of drug resistance. This module (1st spiral) consists of the following themes</p> <ol style="list-style-type: none"> 1. Bacteriology 2. Virology 3. Mycology 4. Parasitology 5. Immunology

<p>Outcomes</p>	<p>KNOWLEDGE: By the end of the course students will be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate a broad understanding of the range of infectious diseases and their causative agents 2. Explain the structure and virulence factors of microbial organisms & pathogenicity caused by them 3. Explain the etiology and pathogenesis of some common infectious diseases. 4. Explain the structural organization and development of immune system. 5. Describe biological interactions between hosts and pathogens during an infection, and their evolution over time 6. Apply the knowledge of the basic concepts to, prevent, diagnose and manage infections in the body 7. Describe the role of antimicrobials in relation to different pathological conditions. 8. Demonstrate the ability to interpret basic epidemiological data on infectious disease outbreaks 9. Give examples of the influence of social organization, culture and economic development on the transmission of infectious disease 10. Discuss strategies to prevent or reduce the impact of infectious diseases, commenting on their strengths and limitations <p>SKILL</p> <ol style="list-style-type: none"> 1. Demonstrate effective skills of sterilization and disinfection process. 2. Perform basic procedures i.e 3. Direct microscopy. 4. Staining (Gram & ZN) 5. Inoculation and incubation of culture media 6. Identification of culture media 7. Choice of relevant specimen for laboratory diagnosis and what clinical information should be mentioned on lab request form <p>ATTITUDE: Observe basic preventive measure to health care acquired infection.</p>
<p>Learning resources</p>	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition).

	<ul style="list-style-type: none"> • Essential Clinical Anatomy by Keith.L.Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William. J. Marshall (5th edition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott’s Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott’s Pharmacology (4th edition). • Katzung’s Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott’s Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by Dr. John Evert Park (21th edition). • Mohammad Iliyas Ansari (7th edition).
--	--

6.

Name of Module	MUSCULOSKELETAL
Year	3rd Year MBBS-2011
Module Code	30606 Year Code-3 ,Semester Code-06, Module Code-06
Module Duration	06 Weeks
Module Rationale	Musculoskeletal disorders are quite common in our clinical practice, and almost all the specialties receive the patients with musculoskeletal disorders in some form or the other. It is therefore important to have the clear concept of common musculoskeletal disorders which includes Developmental dysplasia of hip, Congenital Talipes Equino Varus deformity, Joint pains, fractures of bones and their complications, osteomyelitis and bone tumor. The medical students should have a sound knowledge of these conditions.
Outcomes	By the end of the module the students should be able to, <ul style="list-style-type: none"> 1. Integrate the basic science knowledge with the clinical sciences about musculoskeletal diseases 2. Practice history taking, clinical examination and investigate common

	<p>conditions of musculoskeletal system</p> <ol style="list-style-type: none"> 3. Enlist and discuss the management of common musculoskeletal disorders. 4. Diagnose & refer fractures & other musculoskeletal disorder cases to the specialist. 5. Demonstrate effective communication skill strategies while taking history and examination of patients with musculoskeletal disorders. 6. Display the personal attributes of compassion, honesty and integrity in relationships with patients, families, communities and the medical profession. 7. Demonstrate a professional attitude , team building spirit and good communication skills through effective participation in problem solving , especially in small group exercises.
<p>Learning Resources</p>	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William Marshall (5thedition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott’s Illustrated Review on Microbiology (2thedition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott’s Pharmacology (4th edition). • Katzung’s Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition)

	<p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott's Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by Dr. John Evert Park (21th edition). • Mohammad Iliyas Ansari (7th edition). <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition). <p><u>Surgery:</u></p> <ul style="list-style-type: none"> • Short Practice of Surgery by Bailey & Love (25th edition)
--	--

7.

Name of Module	REPRODUCTION & BREAST
Year	3rd Year MBBS-2011
Module Code	30502 Year Code-3, Semester Code-05, Module number-02
Module Duration	05 Weeks
Module Rationale	<p>Reproductive system plays an important role in person life although it does not contribute to homeostasis and is not essential for survival of individual for example, the manner in which people relate as sexual beings contributes in significant ways to psychosocial behavior and has an important influence on how people view themselves and how they interact with others. Reproductive function also has a profound effect on society. The universal organization of societies into family units provides a stable environment that is conducive for perpetuating our species. On the other hand, the population explosion and its resultant drain on dwindling resources have recently let to world wide concern with the means by which reproduction can be limited. Reproductive capabilities depend on intricate relationship among the hypothalamus, anterior pituitary, reproductive organs and target cells of sex hormones. In addition to these basic biologic processes, sexual behavior and attitudes are deeply influenced by emotional factors and sociocultural mores of the society in which individual lives.</p>
Outcomes	<p>At the end of this module the student should be able to:</p> <p>KNOWLEDGE:</p> <ol style="list-style-type: none"> 1. Identify & interpret the obstetrics and gynecology terms & use them appropriately. 2. Describe the topography of the different parts of pelvis and perineum. 3. Describe the physiology of female and male reproductive system. 4. Describe the Pharmacokinetics and Pharmacodynamics of various hormones of the female and male reproductive system along with their synthetic analogues.

	<ol style="list-style-type: none"> 5. Describe the role of drugs used in puberty, pregnancy and contraceptives. 6. Introduction to antenatal care. 7. Describe health aspects, scopes and Islamic perspective of family planning. 8. Describe the indicators and the measures to control maternal mortality. 9. Describe the anatomy and physiology of breast during puberty, pregnancy and lactation and pathology of breast abscess. <p>SKILL:</p> <ol style="list-style-type: none"> 1. Demonstrate effective skills of obstetrical/gynecological history taking. 2. Perform obstetrical examination on subject/ simulators. 3. Perform urine pregnancy test. 4. Perform Breast examination on subject/ simulators <p>ATTITUDE:</p> <ol style="list-style-type: none"> 1. Demonstrate effective communication skill strategies while taking history and examining the patients/simulators with reproductive health problems. 2. Display the personal attributes of compassion, honesty and integrity in relationships with patients, families, communities and the medical profession. <p>3- Demonstrate a professional Attitude, team building spirit and good communication skills through effective participation in cooperative problem solving, especially in small group exercises.</p>
<p>Learning Resources</p>	<p><u>Gynaecology:</u></p> <ul style="list-style-type: none"> • Textbook of Gynaecology by ten teachers <p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th-edition). • Medical Physiology (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore (8th edition). • Clinical Neuroanatomy by Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8thedition) • Clinical Chemistry (Chemical Pathology) by William. J. Marshall (5thedition). • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11thedition. • Lippincott’s Illustrated Review on Microbiology (2thedition). <p><u>Pharmacology:</u></p>

	<ul style="list-style-type: none"> • Lippincott’s Pharmacology (4th edition). • Katzung’s Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott’s Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward Smith (14th edition) <ul style="list-style-type: none"> • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by John Evert Park (21th edition). • Mohammad Iliyas Ansari (7th edition). <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition).
--	---

8.

Name of Module	Respiratory
Year	3rd Year MBBS-2011
Module Code	
Module Duration	04 Weeks
Module Rationale	Respiratory disorders account for high morbidity and mortality in the community. It is unfortunate that most of the deaths occur due to delay in diagnosis, improper assessment or inappropriate management of the respiratory problems. Correct approach can go a long way in decreasing avoidable morbidity and mortality. Common respiratory problems like tuberculosis, asthma and pneumonia can not only be diagnosed easily and treated but are also preventable. Medical students must be made aware of importance of proper management of respiratory problems for the benefit of community and humanity.
Outcomes	By the end of the module the students should be able to: <ol style="list-style-type: none"> 1. Integrate the basic concepts formed in the first spiral to solve clinical problems 2. Able to take detailed history, perform clinical examination, make a provisional diagnoses and plan appropriate investigations 3. Interpret common respiratory symptoms 4. Develop basic understanding of common respiratory diseases 5. Know when to refer a patient with respiratory problem for expert opinion. Time is critical in making this decision

<p>Learning Resources</p>	<p><u>Physiology:</u></p> <ul style="list-style-type: none"> • Text book of Medical Physiology by Guyton and Hall (12th edition). • Human Physiology: From Cells to Systems by L Sherwood (7th- edition). • Medical Physiology by Ganong (23th-edition). • Human Physiology by Dee Unglaub Silverthorn (4th-edition). <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> • Clinical Anatomy for Medical Students by Richard S. Snell (8th edition). • Basic Histology Text and Atlas by Luiz Carlos and Junqueira (12th latest edition). • Medical Embryology by Langman (11th edition). • Essential Clinical Anatomy by Keith Moore (6th edition). • The Developing Human (clinical oriented embryology) by Keith Moore • Clinical Neuroanatomy by Snell (7th edition). <p><u>Pathology:</u></p> <ul style="list-style-type: none"> • Pathologic Basis of Disease by Robbins and Cotran (8th edition) • Clinical Chemistry (Chemical Pathology) by William. J. Marshall • Review of Medical Microbiology and Immunology by Warren Levinson (Microbiology) 11th edition. • Lippincott’s Illustrated Review on Microbiology (2th edition). <p><u>Pharmacology:</u></p> <ul style="list-style-type: none"> • Lippincott’s Pharmacology (4th edition). • Katzung’s Pharmacology (11th edition). • The Pharmacological Basis of Therapeutics by Goodman & Gillman (12th edition) <p><u>Biochemistry:</u></p> <ul style="list-style-type: none"> • Lippincott’s Biochemistry (5th edition) <p><u>Behavioural Sciences:</u></p> <ul style="list-style-type: none"> • Introduction to Psychology by Edward. E Smith (14th edition) • Behavioural Sciences by Lippincott Williams. • Health Psychology by Douglas Carroll <p><u>Community Medicine:</u></p> <ul style="list-style-type: none"> • J- Park Community Medicine textbook of community medicine by Dr. John Evert Park (21th edition). • Mohammad Iliyas Ansari (7th edition). <p><u>Medicine:</u></p> <ul style="list-style-type: none"> • Principle and Practice of Medicine by Davidson (20th edition). <p><u>Surgery:</u></p> <p>Short Practice of Surgery by Bailey & Love (25th edition)</p>
----------------------------------	--

3rd Professional

Pre-requisites:

Anatomy, Physiology, Biochemistry, Pharmacology, Forensic Medicine, General Pathology and Microbiology

Name of Subject	Community Medicine
Year	4 th Year MBBS-2011
Study Duration	1 year
Course Objectives	The objective of the course is to impart training to the students for health care facilities, infectious diseases, epidemiology and Biostatistics to improve their skills regarding patient and disease handling.
Books	<ul style="list-style-type: none">• Public health and community Medicine by Ilyas Ansari• Parkes Text Book of preventive and social medicine by J.E. Parke
Name of Subject	Special Pathology
Year	4 th Year MBBS-2011
Study Duration	1 year
Course Objectives	This course covers the diseases process of the body at system/organ level. It enables the students to carry out proper diagnosis of the provided samples (blood, urine etc etc).
Books	<ul style="list-style-type: none">• Pathological Basis of Disease by Robbins and Cotran
Name of Subject	Eye
Year	4 th Year MBBS-2011
Study Duration	1 year
Course Objectives	This course is taught to the students to understand and apply the concepts & principles of the basic sciences in context of clinical signs & symptoms of commonly occurring diseases affecting the Eye
Books	<ul style="list-style-type: none">• Parson Diseases of Eye by Ramamjit Sihota• General Ophthalmology by Vaughan and Asbury, s• Clinical Ophthalmology by Shafi Muhammad Jatoi
Name of Subject	ENT
Year	4 th Year MBBS-2011
Study Duration	1 year
Course Objectives	It enables the students to study the basic structure and functions of ear, nose and throat along with its embryological development and anomalies and pathophysiology of common clinical problems. Students is expected to apply the concepts and principles of the basic sciences in context of clinical signs and symptoms of commonly occurring diseases in the region of Otorhinolaryngology & Head and Neck.
Books	<ul style="list-style-type: none">• Diseases on ear nose throat by P I Dingra• Textbook of ENT by Latif & Ghani

4th Professional

Pre-requisites: Community Medicine, Special Pathology, ENT

Name of Subject	Medicine
Year	5 th Year MBBS-2011
Study Duration	1 year
Course Objectives	To enable the students to investigate, diagnose and treat the patients to improve the basic health facilities in the country
Books	<ul style="list-style-type: none">• Davidson's principles and practice of medicine by Christopher Haslett• Clinical Medicine by P Kumar
Name of Subject	Surgery
Year	5 th Year MBBS-2011
Study Duration	1 year
Course Objectives	To enable students to carry out different surgical procedures to comfort the patients
Books	<ul style="list-style-type: none">• Short Practice of Surgery Bailey and love by R CG Russel
Name of Subject	Gynecology/Obstetrics
Year	5 th Year MBBS-2011
Study Duration	1 year
Course Objectives	It enables the students to provide basic health facilities to women to reduce maternal mortality rate in our country
Books	<ul style="list-style-type: none">• Gynecology by Ten Teachers by Stuart Campbell• Obstetrics by Ten Teachers by Geoffrey VP Chamberlain• Gynecology/Obstetrics by Arshad Chohan
Name of Subject	Pediatrics
Year	5 th Year MBBS-2011
Study Duration	1 year
Course Objectives	It enables the students to provide basic health facilities to infants and children to reduce their mortality rate in the country
Books	<ul style="list-style-type: none">• Nelson Text Book Pediatrics by Robert M kliegman• Basis of Pediatrics by Pervaiz Akbar

4.6 Standard 2-1

The curriculum must be consistent and supports the program's documented objectives.

4.6.1 Group 1: Basic Medical Sciences (B.M.S)

Blood (1014), CNS & ANS (10105), Musculoskeletal (10108), Respiration (20201), CVS (20202), GIT (20204), Endocrinology (20208), Skin (20205), Endocrinology (30301), Reproduction (30302), Genetic (30304), Hematology (30305), Musculoskeletal (30306), Skin (30307), Respiration (30308), CVS (30309), Special Pathology (40401), Community Medicine (40402)

4.6.2 Group 2: Clinical Specialties

ENT (1007), Eye (10106), Urology (20203), Eye (20206), ENT (20207), Eye (40403), ENT (40404), Medicine (50507), Surgery (50502), Obs & Gynae (50503), Pediatrics (50504)

4.6.3 Group 3 Humanities

Foundation Block I (10101), Foundation Block II (10102), Foundation Block III (10103)

4.6.4 Course Groups and Program Objectives

Courses Groups	Objectives				
	1	2	3	4	5
1	X	X	X	X	
2		X		X	
3	X	X	X	X	X

Table 4: Courses versus Program Objectives

4.7 Standard 2-2

Theoretical backgrounds, problem analysis and solution design must be stressed within the program's core material.

Elements	Courses
Theoretical Background	Foundation Block I (10101), Foundation Block II (10102), Foundation Block III (10103), Blood & Immunology (10104), CNS & ANS (10105), Eye (10106), ENT (10107), Musculoskeletal (10108), Respiratory (20201), CVS (20202), Urology (20203), GIT (20204), Skin (20205), Eye (20206), ENT (20207), Endocrinology (20208)
Problem Analysis	Respiratory (20201), CVS (20202), Urology (20203), GIT (20204), Skin (20205), Eye (20206), ENT (20207), Endocrinology (20208), Endocrinology (30301), Reproduction (30302), Immunology (30303), Genetic (30304), Hematology (30305), Musculoskeletal (30306), Skin (30307), Respiration (30308), CVS (30309)
Solution Design	Special Pathology (40401), Community Medicine (40402), Eye (40403), ENT (40404), Medicine (50501), Surgery (50502), Gynecology Obstetrics (50503), Pediatrics (50504)

Table 5: Standard 2-2 Requirement

4.8 Standard 2-3

The Curriculum must satisfy the core requirements for the program as specified by the respective accreditation body.

MBBS program is accredited by Pakistan Medical and Dental Council (PMDC).

Minimum Requirements for each program (Program Year Weeks)

Program	Maths & Basic Sciences	Medical Science Topics	General Education (Humanities & Management Sciences)	Others	Electives
MBBS	0	164	5	0	

Table 6: Program Weeks

4.9 Standard 2-4

The curriculum must satisfy the major requirements for the program as specified by the respective accreditation body.

Same as Standard 2-3.

4.10 Standard 2-5

The curriculum must satisfy general education, arts and professional and other discipline requirements for the program as specified by the respective accreditation body.

Same as standard 2-3 and Standard 2-1 (table 4.4) as defined above.

4.11 Standard 2-6

Information technology component of the curriculum must be integrated throughout the program

The program does not contain information technology as a subject. However, the management strongly encourages the use of IT tools by the students for submission of assignments etc.

4.12 Standard 2-7

Oral and written communication skills of the student must be developed and applied in the program.

Students are given oral communication practices through topics presentation in the central classes during the course of theoretical and clinical studies. While undergoing clinical training in the wards, the students present their assigned cases to the senior students and faculty thereby improving their oral and written communication skills.

5.0 Criterion 3: Laboratories and Computing Facilities

RIU has established multiple laboratories for students to practice their learning outcomes. Following is the list of available laboratories:

DETAIL OF LABORATORY EQUIPMENT (Anatomy)

S/ NO.	Laboratory Title	Lab I	Lab II	Lab III
1	Location & Area	Histology Lab C-Block 32'x20'	Museum C-Block 21'.5"x20'	Dissection Hall Block-E 39'.8"x29'.12"
2	Objectives	Histology practicals	Models for student study	Dissection
3	Adequacy for Instruction	Adequate	Very Small	Adequate
4	Courses Taught	MBBS 1 st year, 2 nd year, 3 rd year DPT	MBBS 1 st year, 2 nd year, 3 rd year DPT	MBBS 1 st year, 2 nd year, 3 rd year DPT
5	Software Available	Computer + Multimedia	None	Computers + Multimedia
6	Major Apparatus/ Equipment	Microwave Oven 01 Floating Bath 01 Electric Burner Pad 01 Microtome Machine 02 Fridge 01 Microscopes 16 Digital Camera 01 Electric Saw 01 Television 02 VCR 02	<u>Models</u> Upper Limb 26 Lower Limb 41 Head & Neck 56 Abdomen thorax 42 Embryo Models 05 Histological models 03 X-Rays 100 X-Rays Illuminators 02 Whole body 02 Torso 11 Skeleton 04	X-Rays Illuminators 02 Electric Saw 01 Embalming Pump 01
7	Safety Regulations	No fire Extinguisher Locking systems adequate	No fire Extinguisher Locking systems adequate	Fire Extinguisher

DETAIL OF LABORATORY EQUIPMENT (Physiology)

LABORATORY TILE	PHYSIOLOGY LAB-I	SIDE LAB – LAB-II
Location & Area	Room No 28	Room No 28-A
Objectives	<p>The students at the end of session should be able to</p> <p>Perimetry</p> <ul style="list-style-type: none"> ➤ Define field of vision, nasal field of vision, temporal field of vision. ➤ Define Perimetry. ➤ Perform the steps of perimetry on a subject. ➤ Describe the abnormalities in the field of vision. ➤ Identify the effect of lesions in the visual pathway on field of vision. <p>Spirometer</p> <ul style="list-style-type: none"> ➤ Describe the parts of spirometer ➤ Calculate the lung volumes and capacities in human subject by the following parameters <ul style="list-style-type: none"> ○ FEV1, IRV, ERV, TV, TLC <p>Microscope</p> <ul style="list-style-type: none"> ➤ Describe the parts of microscope ➤ Identify morphology of normal WBCs and RBCs and platelets in a given blood film. ➤ Count WBCs, RBCs and platelets in a Neubauer chamber <p>Kymograph</p> <ul style="list-style-type: none"> ➤ Describe Kymograph and nerve muscle preparation ➤ Perform single muscle twitch in nerve muscle preparation. ➤ Perform two successive stimuli in nerve muscle preparation. ➤ Perform tetanization in nerve muscle preparation. ➤ Perform fatigue in nerve muscle preparation. ➤ Perform effects of temperature in nerve muscle preparation. 	
Adequacy for instruction	Fulfillment of objectives	
Courses Taught	MBBS & DPT	-
Software Available	Multimedia (One)	Multimedia (One)
Major apparatus / Equipment	Spirometers, Perimeters, Microscopes, Kymographs etc	Study cabins, Power lab, Study Library
Safety Regulations	Fire extinguisher (wt 6kg Powder, one) Annexure I	

DETAIL OF LABORATORY EQUIPMENT (Biochemistry)

Laboratory Title	Lab I	Lab II	
Location & Area	IIMCT Al-Mizan Room # 53	IIMCT Al-Mizan Room # 50	
Objectives	<ul style="list-style-type: none"> Used for conduction of experiments SGDs and PBLs 	<ul style="list-style-type: none"> Used for the sitting purpose of Lab Staff and Demonstrators. For storage of Chemicals, Apparatus and Equipments. 	
Adequacy for Instruction	-----	Yes	
Courses Taught	-----	M.B.,B.S and DPT	
Software Available	None	None	
Major Apparatus / Equipments	Name of Equipments	Total Qty	Repairable
	1. Centrifuge machine(China)	06	01
	2. Spectro photometer. Digital	06	-
	3. Water bath (4 Holes)	07	01
	4. Electronic balance (Digital)	02	-
	5. Hot plate electric	01	-
	6. Hemoglobinometer (Sahli's)	05	-
	7. pH Meter	06	-
	8. Micro pipettes (Variable Sizes)	06	04
	9. Hot air oven(Binder)	01	-
	10. Oven China (Blue Color)	02	-
	11. Projector (Overhead)	01	-
	12. Microscope (China)	11	02
	13. Water distillation apparatus S/S (China)	02	-
	14. Beam balance (Manual)	02	-
	15. Stop watch small	05	05
	16. Timer round type	04	-
Safety Regulation	<ul style="list-style-type: none"> Inside the lab: None (No emergency exit, No first-aid box etc) Outside the Lab: Fire extinguisher (within due date). Staff is not trained to use it. 	<ul style="list-style-type: none"> Inside the lab: None (No emergency exit, No first-aid box etc) Outside the Lab: Fire extinguisher (within due date). Staff is not trained to use it. 	

DETAIL OF LABORATORY EQUIPMENT (Pharmacology)

Laboratory Title	Lab I	Lab II	
Location & Area	IIMCT AI-Mizan Room # 58	None	
Objectives	• Used for conduction of experiments SGDs and PBLs	-----	
Adequacy for Instruction	Prope understanding of Instruments & drugs used	-----	
Courses Taught	M.B.,B.S and DPT	-----	
Software Available	None	-----	
Major Apparatus / Equipments	Name of Equipments	Total Qty	Repairable
	17. Organ Bath	20	04
	18. kymograph with stimulator	06	02
	19. kymograph without stimulator	14	03
	20. BP Apparatus	02	-
	21. Analytical Balance	01	-
	22. Spectrometer	01	-
	23. Distillation Plant (Electric & Gas)	02	02
	24. Weighing Machine	01	-
	25. Frog Board	06	01
	26. Pithing Needles	08	-
	27. Gas cylinders	10	-
	28. Gas Regulator	08	01
	29. Micro Pipettes	04	-
	30. Torch Battery	10	02
	31. Scissors	15	-
	32. Electric Balance for chemicals	01	-
	33. Rabbit Retainer	10	-
	34. Thermostatic water bath	01	-
	35. Freezer	01	-
	36. Stethoscope	01	-
Safety Regulation	<ul style="list-style-type: none"> • First-aid box • Safety gloves • Annexure I 		

DETAIL OF LABORATORY EQUIPMENT (Pathology)

Laboratory Title	Lab I (Main Pathology Lab)	Lab II – Microscopy Room (Room # 139)
Location & Area	IIMC – 274 Peshawar road. Rwp	IIMC – 274 Peshawar road. Rwp
Objectives	Imparting practical training in Pathology	Imparting practical training for microscopy only
Adequacy for Instruction	Yes	Yes
Courses Taught	Practical in path 1 st year, 2 nd year, 3 rd year & 4 th year MBBS	Practical training in microscopy 1 st Year, 2 nd year, 3 rd year & 4 th year MBBS
Software Available	Nil	Available for microscopy only
Major Apparatus / Equipment	<ul style="list-style-type: none"> • Ordinary light microscopes • Microbiological incubators • Hot air oven • Routine glass ware 	<ul style="list-style-type: none"> • Multihead teaching microscope • Ordinary light microscopes
Safety Regulations	Safety instruction present Annexure I	Safety instruction present Annexure I

DETAIL OF LABORATORY EQUIPMENT (Community Medicine)

Laboratory Title	Lab I	Lab II
Location & Area	Room No.44, Block – C	NIL
Objectives	Knowledge about Community oriented problems	NIL
Adequacy for Instruction		
Courses Taught	Tutorials /PBL/SGd	NIL
Software Available	N/A	NIL
Major Apparatus / Equipment	List attached	NIL
Safety Regulations	Annexure I	NIL

COMMUNITY MEDICINE MUSEUM

➤ MODELS

1. Country well (Cone of filtration)
2. Slow sand filter
3. Septic Tank
4. different types of Mosquito
5. Mosquito (Stages of reproduction)
6. Phthirus Pubis (Pubic or Crab Louse)
7. Pediculus Capitus (Head Louse)

8. Pediculus Corporis (Body Louse)
9. Life cycle of Malarial Parasite
10. Contraceptive devices
11. EPI vaccines
12. Nutritional Model
13. Water Sources
14. Environmental Pollution
15. Population Pyramid
16. Growth chart
17. Incinerator
18. Air pollution kit
19. Horrocks Apparatus
20. Measles
21. diphtheria
22. Goitre
23. Polio Myelitis
24. Xerophthalmia

➤ **SPECIMENS**

A. Contraceptive Devices

1. I.U.C.D (Lippes Loop, Cu.T)
2. Condom
3. Oral Pills
4. injections

B. GROWTH & NUTRITION

1. Growth Chart
2. ORS
3. Iron tablets
4. Calcium tablets
5. Vitamin B Complex Tablets
6. Vitamin A Tablets
7. Grams
8. Ghee
9. Oil
10. Walnut
11. Beans
12. Dal Masoor
13. Wheat
14. Dal Channa
15. Dal Mash
16. Dal Mongi
17. Rice
18. Adulteration model

C. INSECTICIDES & REPELLENTS

1. Paris green
2. Benzyl benzoate

3. Sulphur powder
4. Coopex
5. Finis
6. Mosquito coil
7. Mosquito electric repellent
8. Spray gun
9. Finis Rate 50
10. Finis hit powder

D. VACCINES

1. MMR vaccine
2. Hepatitis B Vaccine
3. Oral polio Vaccine
4. Human diploid cell vaccine (rabies)
5. hepatitis A
6. MMR
7. Measles
8. interferon injection

E. DRUGS/Antiseptics/ Disinfectants

1. Dettol
2. Povidine
3. Iodine
4. CuSO_4
5. Potassium permanganate
6. Alum
7. Bleaching powder
8. Leprosy tablets

F. ENTOMOLOGY

1. Snake
2. Cockroach
3. Wasp
4. Mosquito

CHARTS

- Life cycle of Sandfly
- Aedes Aegypti
- Life cycle of Malaria
- Important cestodes
- Life cycle of leishmania
- Life cycle of Ancylostoma duodenale
- Life cycle of E.vermicularis
- Life cycle of Stongyloides
- Life cycle of Taenia saginata
- Types of variables
- Phases of precede & proceed
- School health education
- Population pyramid
- Sewage treatment plant

- Course of a typical propogative epidemic
- Areas of major concern within health system
- Methods of Family Planning (illustration)
- Care of a patient with diarrhoea (illustration).
- Acute Respiratory Illness (illustration on management).
- World population data sheet 2003,2005
- Diabetes mellitus
- Environmental pollution
- Sterilization

DETAIL OF LABORATORY EQUIPMENT (Forensic Medicine)

Laboratory Title	Lab I
Location & Area	Forensic Medicine Department
Objectives	Forensic Serology Practical
Adequacy for Instruction	Adequate
Courses Taught	3 rd year MBBS
Software Available	N/A
Major Apparatus / Equipment	Microscope
Safety Regulations	NIL

5.1 Standard 3-1

Laboratory manuals/documentation/instructions for experiments must be available and easily accessible to faculty and students.

Laboratory In-charge is the custodian of all the manuals and instructions concerning his laboratory. Its copies are also available with the Program Coordinator to be used by the faculty and students. These manuals and instructions are issued to desired entity through a defined process and proper record is maintained. The laboratory in-charge keeps the manuals and instructions in laboratory for immediate access to students and faculty members during the laboratory work.

Laboratory equipment and facilities in IIMC are equally good and comparable to any high reputed university of the country. We may compare our facilities with the NUST (Army Medical College).

5.2 Standard 3-2

There must be support personal for instruction and maintaining the laboratories.

Each laboratory is authorized two staff members, Laboratory In-Charge and Laboratory Attendant. Laboratory in-charge is responsible for overall maintenance of laboratory and also maintains the manuals and instructions while laboratory Attendant is responsible to maintain the laboratory equipment and general duties within the lab.

5.3 Standard 3-3

The University computing infrastructure and facilities must be adequate to support program's objectives.

The computer facilities available to the students and faculty are in abundance. Every teacher has a dedicated computer and access to internet during and after working hours. Similarly students have 20 terminals to their disposal in the library where they have access to unlimited internet and computing facilities

RIU is running a comprehensive Campus Management System. It facilitates the faculty members in maintaining the attendance record, examination schedules, time tables and student's data.

6.0 Criterion 4: Student Support and Advising

All, RIU programs, since year 2002, started and finished on schedule. The teachers and students in RIU have facility of interaction, even after classes, for any professional and academic advice. This fact is also highlighted by the students

in the feedback on Performa number 10, taken by the Quality Enhancement Cell (QEC).

6.1 Standard 4-1

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

The department offers courses/modules (core and humanities) as per requirements of the program. The required and elective courses are offered in a logical sequence to groom the students to obtain the program's defined objectives and outcomes. The courses offered outside the department belong to Faculty of Basic Sciences and Faculty of Social Sciences. The MBBS program coordinator coordinates with the respective coordinators in both the faculties and accommodates the desired courses in program's time table. This is done well in advance, prior to the commencement of classes to avoid any clashes in the schedule.

6.2 Standard 4-2

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

All courses/modules in the program are taught by the single faculty member. Courses/modules are structured in the board of studies, before, commencement of each academic year. Faculty members carry out frequent interaction with students. Students are encouraged to give feedback and their views, about syllabi during and after the classes.

6.3 Standard 4-3

Guidance on how to complete the program must be available to all students and access to qualified advising must be available to make course decisions and career choices.

Students are briefed about the program contents at the start of the session during orientation week by in-charge program and QEC staff. In-Charge Program acts as advisor to guide students to choose appropriate courses and also provide guidance on different issues. He maintains a list of guidance points provided to students during the whole duration of the program. Guidance points are evaluated at the end of the program to have necessary improvements.

In-charge student's affair endeavors to give professional counseling to students when needed. Students can get in touch directly with him/her for any advice/guidance.

Program coordinator advises students regarding selection of professional societies and technical bodies. He helps students to get membership of such organizations on individual basis as per their choice.

In-charge House Job program coordinates with different hospitals to have study/clinical tours for students to improve their subject vision and clinical skills. He/She is also mandated to invite professionals from different hospitals for having interactive sessions with students.

7.0 Criterion 5: Process Control

7.1 Standard 5-1

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.

Admissions are made once a year, in Spring. The program has a well defined admission criterion that includes evaluation of student's marks at different levels and admission test results.

Students with more than 60% marks in HSSC or equivalent are eligible to appear in the admission test of the program. Admission is granted strictly on the basis of academic record and admission test.

Inter medical college/university transfer are also allowed. Students from accredited medical colleges/universities are eligible to transfer their credits to RIU. Students have to submit complete course curriculum and internal evaluation certificate of each subject from his/her previous institution duly signed by head of department/principal. Student's requests in this regard are dealt on case to case basis. Such requests are discussed in Board of Studies for decision. Dean of the faculty is final deciding authority.

The admission criterion is evaluated every 2 years by the board of faculties and academic council in the light of instructions issued by HEC. Minor adjustments regarding admission test results weightages or test contents are made within university.

7.2 Standard 5-2

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.

The selected students are registered by Registrar office and registration numbers are issued.

At the end of each year students are evaluated through assignments, sessionals, mid-term tests and final examinations. The laboratory work has got a good weight-age and it is done on regular basis as per schedule and contributes significantly towards the student's evaluation for relevant course. Passing students in each year are allowed to join the next year.

7.3 Standard 5-3

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.

Vacant positions are advertised in the national newspapers. Applications are scrutinized by the Dean FHMS and HR Department. Call letters are issued to the short-listed candidates on the basis of experience, qualification, publications and other factors as determined by the University in the light of HEC guidelines.

University has a very transparent selection system. Selection of candidates is approved by the Board of Governors (BoG). HEC helps RIU, in enrolling the foreign faculty as and when demanded by RIU. Good pay package, favorable teaching environments, research facilities and management support keeps the teachers glued to RIU.

Faculty performance is evaluated through performance number 10 by students. QEC evaluates data, makes comparative charts and puts up to Dean. Annual increment is awarded to the faculty members on the recommendations of Dean, Vice Chancellor and approval of Pro-Chancellor.

7.4 Standard 5-4

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.

Students are the recipient of the delivery of course material, through their teachers. The program is actively evaluated by Dean, In Charge program and QEC. The feedback of the taught is best instrument to measure that the course learning outcomes are met. The students give feedback on Performance number 1

regarding course contents and how it was delivered. Through Performa number 10, students evaluate and comment on teacher's efforts, put in to deliver the course contents, his/her general conduct in the class, the environment, he/she maintains and extra efforts, he/she makes to satisfy student's thirst for knowledge. Faculty feedback is also taken on HEC Performa number 2 (Faculty Course Review Report – See Annexure-L for Faculty Course Review summary) and Performa number 5 (Faculty Survey – Annexure-G) which is a very useful activity to evaluate the course contents, learning and teaching environments and overall teachers satisfaction level. Course evaluation by teachers also indicates what percentage of desired outcome has been achieved by the course contents and what needs to be improved or changed.

This exercise is done once a year. The feedback is discussed with Dean and In-charge program, who focuses on making improvements in the weak areas, identified by the students. Teacher's evaluation performas are fed to the computer and bar charts are made. Each teacher is graded out of 5 marks. The comparative bar charts indicate level of performance of teachers, as visualized by the students. QEC, formally submits these bar charts to Dean and Vice Chancellor for their information and taking necessary corrective actions.

7.5 Standard 5-5

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.

The program is run on annual basis and at the end of each year examinations are held to evaluate the students progress in that year. Qualified students are allowed to join next year and this cycle continues till the end of 5th year which is the final year. At the end of 5th year the internal assessment of all the students is reviewed including the results of all the professionals and final results are announced on that basis.

The program completion process is evaluated on the basis of feedbacks from current students, alumni and employers. The feedback is documented and its evaluation indicates degree of satisfaction of the graduates. Three forms (Performa 3, Survey of Graduating Students (Annexure-F), Performa 7, Alumni Survey (Annexure-A) and Performa 8, Employer Survey (Annexure-B)) are extremely good instruments to measure the program outcomes and processes. The suggestions given by the graduating students and graduates working in the hospitals are given due weightage. For example a few graduates through Alumni survey indicated that along with theoretical knowledge, they shall be given more exposure towards clinical skills. The proposal is being evaluated by Board of Faculty. The recommendations will be put up to Academic Council for grant of approval for change in syllabi.

The feedback of employers has been achieved. Generally, they are satisfied; however, they have recommended that graduates be given more practice in clinical skills for better patient handling and presentation skills. This is also being processed to make changes in syllabi.

8.0 Criterion 6: Faculty

8.1 Standard 6-1

There must be enough full time faculties 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.

Program Area of Specialization	Courses in the area and average number of sections per year	Number of Faculty Members in each area	Number of Faculty with Ph.D. Degree
Basic Medical Sciences	1014, 10105, 10108, 20201,20202,20204, 20208,20205,30301, 30302,30304,30305, 30306, 30307, 30308, 30309, 40401, 40402		
Clinical Specialties	1007, 10106, 20203, 20206, 20207, 40403, 40404, 50507, 50502, 50503, 50504		
Total			

Table 11: Faculty Distribution by Program Area (table 4.6)

8.2 Standard 6-2

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. Effective Programs for Faculty Development

Faculty concurrency in the discipline is based on the criterion set by the University, in the light of HEC guidelines. All faculty members submit their professional resumes on HEC Performa number 9 (Faculty Resume) once a year (Annexure-H). This information is compared with the existing criterion set by university for the concurrency of the post.

All full time faculty members are allocated teaching hours as per HEC defined limit which enables the faculty to have enough spare time to perform scholarly activities and improve their knowledge and skills.

Faculty members are provided adequate resources for research and academic activities. Every faculty member has been provided a computer system and access to internet. Faculty members have also access to library materials for academic and research activities. Professional training is provided to faculty if required to enhance their capabilities, through Riphah Academy of Research and Education (RARE).

RARE holds frequent interactive sessions of junior and senior faculty to discuss teaching methodology with a view to train the young faculty members. This practice is done on yearly basis during the summer vacations. After every 2 years the development program is analyzed in Deans Council for its effectiveness and necessary improvements.

The university encourages the faculty to participate in research activities by providing them sufficient financial support within or outside university.

8.3 Standard 6-3

All faculty members should be motivated and have job satisfaction to excel in their profession.

Faculty members are motivated through public appreciation and documented appreciation (annual performance evaluation report) by the In-Charge Program and Dean on regular basis.

The faculty survey of the program using HEC Performa number 5 indicates the reactions of the faculty, which indicates that teaching load is evenly distributed and faculty is having relaxed environment. Results of faculty surveys are attached in Annexure G. The compiled report of all the faculty members of the university including IIMC is put up to Pro-Chancellor, Vice Chancellor and the respective Deans for their information/evaluation for improvements in the areas, identified by the faculty members.

9.0 Criterion 7: Institutional Facilities

9.1 Standard 7-1

The institution must have the infrastructure to support new trends in learning such as e-learning.

The university has provided e-learning facilities to faculty members and students. Each faculty member has a computer system with access to internet and e-learning library section.

Students have been provided a number of computer systems in the library to access e-learning section. Every student has been provided with user ID to access the e-learning resources from within the university library. The university library is linked with foreign universities libraries through internet.

The support staff to look after the e-learning resources is sufficient in number, trained and responsive. The university has provided enough funding to support the e-learning.

9.2 Standard 7-2

The library must possess an up-to-date technical collection relevant to the program and must be adequately staffed with professional personnel.

The university library has enough technical books in hard copies to support the program learning. The internet access to the external universities libraries provides opportunities to the students and faculty to obtain knowledge from their technical resources.

The library is staffed with more than 8 professionals to help students and faculty members to get access to required books or learning material efficiently.

9.3 Standard 7-3

Class-rooms must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibilities.

Enough class rooms are available to run the program as per desired schedule. In few class rooms, there is a need of up-gradation of multimedia and other

resources (details are in the implementation plan). The work orders have been initiated and procurement process is in progress.

10.0 Criterion 8: Institutional Support

10.1 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.

University allocates enough financial resources each year to hire competent faculty as required. Faculty members are retained by giving them good remuneration, favorable teaching environment, research facilities and management support.

Faculty members are also provided adequate resources for research and academic activities to maintain their competence. Every faculty member has been provided computer system and access to internet. Faculty members have also access to library materials for academic and research activities. Professional training is also provided to faculty if required to enhance their capabilities.

10.2 Standard 8-2

There must be an adequate number of high quality graduate students, research assistants and Ph.D. students.

The university follows the guidelines of HEC and Pakistan Medical and Dental Council (PMDC) for admission in this program. The number of graduate students during the last three years is 300. There are no research assistants and Ph.D students in the IIMC.

Faculty to graduate student's ratio for the last three years remained in the range of 5:1 to 5.5:1.

10.3 Standard 8-3

Financial resources must be provided to acquire and maintain Library holdings, laboratories and computing facilities.

Library at RIU holds more than 50000 books for all programs. Sufficient number of computers are available to be used by the students. Library is organized to accommodate 50 students (male, female) in research cubicles as well as in the

common places. Separate common rooms for male and female students are available with internet facility.

Laboratories at RIU holds adequate equipment to be used by the students to carry out desired experiments and laboratory work. Each year a handful of budget is allocated for laboratories to maintain and upgrade the equipment and other facilities.

The computing facilities at RIU are of excellent standards and provides platform to students to enhance their learning capabilities.

11.0 Conclusion

The self assessment report of the Islamic International Medical College (MBBS Program) Riphah International University, I-14 Campus Islamabad, gives strengths and weaknesses of the program. The management is striving hard to improve infrastructure for establishment of conducive environments for studies. The faculty is imparting quality education, introducing innovative techniques and is conducting quality research to produce competent medical professionals. The report is based on, 8 criterion and 31 standards as given in HEC's Self Assessment Manual. The program mission objectives and outcomes are assessed and strategic plans are presented to achieve the goals, which are again measurable through definite standards. Teachers' evaluation revealed satisfactory standards, the score of nineteen teachers of the program ranged from 3.06 to 4.01. Students' course evaluation score ranged between 2.78 and 4.08 with a mean of 3.42 points in 0-5 scale. Alumni surveys revealed variable results with regards to knowledge, interpersonal skills, diagnostic skills and research aptitude. Weaknesses are identified which are related to space, syllabi change, laboratories and equipment up-gradation. Pre-requisites are fully observed, examinations are held on schedules, academic schemes are prepared well in advance, transparent admission, registration and recruiting policy, excellent student teacher ratio are some of the strong areas of this program. The number of courses along with titles and duration for each year, course contents for degree program, are thoroughly planned. Their efficacy was measured through different standards and it was found to be satisfactory.

The facilities and shortcomings in the laboratory have been discussed. It was concluded that laboratory facilities and class rooms need further improvement. The need of refreshal courses for the fresh faculty on method of teaching is emphasized.

Proper steps are taken to guide the students for program requirements, communication, meetings, tutorial system, tours, students-teacher interaction etc. As regards the process control covering admission, registration, recruiting policy, courses and delivery of material, academic requirements, performance and grading, university, Pakistan Medical and Dental Council (PMDC) as well as Higher Education Commission, have set forth proper rules, which are properly followed. At present there are over hundred competent faculty members. However, faculty members need motivation for advanced knowledge, research and external training. Institutional facilities were measured through Criterion 3; infrastructure, library, class room and faculty offices and in each case, short comings and limitation are highlighted. Institutional facilities need to be strengthened. Accordingly, institutional support will greatly promote and strengthen academic, research, management and leadership capabilities.

In conclusion, the strong and weak areas of the program are as under:-

11.1 Strong Areas

- Pre-requisites of PMDC are fully observed. Academic calendar is adhere to and examinations schedule prepared at the beginning of the year.
- Curriculum Design, development and organization are based upon set, well defined and approved criteria
- Academic Schemes (Modular format) are fully prepared in advance
- Properly scheduled Examinations and classes.
- Number of Modules along with their titles and credit hours for each year, course contents for degree program are fully planned
- Transparent admission, registration and recruiting policy
- A very powerful and expanded international library with online access to medical journals
- HEC & PMDC rules fully followed
- Excellent Students-Teacher Ratio
- Keeping in view ISLAMIC VALUES inculcating state of the “ART EDUCATION” most of the students specifically girls students would prefer to join this institutions.

11.2 Weaknesses

- Average Class rooms infrastructure
- Guidance/ Advisory process for students
- Lack of emphasis on extra curricular activities

Since class rooms are common to other faculties. Hence, salient recommendations of Chairman AT's presentations are similar to other two faculties.

11.3 Class Room Improvements

- a. Some class rooms have inadequate seating capacities
- b. Shape of class rooms-(Problem of light and echo)
- c. Multimedia projector and overhead projector requirement in a few classes
- d. Lights and Fans and ACs especially in summer
- e. Whiteboard should be dispersive
- f. Sound system for bigger class rooms
- g. All big rooms should be reserved for classes only.

11.4 Laboratory Equipment

- h. Laboratory Equipments Up-gradation

11.5 Regular Teacher Training

- i. Excellent communication skills are required
- j. Training of Young Faculty
- k. Improve the Teaching Methodology
- l. Preparation and delivery of lectures
- m. Evaluation of students

11.6 Facilities for Students

- n. Common Room for Male students

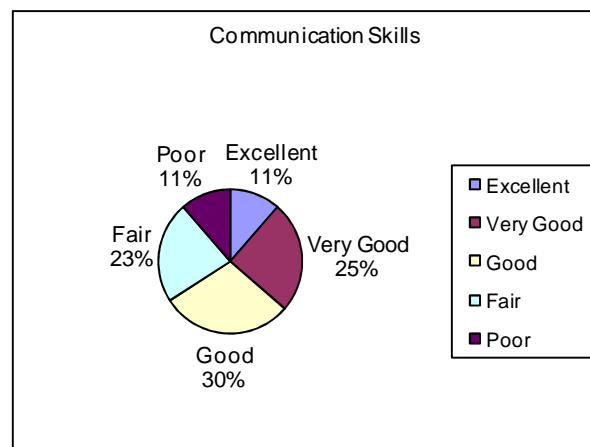
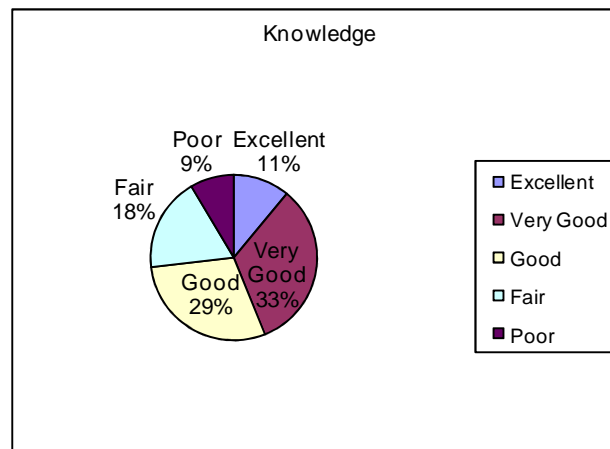
- o. Ample sitting facilities in lawns and under shade
- p. Sport facilities (Basket ball, Badminton, Table tennis, Cricket ground)
- q. Industrial and Educational tours

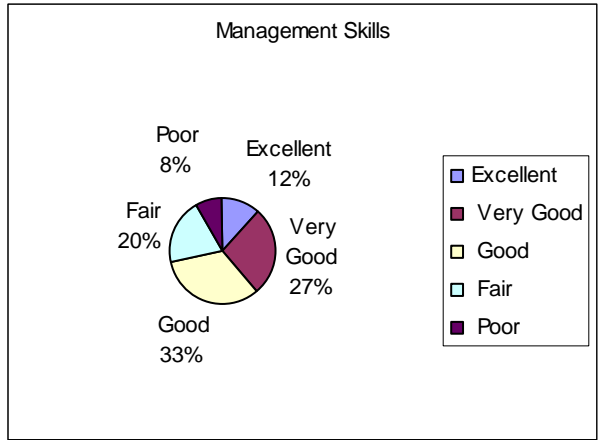
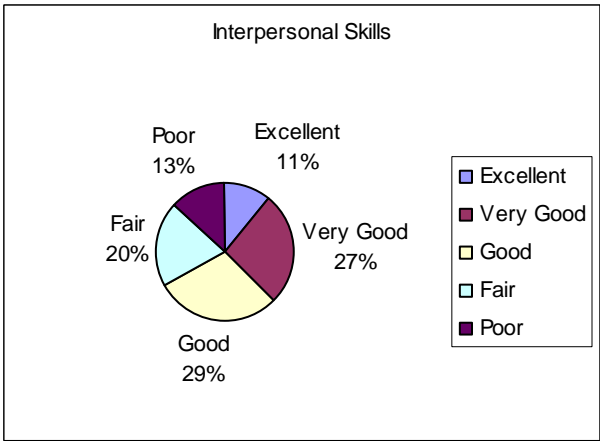
11.7 Faculty Development

- r. Indigenous Plans for faculty development
- s. Practical skills should be enhanced
- t. Research facilities and funds
- u. Balance of teaching workload and research activities
- v. Technical training regarding handling of Laboratory and Class room equipment (Handling of ACs, Handling of Multimedia Projectors, Handling of PCs, Handling of laboratory equipments)

Annexure – A: Alumni Survey Results

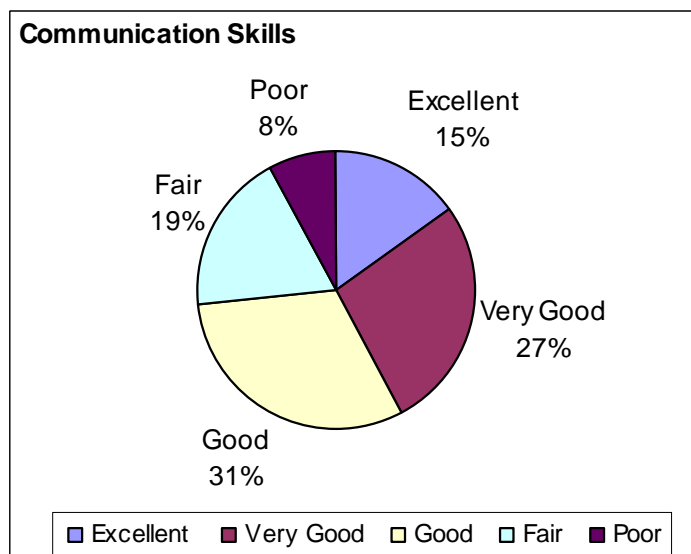
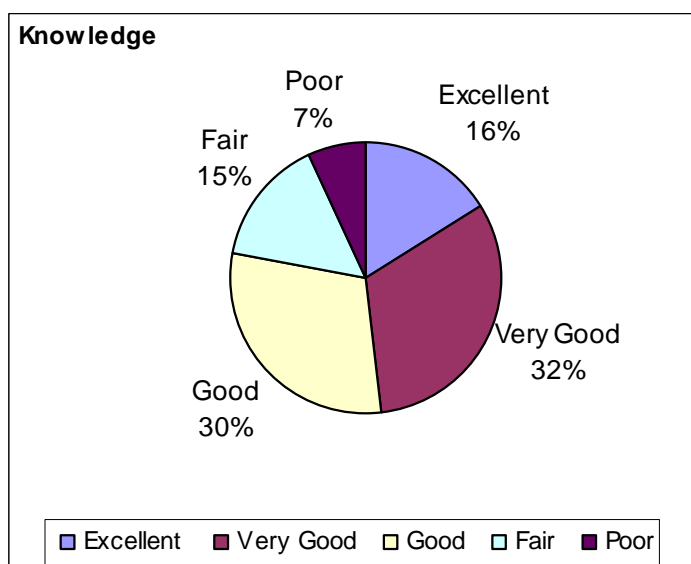
The Alumni Survey was conducted to get feedback regarding the effectiveness of program in professional career.

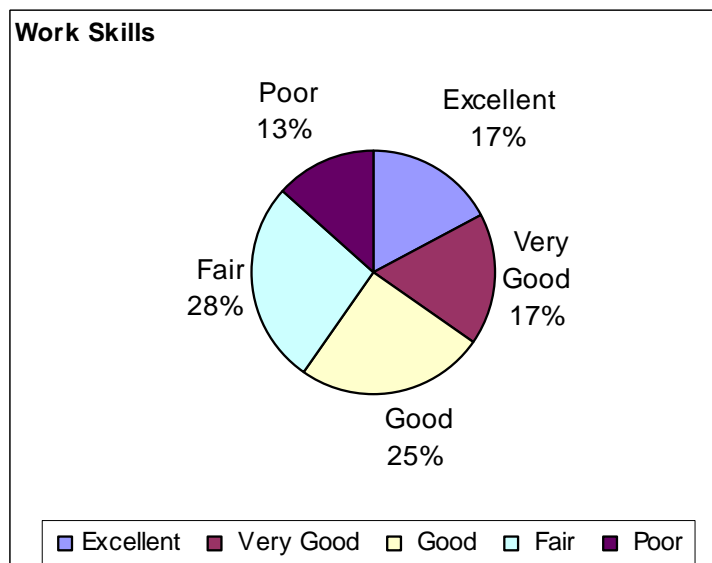
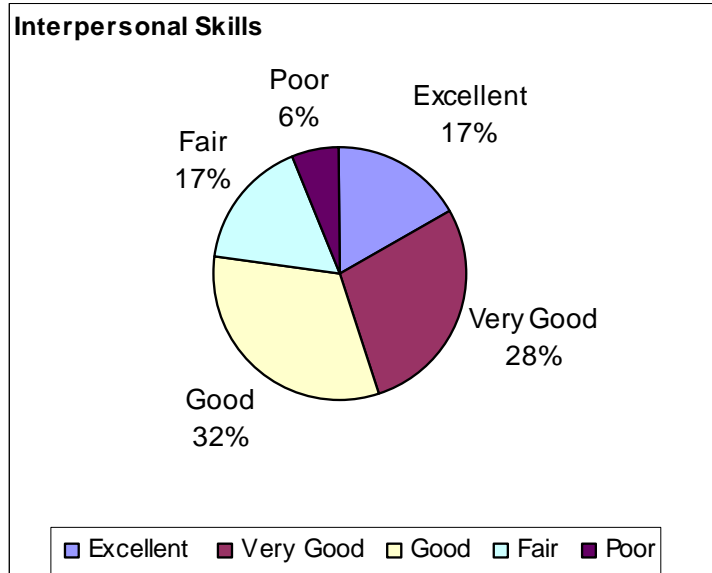




Annexure – B: Employer Survey Results

These pie charts show an overall trend of responses from employers regarding different survey categories using HEC Performa number 8. These charts show overall trend in the skills and working behavior of RIU graduates.

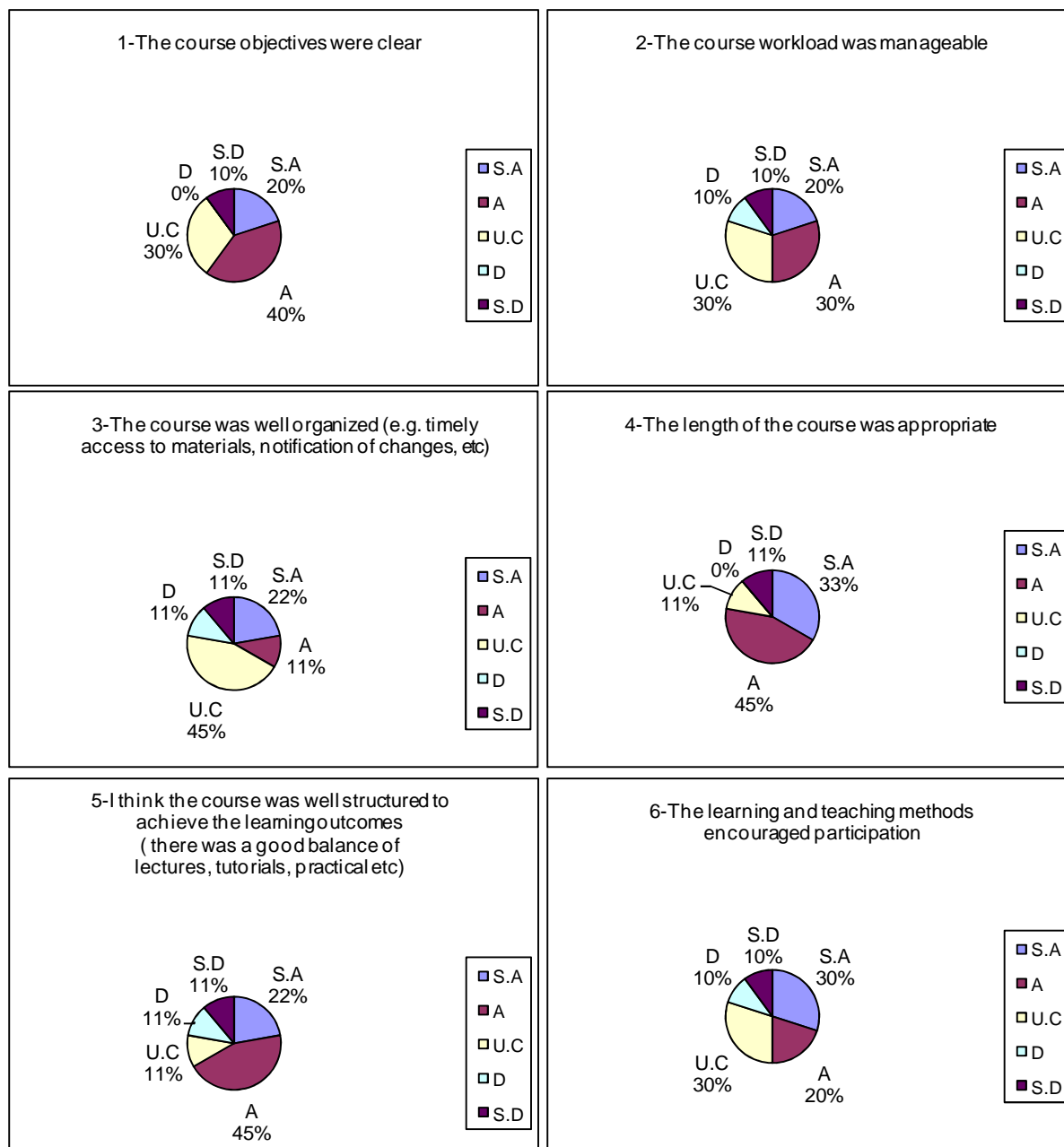




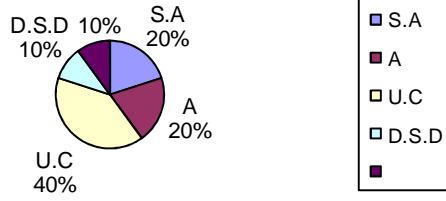
Annexure – C: Students Course Evaluation Sample

Course: EYE (10101)

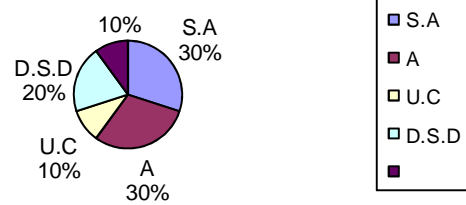
Following is the graphical representation of course evaluation for Eye module which is attached herewith as sample to show the actual results. This annexure shows results for one course as a sample, while, same has been done for all courses listed in section 3.3.1. These charts show students response for all questions against the listed course.



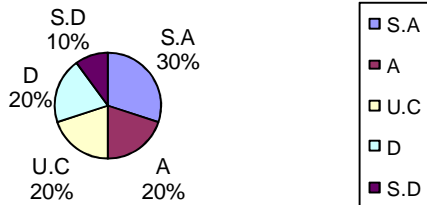
7-What was taught matches the goal and objectives of the course



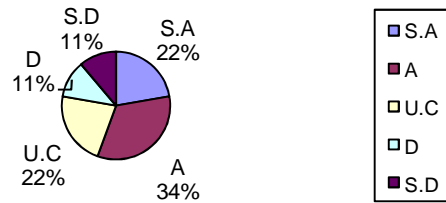
8-Learning materials (Lesson plans, Course Notes etc) were relevant and useful.



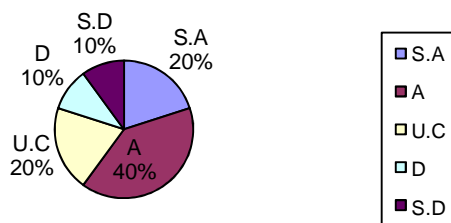
9-Recommended reading books etc were relevant and appropriate



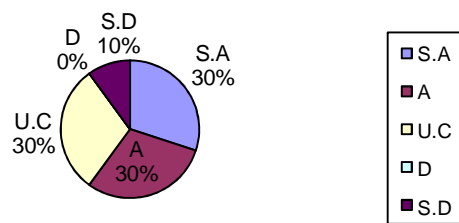
10-The Course stimulated my interest and thought on the subject area

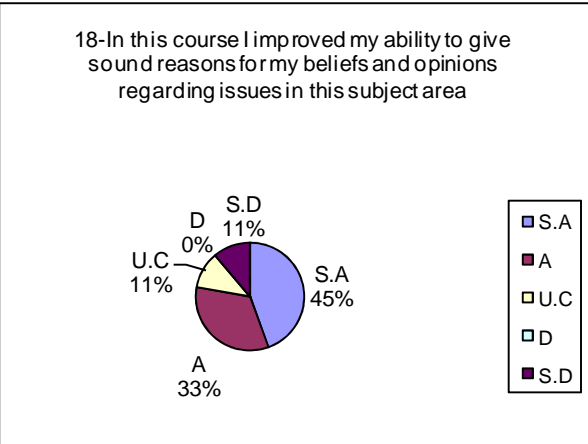
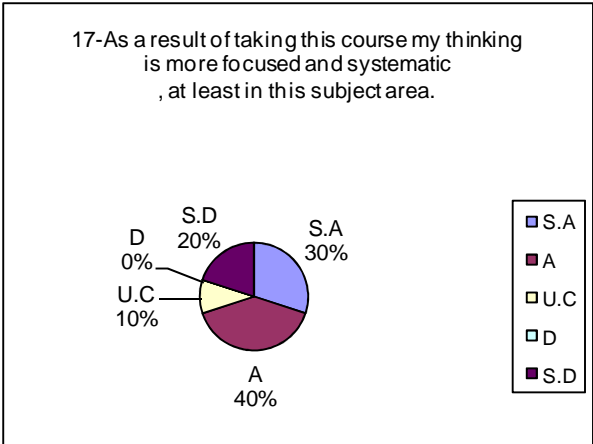
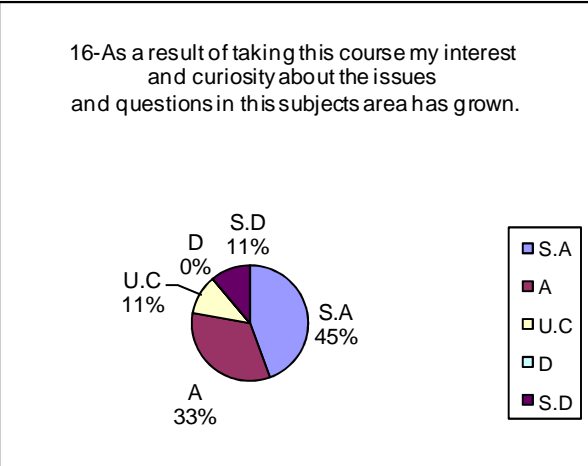
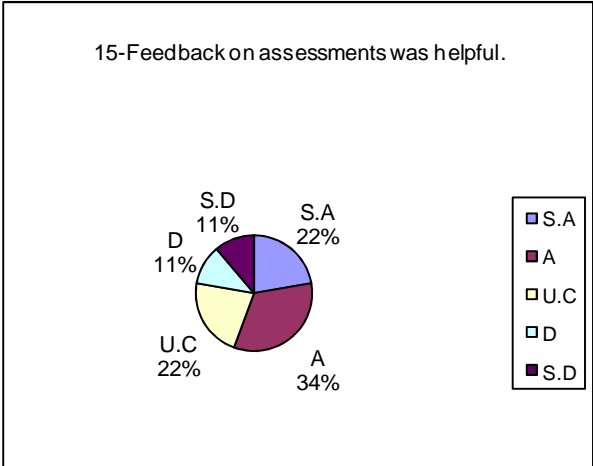
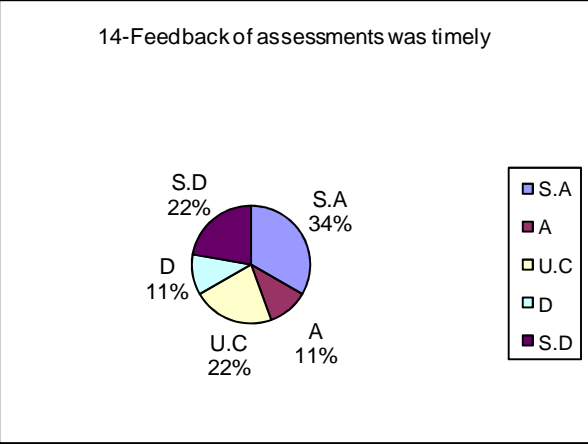
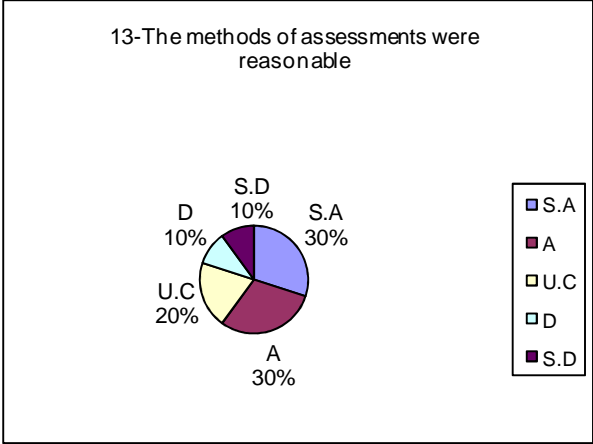


11-I understood the lectures

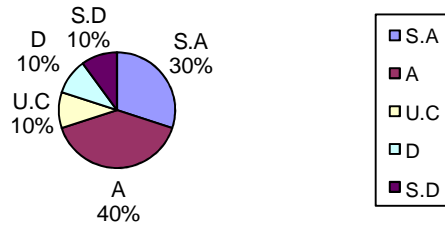


12-The pace of the Course was appropriate

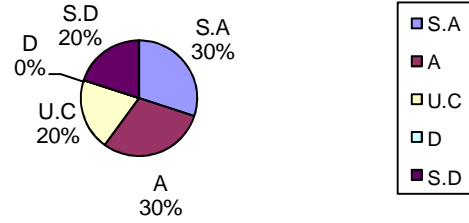




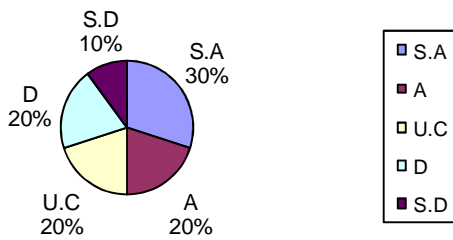
19-The material in the practical was useful (If applicable)



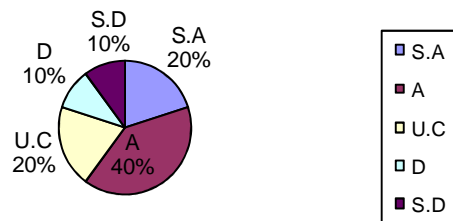
20-The demonstrator dealt effectively with my problems (If applicable)



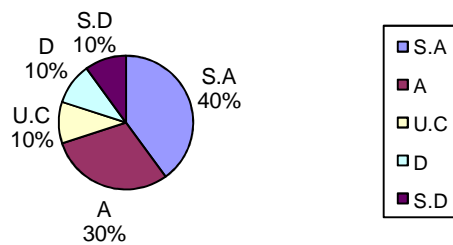
22-The amount of effort I put into this course



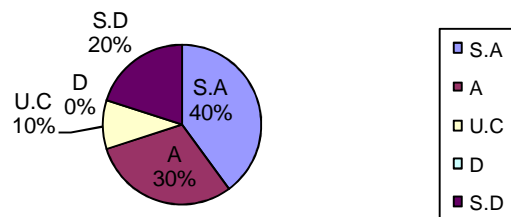
21-Approximate level of my own attendance during the whole Course



23-My involvement in this course (doing assignments, attending classes, etc.) was:



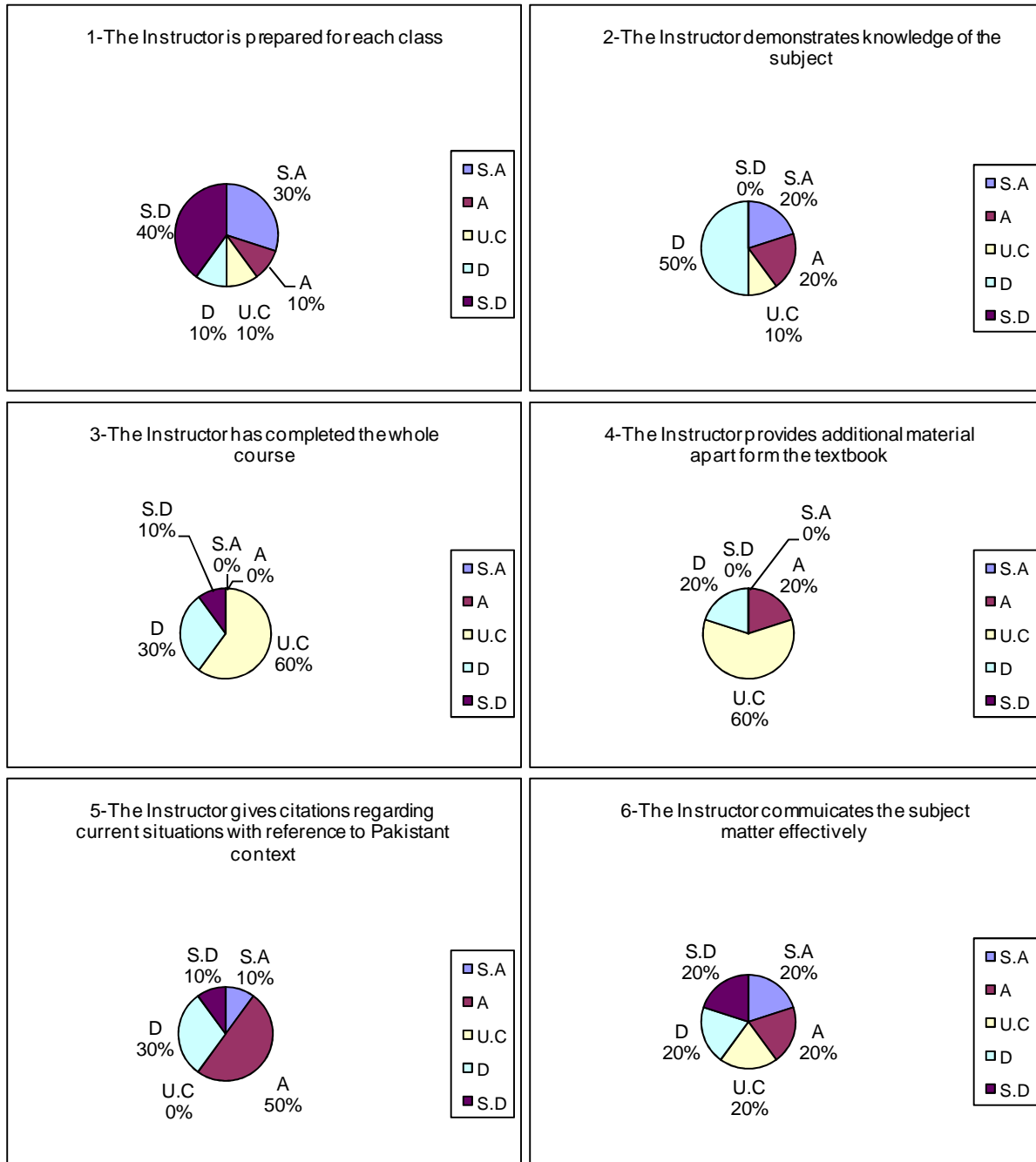
24-I think I have made progress in this Course



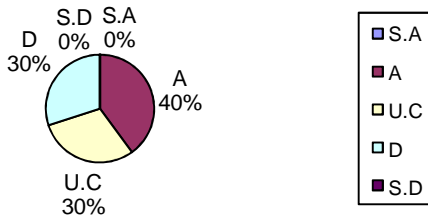
Annexure – D: Teachers Evaluation Feedback Sample

Teacher: Dr. Sadia Sultana

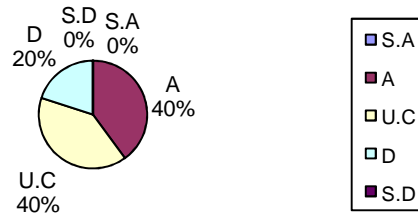
The graphical representation of teacher evaluation feedback is shown below as sample for one teacher only. Same has been done for all the teachers listed in section 3.3.2.



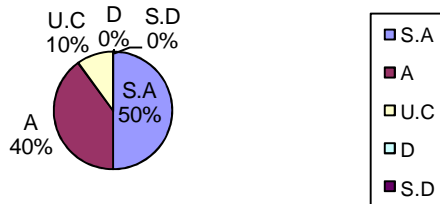
7-The Instructor shows respect towards student and encourages class participation



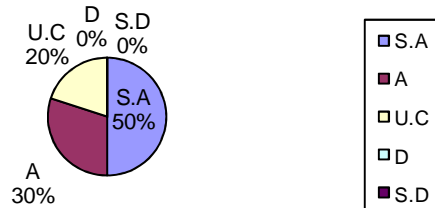
8-The Instructor maintains an environment that is conducive



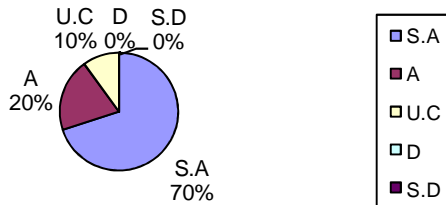
9-The Instructor arrives on time



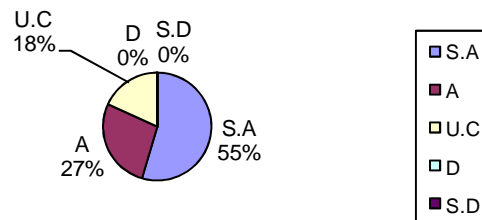
10-The Instructor leaves on time



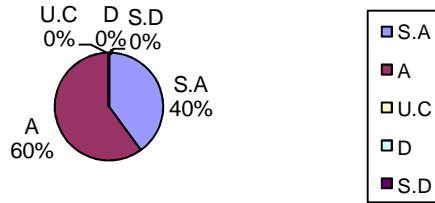
11-The Instructor is fair in examination



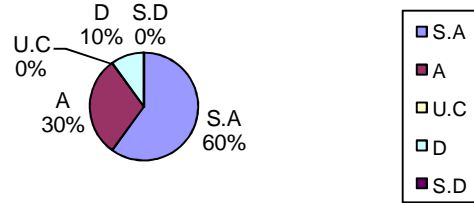
12-The Instructor returns the graded scripts etc. in a resonable amount of time



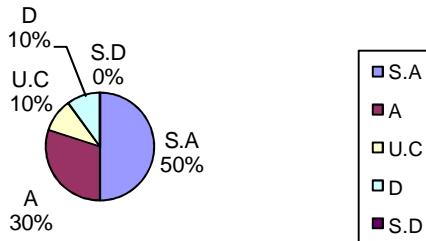
13-The Instructor was available during the specified office hours and for after class consultations.



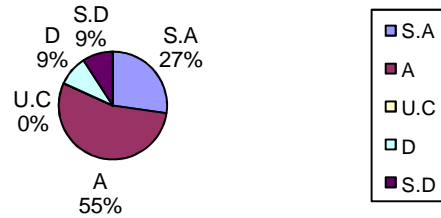
14-The Instructor communicates effectively in terms of voice eye contact, professional use of English or target language



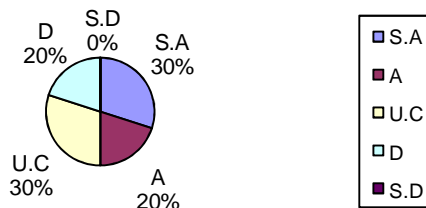
15-The Instructor plans creative and innovative activities appropriate to objectives, including the use of technology



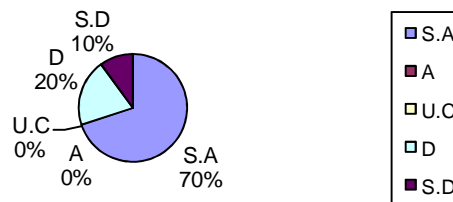
16-The Instructor relates current lesson content to previous and future lesson content

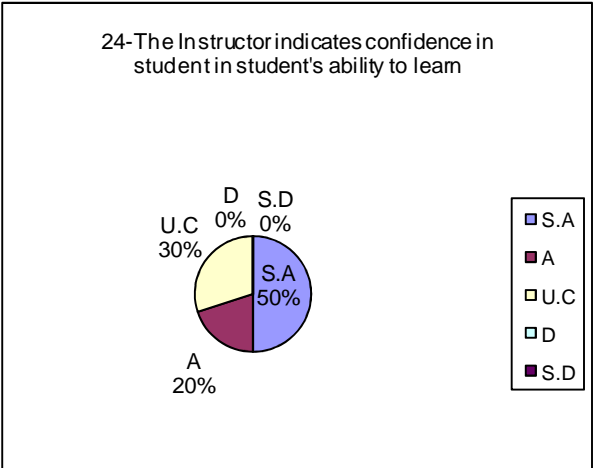
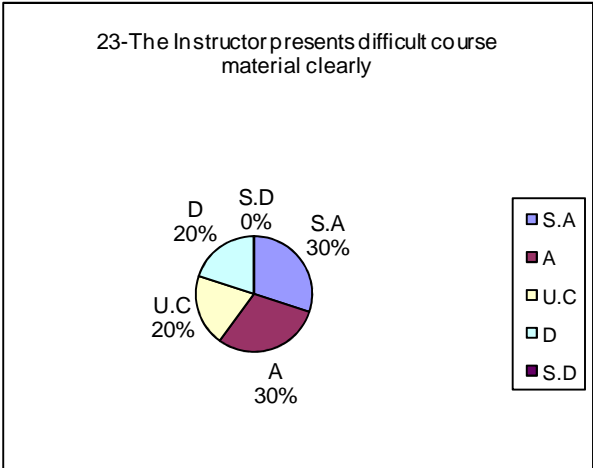
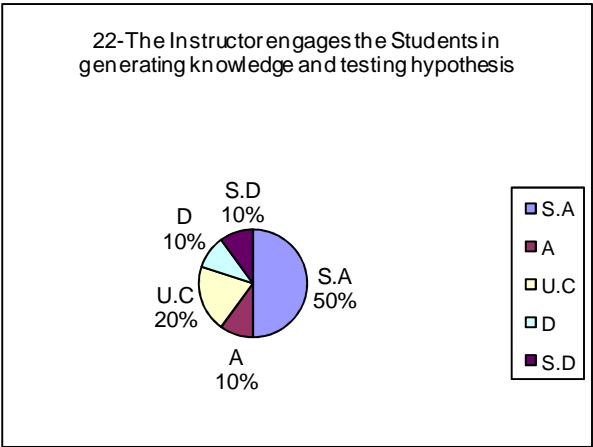
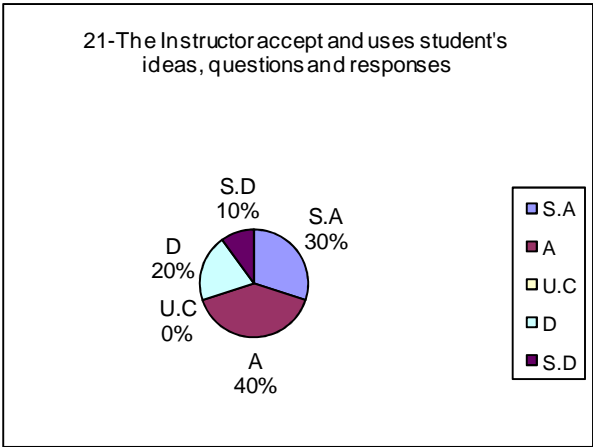
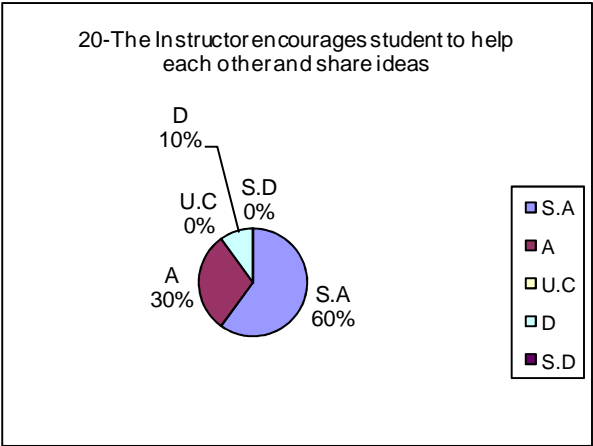
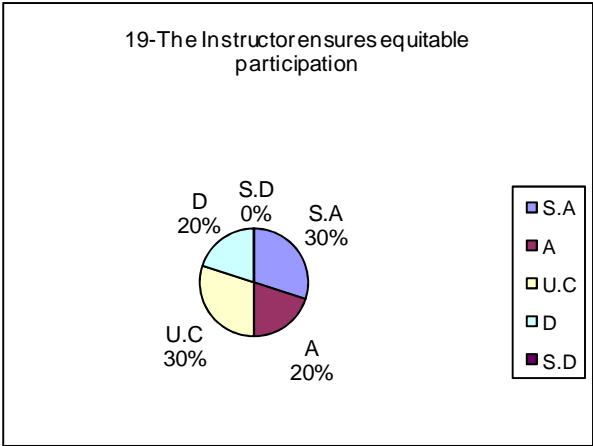


19-The Instructor ensures equitable participation

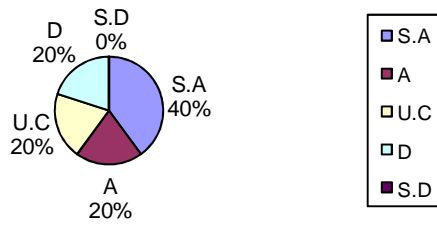


18-The Instructor establishes classroom rules and procedures cooperatively with Students when appropriate

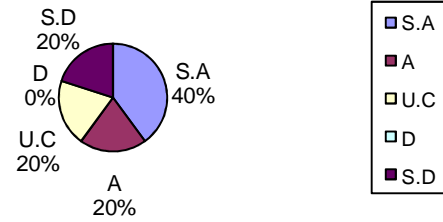




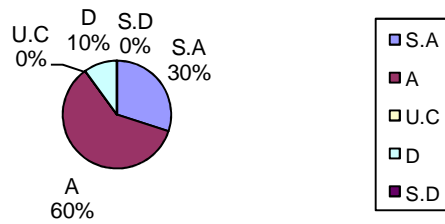
25-The Instructor avoids personal criticism of students



26-The Instructor uses vocabulary and style appropriate to level of students



27-The Instructor pronounces and spells words correctly and uses correct grammar



Annexure – E: Research Papers List

Sr. No.	Name of Author	No.	Title	Type	Journal	Year/Volume
1	Lt. Gen. Najam Khan	1	Outcome of Tissue Sparing Surgical Intervention in Mine Blast Limb Injuries	Original Article	J. CPSP	2006/16(12): 773-776
2	Dr. Shamsunnisa Sadia	1	The Clinical Pattern and Major Causes of Pri-Mary and Secondary Infertility (A Study of 100 Cases in MCH, PIMS)	Original Article	J. Islamic Int. Med. College	2006/1(1): 42-47
		2	Sonomammography for Evaluation of Solid Breast Masses in Young Patients		J. Ayub Med. College, Abbottabad	2006/18(2)
		3	Determination of Gestational Age by Transverse Cerebellar Diameter in Third Trimester of Pregnancy	Original Article	J. CPSP	2006/16(4): 249-252
		4	Do Cardiocotographic Changes Alone Determine Fetal Outcomes	Original Article	Pakistan Journal of Obs. & Gyn	2006/14: 1-2
		5	Endometriosis: Frequency and Correlation Between Symptomatology and Disease Stage	Original Article	J.CPSP	2007 17(4): 199-202
3	Brig. (R) M. Amjad Hameed	1	Physiological Basis & Clinical Utility of Erythrocyte Secimentation Rate	Continuing Medical Education	Pak J. Med. Sci	2006/22:2
4	Dr. Shabana Channa	1	Anti-inflammatory Activity of Bacopa Monniera in Rodents	Original Article	Journal of Ethnopharmacology	2006/104: 286-289
5	Brig. (R) Wahid Bakhsh Sajid	1	Mefloquine - Neuropsychiatric Side Effects Profile	Original Article	PAFMJ	2006/56: 2
		2	Stress Related Emotional and Behavioral Problems I Medical Students	Original Article	JIIIMC	Vol.4, No.2, December 2008 (14-18)
6	Dr. Shah Sattar Khan	1	Alkaptonuria	Case Report	J. IIMC	2006/1(1): 6-8
		2	Diagnostic Accuracy of Guys' Hospital Stroke Score (Allen Score) In Acute Supratentorial hormbotic/Haemorrhagic Stroke	Original Article	J. IIMC	2006/1(1): 20-24
		3	Diagnostic Accuracy of Siriraj Stroke Score in Acute Supratentorial Thrombotic/Haemorrhagic Stroke	Original Article	Journal of Rawalpindi Medical College	2006/10(1): 305
		4	Prevalence of H. Phlori infection in patients with Gastroduodenal disease in Pakistan	Original Article	Rawal Medical Journal;	Vol. 33, No. 1 Jan-June 2008
		5	Intractable Headache as a Side Effect of Topical Nitroglycerin Ointment	Original Article	Rawal Medical Journal;	Vol. 33, No. 1 Jan-June 2008
7	Dr. Afsheen Zafar	1	Outcome of Tissue Sparing Surgical Intervention in Mine Blast Limb Injuries	Original Article	J. CPSP	2006/16(12): 773-776

		2	Chemical Composition of Non-Infected Upper Urinary Tract Calculi	Original Article	Rawal Medical Journal;	Vol. 33, No. 1 Jan-June 2008
8	Dr. Muhammad Iqbal	1	Diagnostic Accuracy of Guys' Hospital Stroke Score (Allen Score) In Acute Supratentorial thrombotic/Haemorrhagic Stroke	Original Article	J. IIMC	2006/10(1): 3-5
		2	Diagnostic Accuracy of Siriraj Stroke Score in Acute Supratentorial Thrombotic/Haemorrhagic Stroke	Original Article	Journal of Rawalpindi Medical College	2006/10(1): 305
9	Dr. Asim Zulfiqar	1	Diagnostic Accuracy of Guys' Hospital Stroke Score (Allen Score) In Acute Supratentorial thrombotic/Haemorrhagic Stroke	Original Article	J. IIMC	2006/10(1): 3-5
		2	Diagnostic Accuracy of Siriraj Stroke Score in Acute Supratentorial Thrombotic/Haemorrhagic Stroke	Original Article	Journal of Rawalpindi Medical College	2006/10(1): 305
		3	Alkaptonuria	Original Article	J. IIMC	2006/1(1): 6-8
		4	Prevalence of H. Pylori infection in patients with Gastrointestinal disease in Pakistan	Original Article	Rawal Medical Journal;	Vol. 33, No. 1 Jan-June 2008
10	Dr. Shamsa Zafar	1	The Changing Trend in the Rate of Caesarean Sections at a Tertiary Care Hospital	Original Article	J. IIMC	2006/1(1): 36-41
		2	Frequency & In-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT-PRH	Original Article	J. IIMC	2006/1(1): 14-17
		3	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. IIMC	2006/1(1): 14-17
		4	Emergency Management of Cardiac Tamponade Resulting from Blunt Trauma	Original Article	PAFMJ	2006/56(1): 92-94
		5	A Study on Perceptions, Ideas and Beliefs of Newly Inducted Students of MBBS & BDS at the IIMC, Rawalpindi	Original Article	J. IIMC	2006/1(1): 42-47
		6	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. IIMC	2006/1(1): 14-17
		7	Role of Metformin in Correcting Hyperinsulinemia, Menstrual Irregularity and Anovulation in Polycystic Ovary Syndrome	Original Article	J. Ayub Med. College, Abbottabad	2006; 17(4)
		8	Evaluation structured maternal and child life support courses in Pakistan: an audit of trainees's logbooks	Original Article	Arch Gynecol Obstet	2007; May; 275

		9	Pregnancy Outcome in Bernared-Solulier syndrome Complicated by Preeclampsia	Case Report	J. Turkish - German Gynecol Assoc,	2007; Vol.8(3); 324
11	Col. Masood ul Hassan	1	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. IIMC	2006/1(1): 14-17
12	Dr. Mirza Inam ul Haque	1	A Study on Perceptions, Ideas and Beliefs of Newly Inducted Students of MBBS & BDS at the IIMC, Rawalpindi	Original Article	J. IIMC	2006/1(1): 42-47
		2	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. IIMC	2006/1(1): 14-17
		3	Current Maternal Attitudes and Trends Towards Vaccination of Children in EPI Program	Original Article	JRMC	2008;12(2):99-101
13	Dr. Muhammad Ayaz Bhatti	1	A Study on Perceptions, Ideas and Beliefs of Newly Inducted Students of MBBS & BDS at the IIMC, Rawalpindi	Original Article	J. IIMC	2006/1(1): 42-47
14	Dr. Umbar Jalil Bakhtiar	1	Caesarean Sections Audit is the Frequency of Caesarean Section at Railway Hospital Acceptable	Original Article	J. IIMC	2006/1(1): 9-13
15	Dr. Aneeq Ullah Baig Mirza	1	Results and Complications of Photorefractive Keratectomy	Original Article	Pak Ophthalmol	2006/22: 3
		2	Epitheliotropic Effect of Autologous Serum in Persistent Corneal Epithelial Defects	Original Article	Pak J Ophthalmol	2008. Vol. 24 No. 1
		3	Comparison of Photorefractive Keratectomy Results in Two Myopia Groups	Original Article	Pak J. Med Res.	2007; Vol. 46, No. 1
		4	Phacoemulsification; The First 50 Cases	Case Report	JRMC	2007; 11(12);
16	Dr. Farida Rashid	1	Spread of Hepatitis Through Orthodontic Clinics	Original Article	Pakistan Oral & Dent. Jr.	2006/26: 1
17	Dr. Faisal Raza Malik	1	Chelation Practices and Iron Overload in Thalassemia Major	Original Article	Pak. Inst. Med. Sci	2006/2(3): 148-152
18	Dr. Muhammad Tahir Chaudary	1	Thalassaemina- Pakistani Scenario	Case Report	Annals of PIMS/QPGMC, Islamabad.	2006;2(3): 145-147
		2	Risk Factors for malnutrition in an Urban Slum	Original Article	Annals of PIMS/QPGMC, Islamabad.	2006;2(4): 265-268
		3	Chelation Practices and Iron Overload in Thalassemia Major	Original Article	Annals of PIMS/QPGMC, Islamabad.	2006;2(3): 148-152
		4	Transfusion Transmitted HBV, HCV and HIV Infections in Multi-Transfused Patients of Thalassaemia Major	Original Article	Annals of PIMS/QPGMC, Islamabad.	2007;3(2): 80-83
19	Dr Rahila Yasmin	1	Learning styles of first year MBS and BDS program's students at Ripahah International University	Original Article	Proceeding of Asia Pecific Medical Education Conference in SingaPore	2007

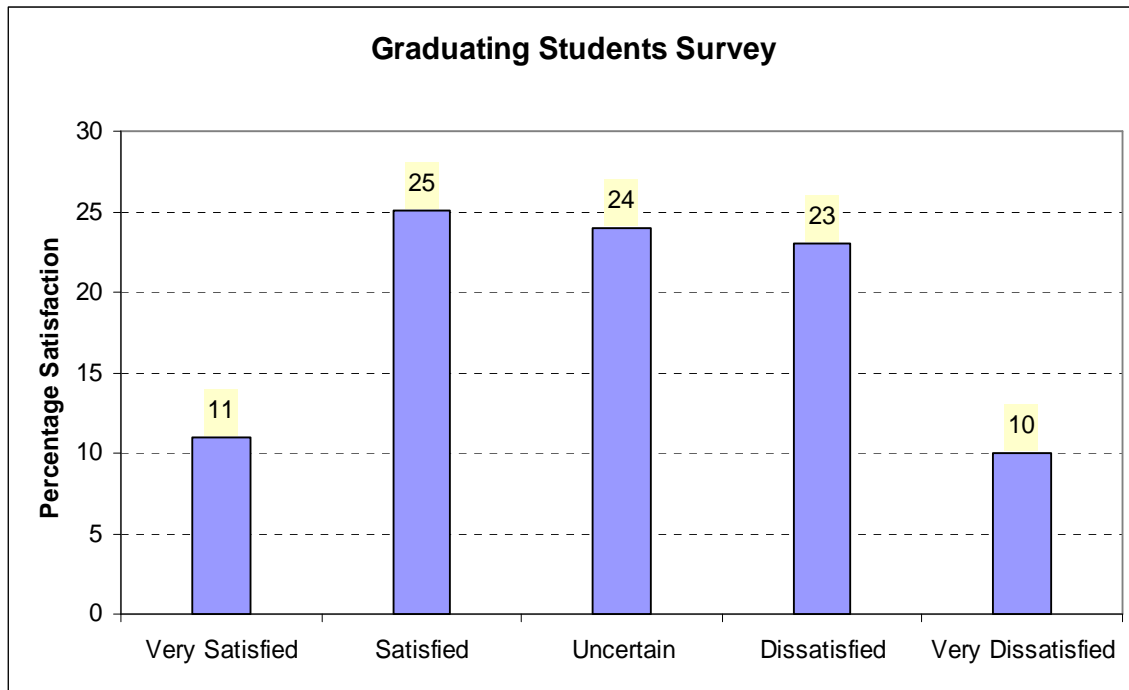
20	Prof Dr umar Ali Khan	1	A study on perceptions, social behavior and profile of newly inducted medical & dental students at Riphah International University Pakistan	Original Article	Proceeding of Asia Pacific Medical Education Conference in SingaPore	2007
21	Dr. Faisal Moeen	1	Metal Supported Telescopic Acrylic Based Fixed and Removable Dentures	Case Report	JPDA Vol. 16No. 1Jan-Mar 2007	2007
		2	Reengineering of Dental Education In Pakistan	Original Article	JPDA Vol. 16No. 3 Jul - Sep	2007
22	Dr. Zahid Iqbal	1	Renal Clearance and Urinary Excretion of Ciprofloxacin in Goats	Research Paper	Pak Vet. J., 2007, 27(4): 179-183.	2007
23	Abdul Bari Khan	1	Epitheliotropic Effect of Autologous Serum in Persistent Corneal Epithelial Defects	Original Article	Pak J Ophthalmol	2008. Vol. 24 No. 1
		2	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. Islamic Int. Med. College	2006; Vol. 1 (1): 14-17
24	Umber Jalil Bakhtiar	1	Relationship between maternal hemoglobin and Perinatal outcome	Original Article	Rawal Medical Journal;	2007. Vol. 32, No.2, July-Dec
25	Razia Nasar	1	Relationship between maternal hemoglobin and Perinatal outcome	Original Article	Rawal Medical Journal;	2007. Vol. 32, No.2, July-Dec
26	Muhammad Muzaffar	1	Invasive Squamous Cell Carcinoma of the Conjunctiva	Case Report	Pak Armed Med Journal	2007; 57(4): 344-345
		2	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. Islamic Int. Med. College	2006; 1(1): 14-17
27	Naheed Ghani	1	Invasive Squamous Cell Carcinoma of the Conjunctiva	Case Report	Pak Armed Med Journal	2007; 57(4): 344-345
28	Samina Iltaf	1	Invasive Squamous Cell Carcinoma of the Conjunctiva	Case Report	Pak Armed Med Journal	2007; 57(4): 344-345
		2	Morphological Pattern of Ovarian Tumors	Original Article	Ann. Pak. Inst. Med Sci	2006; 2(4); 222-228
29	Saleha Moghal	1	Invasive Squamous Cell Carcinoma of the Conjunctiva	Case Report	Pak Armed Med Journal	2007; 57(4): 344-345
30	Ayesha Nayyar	1	Invasive Squamous Cell Carcinoma of the Conjunctiva	Case Report	Pak Armed Med Journal	2007; 57(4): 344-345
31	Dr. Omer Awab	1	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. Islamic Int. Med. College	2006; Vol. 1 (1): 14-17
32	Mahmud-ul-Hassan	1	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. Islamic Int. Med. College	2006; Vol. 1 (1): 14-17
33	Shaheena Yasmin	1	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. Islamic Int. Med. College	2006; Vol. 1 (1): 14-17

34	Hameeda Ahkter	1	Frequency and in-Vitro Antibiotic Susceptibility Pattern of Aerobic Isolates from Pus at IIMCT - Railway Hospital Rwp	Original Article	J. Islamic Int. Med. College	2006; Vol. 1 (1): 14-17
35	Fareesa Waqar	1	Osteoporosis and Menopause: The Treatment Options and Management	Review Article	J. Islamic Int. Med. College	2006; Vol. 1 (1): 24-30
		2	Sonomammography for Evaluation of Solid Breast Masses in Young Patients	Original Article	J. Ayub Med. College, Abbottabad	2006; 18(2)
		3	Determination of Gestational Age by Transverse Cerebellar Diameter in Third Trimester of Pregnancy	Original Article	JCPSP	2006; Vol. 16 No. 249-252
		4	Do Cardiocographic Changes Alone Determine Fetal Outcomes	Original Article	Pal. J. Obstet. Gynecol.	2006; Vol. 14.No. 1&2
36	Mohammad Iqbal Khan	1	Outcome of Tissue Sparing Surgical Intervention in Mine Blast Limb Injuries	Original Article	J. CPSP	2006/16(12): 773-776
37	Dr. Fahmida Akhtar	1	Emergency Management of Cardiac Temponade Resulting from Blunt Trauma	Research Paper	Pak AFMJ	2006
38	Dr. Rubina Mumtaz	1	Reengineering of Dental Education In Pakistan	Original Article	JPDA Vol. 16 No. 3 July- Sep	2007
		2	Tobacco Cessation and the Dental Profession	Original Article	JPDA Vol. 17 No. 1 Jan - Mar	2008
		3	Role and Control of Mercury Exposure in Dental Settings	Original Article	JPDA Vol. No. 1 Jan-Mar	2007
39	Dr. Ayyaz Ali Khan	1	Reengineering of Dental Education In Pakistan	Original Article	JPDA Vol. 16 No. 3 July- Sep	2007
40	Dr. Khalidh Farooq Danish	1	Intractable Headache as a Side Effect of Topical Nitroglycerin Ointment	Original Article	Rawal Medical Journal;	Vol. 33, No. 1 Jan-June 2008
		2	Chemical Composition of Non-Infected Upper Urinary Tract Calculi	Original Article	Rawal Medical Journal;	Vol. 33, No. 1 Jan-June 2008
41	Abdul Rashid Chaudhry	1	Intractable Headache as a Side Effect of Topical Nitroglycerin Ointment	Original Article	Rawal Medical Journal;	Vol. 33, No. 1 Jan-June 2008
		2	Chemical Composition of Non-Infected Upper Urinary Tract Calculi	Original Article	Rawal Medical Journal;	Vol. 33, No. 1 Jan-June 2008
42	Prof. Dr. Shamim Mumtaz	1	In Vitro Comparative Efficacy of Carbapenems and β -Lactam β -Lactamase Inhibitor Combinations against Multi Drug Resistant Gram Negative Bacilli	Original Article	Gomal Journal of Medical Sciences	Vol. 6, No.1, Jan-June 2008
		2	Extended Spectrum β -Lactamases in Urinary Gram- Negative Bacilli and their Susceptibility Pattern	Original Article	Pak J Med Res	Vol. 47, No.4, 2008.
43	Prof. Dr. Naseem Saud Ahmed	1	Pharmacological basis for use of Pistacia integerrima leaves in hyperuricemia and gout	Original Article	Journal of Ethnopharmacology	117, 478-482 (2008)
44	Ms. Fazaila Sabih	1	Stress Related Emotional and Behavioral Problems I Medical Students	Original Article	JiIMC	Vol.4, No.2, December 2008 (14-18)
		2	Psychiatric Morbidity Among Lung & Blood Cancer Patients	Original Article	Pak Armed Forces Med J	2009; 59 (1): 54-58

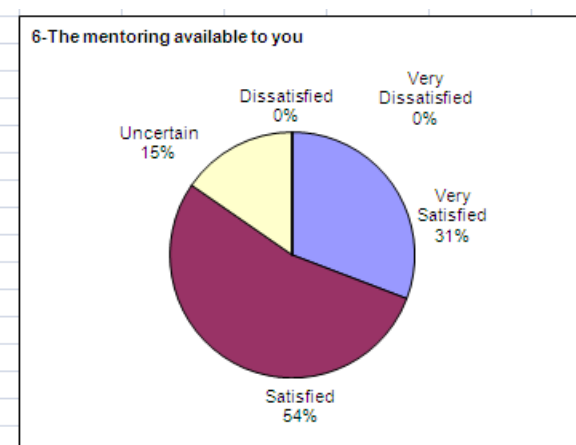
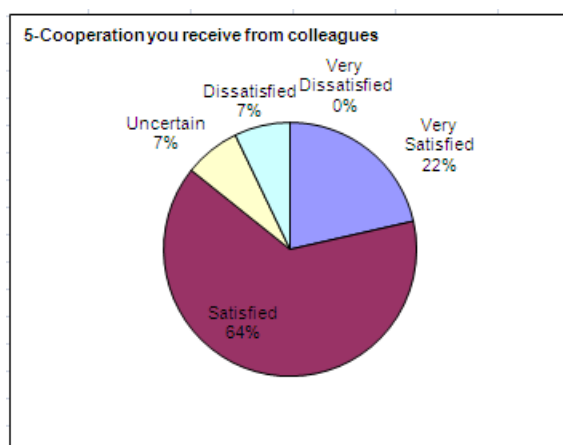
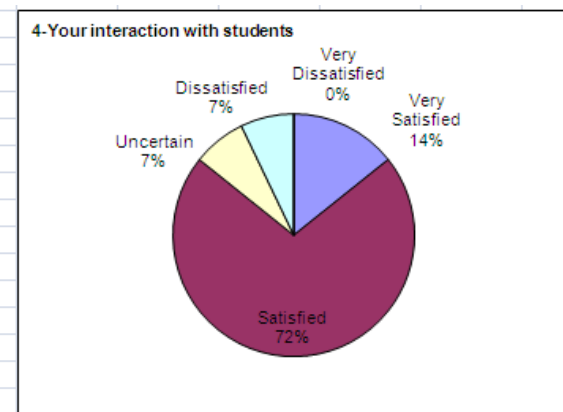
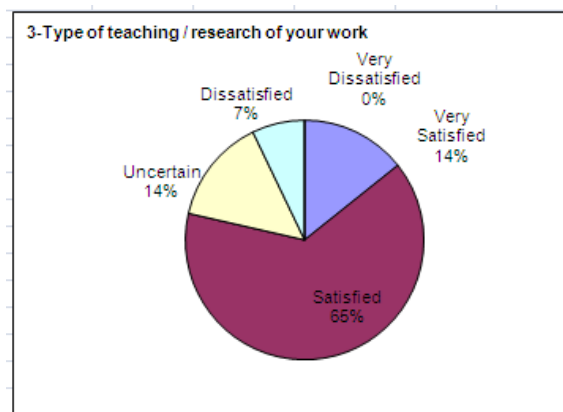
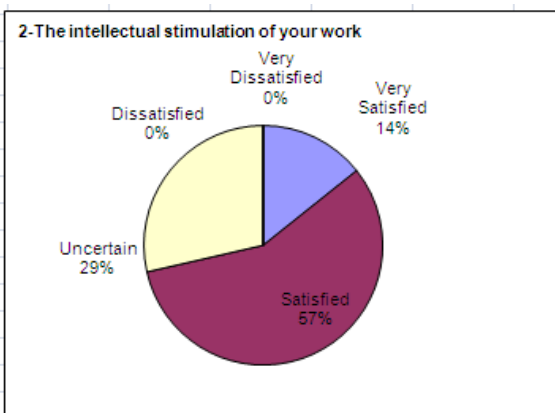
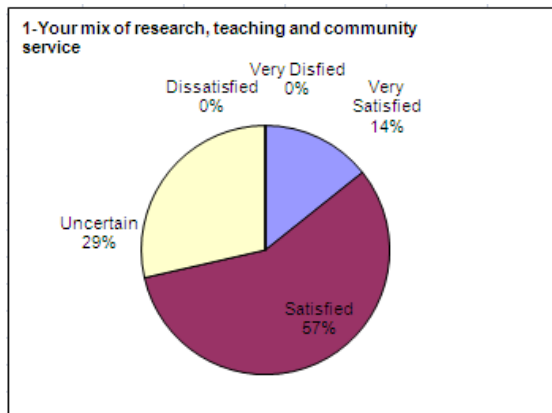
45	Dr. Ulfat Bashir	1	Tooth size discrepancy in various malocclusion Groups	Original Article	Journal of Pakistan Dental Association Karachi	(J Pak Dent Assoc.2008;17(2):79-85)
		2	Applicability Of Melgaco Equations For Predicting The Size Of Unerupted Mandibular Canines And Premolars In Patients Reporting To Islamic International Dental Hospital, Islamabad	Original Article	Oral & Dental Journal Pakistan	(PODJ 2008;28(2):165-70)
		3	Canine Retraction: Efficacy Of Methods Applied Over The Years - A Systematic Review	Original Article	Pakistan Oral & Dental Journal	(PODJ 2008;28(2):175-80)
		4	In Vitro Comparison Of Shear Bond Strength Of Transbond Xt And Heliosit Orthodontic As Transbond Xt And Heliosit Orthodontic As Direct Bracket Bonding Adhesives	Original Article	Pakistan Oral & Dental Journal	(PODJ 2008;28(2):203-206)
		5	Iatrogenesis Damage in Orthodontics: Aetiology and Provention	Pear Review	International Journal of Orthonodtics	IJO 2009; 20(1): 39-47
46	Dr. Noeen Arshad	1	Tooth size discrepancy in various malocclusion Groups		Journal of Pakistan Dental Association Karachi	(J Pak Dent Assoc.2008;17(2):79-85)
		2	Applicability Of Melgaco Equations For Predicting The Size Of Unerupted Mandibular Canines And Premolars In Patients Reporting To Islamic International Dental Hospital, Islamabad		Oral & Dental Journal Pakistan	(PODJ 2008;28(2):165-70)
		3	Canine Retraction: Efficacy Of Methods Applied Over The Years - A Systematic Review		Pakistan Oral & Dental Journal	(PODJ 2008;28(2):175-80)
		4	In Vitro Comparison Of Shear Bond Strength Of Transbond Xt And Heliosit Orthodontic As Transbond Xt And Heliosit Orthodontic As Direct Bracket Bonding Adhesives		Pakistan Oral & Dental Journal	(PODJ 2008;28(2):203-206)
		5	Iatrogenesis Damage in Orthodontics: Aetiology and Provention	Pear Review	International Journal of Orthonodtics	IJO 2009; 20(1): 39-47
47	Dr. Shahzad Akhtar Aziz	1	Current Maternal Attitudes and Trends Towards Vaccination of Children in EPI Program	Original Article	JRMC	2008;12(2):99-101

Annexure – F: Graduating Students Feedback Sample

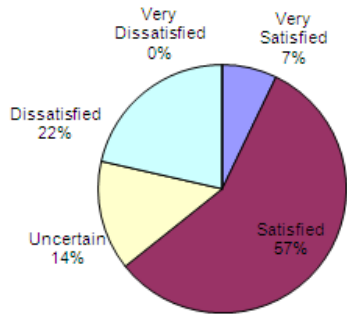
Results of survey of graduating students based on Performa 3 (Annexure III) are given in figure below. The graduating students in the last semester were surveyed before the award of degree. More than 25 % students showed their satisfaction regarding all the parameters on average, whereas 11% of the students surveyed were highly satisfied regarding all information asked. The results of graduating students are summarized and given in figure below:



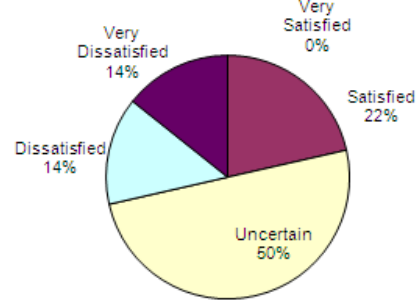
Annexure – G: Faculty Survey



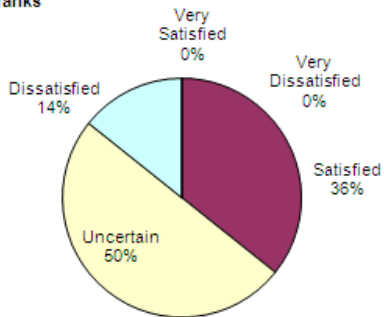
7-Administrative support from the department



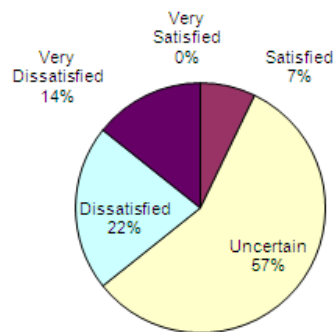
8-Providing clarity about the faculty promotion process



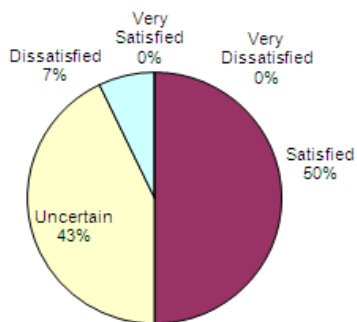
9-Your prospects for the advancement and progress through ranks



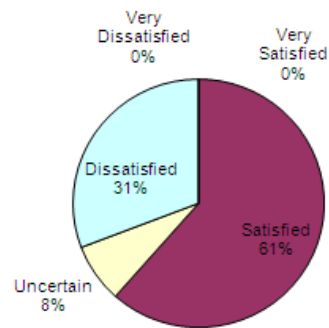
10-Salary and compensation package



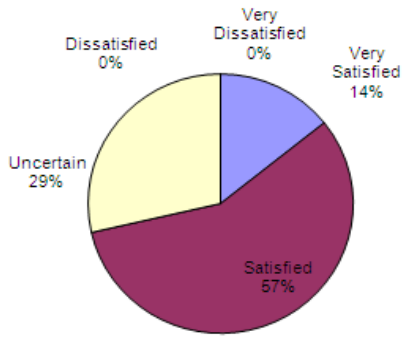
11-Job security and stability at the department



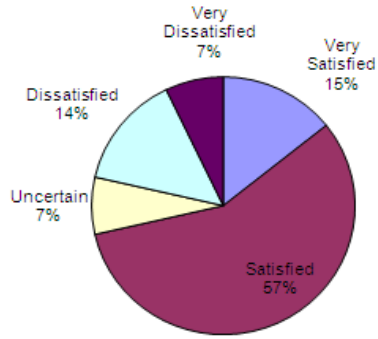
12-Amount of time you have for yourself and family



13-The overall climate at the department



14-Whether the department is utilizing your experience and knowledge



Annexure – H: Faculty Resume

Anatomy					
S. #	Name	Designation	Qualification	PMDC Reg.#	Date of Joining
	Prof. Dr. Rehana Rana	Professor & HOD	MBBS; M.Phil	6678-P 2012	1-Jun-11
1	Dr. Sikandar Hayat Khan Niazi	Asstt. Professor PG (M.Phil)	MBBS; FCPS	705-P 2013	2-Aug-04
2	Dr. Sabiha Mumtaz Haq	Asstt. Professor PG (M. Phil)	MBBS; FCPS	18914-S 2014	9-Dec-06
3	Dr. Khadija Iqbal	Asstt. Professor	MBBS; FCPS	31781-P 2011	30-Jun-08
4	Dr. Saffia Shoukat	Lecturer/ Demonstrator PGT(M.Phil)	MBBS	27183-P 2014	20-Jul-96
5	Dr. Shabana Ali Mahmood	Lecturer/ Demonstrator PGT(M.Phil)	MBBS	1369-AJK 2012	12-Aug-04
6	Dr. Rubina Shafi	Lecturer/ Demonstrator	MBBS	28752-P 2014	19-Jan-09
7	Dr. Sadaf Khan	Lecturer/ Demonstrator	MBBS	2305-AJK 2012	25-Aug-09
8	Dr. Sheikh Sajid Ali Munir	Lecturer/ Demonstrator	MBBS	55691-P 2013	19-Aug-10
9	Dr. Naheed Hamid	Lecturer/ Demonstrator	MBBS	32870-P 2012	3-Jan-11
Physiology					
S. #	Name	Designation	Qualification	PMDC Reg.#	Date of Joining
1	Prof. Arif Siddiqui	Professor & HOD	MSc (phy) M.Phil(Phy) PhD (Phy)	Non-Medical	9-May-11
2	Dr. Shazia Ali	Asstt. Professor	MBBS; M.Phil:	30504-P 2010	1-Nov-06
3	Dr. Humaira Fayyaz	Asstt. Professor	MBBS; FCPS	21830-P 2015	17-Nov-08

4	Dr. Aneeqa Shahid	Asstt. Professor	MBBS-FCPS	39663-P 2013	2-Apr-07
5	Dr. Nida Naeem	Lecturer/ Demonstrator PGT (M.Phil)	MBBS	36594-P 2014	17-Nov-08
6	Dr. Ayyaz Ahmad	Lecturer/ Demonstrator PGT (M.Phil)	MBBS	35182-P 2013	18-May-09
7	Dr. Jamil Ahmad Siddiqi	Lecturer/ Demonstrator	MBBS	B-16041-N 2011	11-Apr-11
8	Dr. Saman Jahangir	Lecturer/ Demonstrator	MBBS	B-56112-P 2011	13-Apr-11
9	Dr. Omer Pervaiz	Lecturer/ Demonstrator	MBBS	57597-P 2014	2-May-11
10	Dr. Binyamin	Lecturer/ Demonstrator	MBBS	57596-P 2014	17-May-11

Biochemistry

S.#	Name	Designation	Qualification	PMDC Reg.#	Date of Joining
1	Prof. Syed Touqeer Abbas	Professor & HOD	M.Sc. Biochemistry Ph.D. Biochemistry	Non-Medical	31-Dec-10
2	Mrs. Irum Afshan	Asstt. Professor	M.Sc. M. Phil	Non-Medical	1-Nov-06
3	Dr. Zehra Naz	Asstt. Professor	MBBS; M. Phil	35381-S 2013	6-Jun-11
4	Dr. Sheikh Kashif Rahim	Lecturer/ Demonstrator	MBBS	42034 - P 2017	9-Jun-06
5	Dr. Nasim Ilyas	Lecturer/ Demonstrator PGT (M.Phil)	MBBS	49621-P 2010	21-Apr-08
6	Dr. Farhana Ayub	Lecturer/ Demonstrator PGT (M.Phil)	MBBS	41850-P 2012	10-Aug-09

Pharmacology

S.#	Name	Designation	Qualification	PMDC Reg.#	Date of Joining
1	Prof. Dr. M. Azam Zia	Professor & Head of Department	MBBS; M. Phil; MCPS	18379-P	16-Jun-11
2	Dr. Aneela Noor Awan	Asstt. Professor	MBBS; M.Phil	32380-P 2016	3-May-10
3	Dr. Adnan Jehangir Malik	Asstt. Professor	MBBS; M.Phil	44486-P 2013	1-Mar-11
4	Dr. Uzma Naeem	Asstt. Professor	MBBS; M.Phil	42915-P 2007	1-Mar-11

5	Dr. Uzma Riaz	Lecturer/ Demonstrator	MBBS	31344-P 2011	29-Aug-03
6	Dr. Asma Saeed	Lecturer/ Demonstrator PGT (M.Phil)	MBBS	42879-P 2012	14-Mar-06
7	Dr. Zunnera Rashid Ch.	Lecturer/ Demonstrator PGT (M.Phil)	MBBS	29023-P 2011	17-Nov-08
8	Dr. Usman Nawaz	Lecturer/ Demonstrator PGT (M.Phil)	MBBS	52955-P 2012	2-May-11
Pathology					
S. #	Name	Designation	Qualification	PMDC Reg.#	Date of Joining
1	Maj Gen (R) Masood Anwar	Professor (Haematology)	MBBS; MCPS; FCPS	883-N 2015	11-Jul-08
2	Brig (R) Prof. Ahsan Ahmad Alvi	Professor (Haematology)	MBBS; M.Phil; FCPS;	3132-P 2010	21-Apr-08
3	Col(R) Dr. Abdul Bari Khan	Professor (Microbiology) & HOD	MBBS; MCPS; M.Phil	17853-P 2012	9-Dec-03
4	Dr. Shahina Yasmin	Assoc. Professor (Microbiology)	MBBS; M. Phil	10535-P 2014	11-Mar-99
5	Dr. Samina Iltaf	Asstt. Professor (Histopathology)	MBBS; MCPS; M. Phil	15748-P 2011	30-Oct-06
6	Dr. Madiha Sajjad Minhas	Asstt. Professor (Histopathology)	MBBS; FCPS;	33393-P 2012	2-May-08
7	Dr. Muhammad Nadeem Akbar Khan	Asstt. Professor (Chemicalpathology)	MBBS; FCPS; MCPS	2217-N 2013	17-Jul-08
8	Dr. Shazia Qayyum	Asstt. Professor	MBBS; M.Phil	1092-AJK 2009	19-May-08
9	Dr. Farida Nighat	Asstt. Professor Microbiology)	MBBS; M. Phil	2784-N 2014	26-Jan-10
10	Dr. Uzma Mussarat	Senior Lecturer	MBBS; M.S.	33004-P 2007	1-Feb-10
11	Dr. Ayesha Nayyar	Senior Lecturer	MBBS; M.Phil	1864-AJK 2008	8-Mar-10
12	Dr. Nurain Baig	Lecturer/ Demonstrator	MBBS	46916-P 2008	15-Aug-07
13	Dr. Maria Sarfraz	Lecturer/ Demonstrator	MBBS	51774-P 2011	17-Aug-09
14	Dr. Hina Aslam	Lecturer/ Demonstrator	MBBS	13894-N 2012	16-Oct-09

15	Dr. Muhammad Saffar	Lecturer/ Demonstrator	MBBS	53071-S 2012	26-Aug-10
16	Dr. Sobia Humerah	Lecturer/ Demonstrator	MBBS	30103-P 2010	1-Oct-10
Forensic Medicine					
S. #	Name	Designation	Qualification	PMDC Reg.#	Date of Joining
1	Dr. Naveed Ahmad Khan	Asstt. Professor & HOD	MBBS; DMJ	29722-P 2010	2-Nov-98
2	Dr. Sundus Ambreen	Asstt. Professor	MBBS; DMJ	29112-P 2015	25-Feb-10
3	Dr. Tasneem Murad	Lecturer/ Demonstrator	MBBS	44978-P 2013	19-Oct-09
4	Dr. Hamza Zafar	Lecturer/ Demonstrator	MBBS	55700-P 2013	19-Aug-10
5	Dr. Sadia Mansoor	Lecturer/ Demonstrator	MBBS	45713-P 2014	1-Mar-11

Annexure – I: Lab Safety Precautions and Working Instructions

Laboratory Staff

- Be calm and relaxed, while working in Lab.
- No loose wires or metal pieces should be lying on table or near the circuit, to cause shorts and sparking.
- Avoid using long wires, that may get in way while making adjustments or changing leads.
- Keep high voltage parts and connections out of the way from accidental touching and from any contacts to test equipment or any parts, connected to other voltage levels.
- BE AWARE of bracelets, rings, metal watch bands, and loose necklace (if you are wearing any of them), they conduct electricity and can cause burns. Do not wear them near an energized circuit.
- Do not install any software on any computer without getting approval from the respective authorities.
- Make sure all the computers and other equipments in the labs are switched off at the end of the day.
- Do not unplug a computer or equipment without switching it off first.

Students

- Shut down the computers properly after finishing your work.
- Do not install any software on any computer. If you are unable to find any required software, please contact the IT staff for help and support.
- Do not switch off network printers and scanners.
- Do not damage any equipment in the lab.
- Be considerate to other students while working in the labs.

Self Assessment Team Report December 2, 2011 (Exit Presentation)

Brig ® Dr. Maqsood ul Hassan

Self Assessment Program

- Successful Assessment Program include
 - Purpose identification
 - Outcomes identification
 - Measurements and evaluation design
 - Data collection
 - Analysis and evaluation
 - Decision-making regarding actions to be taken

Self Assessment Objectives

- Maintain and continuously enhance academic standards
- Enhance students' learning
- Verify that existing programs meet their objectives and institutional goals
- Provide feedback for quality assurance of academic programs
- Prepare the academic program for review by discipline councils

Self Assessment Team

- Constituted by VC in Sept 2010
- Members
 - Brig ® Dr. Maqsood ul Hassan, IIMC (Chairman)
 - Mr. Aun Muhammad, AP, RIPS
 - Dr. Muhammad Afzal Rana, AP, DBS

Terms of Reference

- Conduct of assessment of SAR
- Pin point gaps and deficiencies for improvement
- Report of findings of the Assessment

Self Assessment Report

- IIMC
- RIPS
- DBS

Conclusions of SAR

- Class room improvement
- Labs and Project equipment and fund
- Regular teacher training
 - Teaching methodology, Evaluation
- Facilities for students
- Development of Faculty
 - Mix of research and teaching proportion
- Training of support staff

Visit of SAT to 3 Faculties

- Tuesday Nov 29, 2011
- Visit of Class rooms and Laboratories and allied facilities
- Visit and Meeting with Faculties
 - Dean
 - Incharge Undergraduate Programs
 - Quality Program Team Members

Class Room Improvement

- Some class rooms have inadequate seating capacities
- Shape of class rooms
 - Problem of light and echo
- Multimedia projector and overhead projector requirement in every class
- Lights and Fans and ACs especially in summer

Class Room Improvement

- Whiteboard should be dispersive rather the reflective (currently installed)
- Sound system for bigger class rooms
- All big rooms should be reserved for classes only.

Laboratory Equipment

- Being upgraded

Regular Teacher Training

- Teaching is an art
- Excellent communication skills are required
- Specially required for new and young faculty members
- Teaching Methodology
- Preparation and delivery of lectures
- Evaluation of students

Facilities for Students

- Common Room for Male students
- Ample sitting facilities in lawns and under shade
- Sport facilities

— Basket ball, Badminton, Table tennis

IIMC_MBBS — Cricket ground

- Industrial and Educational tours

Faculty Development (2)

- Practical skills should be enhanced
- Research facilities and funds
- Balance of teaching workload and research activities
- Student teacher ratio should be adequate

Training of Support Staff

- Technical training regarding handling of Laboratory and Class room equipment
 - Handling of ACs
 - Handling of Multimedia Projectors
 - Handling of PCs

Conclusion

- Improvement is a continuous process
 - Class Rooms
 - Faculty training and development
 - Laboratory equipment
 - Research and development culture
 - Training of support staff
 - Facilities for students and Faculty
 - Syllabi Review
 - Implementation plan is to be developed by the respective faculties

Annexure - K: Implementation Plan MBBS Program (Summary)
(Shared Class Rooms & Facilities with other Faculties)

AT Finding	Corrective Action	Implementation Date	Responsible Body	Present Status
1. Inadequate seating capacity in Three class rooms	Add 10 chairs in each class room	By 30 th Dec, 2011	IIMC/Registrar Office	In Progress
2. Two class rooms have light and echo problem	Add curtains and carry out sound proofing of walls	By 31 st March 2012	-do-	In Progress
3. Deficiency of Multimedia Projectors	Add 1 multimedia projector in 1 class room	By 30th June 2012	-do-	In progress
4. Dispersive white boards	Replace all with mat finish white boards	By 30th April 2012	-do-	In progress
5. Sound system for 1 bigger class rooms	Add sound system	By 30th June 2012	-do-	In progress
Students Facilities				
6. Common room for male students not available	Earmark a bigger room for this purpose	By 30th April 2012	-do-	In progress
7. Sports facility for students	Develop Basket Ball, Bad Minton, and Table Tennis facilities for students	By 30th June 2012	Registrar office	In Progress
8. Shortage of sitting facilities around cafeteria and college verandas	Add all weather chairs/benches for atleast 100 students	By 30th April 2012	Registrar office	In Progress
Faculty Development				
1. Non Attendance of Workshops/Seminars/ Lectures	Provide opportunities to faculty to attend sessions of their interest	By 30 th April 2012	Registrar Office/ Finance	In Progress
2. Imbalance of Teaching workload and research activities	Follow HEC instructions	By 30 th April 2012	IIMC/HR	In Progress
3. Deficiency of indigenous plans for faculty development	Active RARE to run faculty development courses on regular	By 30 th June 2012	IIMC/Registrar office/RARE	RARE will hold faculty interactive sessions in July-August 2012

	basis			
4. Deficiency of support staff to handle ACs, Multimedia	Reorganize manpower allocation from within department. Deficiency if any be filled up	By 30 th March 2012	IIMC/HR	In Progress
Syllabi Review				
1. Need to review syllabi for more emphasis on Research, and clinical skills	Review Syllabi through Board of Studies and Board of Faculties	By 30 th July 2012	Dean, Incharge Programs and concerned faculty	Action in Hand
Chairman's AT Comments Name and Signature				
Dean's Comments Name and Signature				
QEC Comments Name and Signature				

Annexure – L: Faculty Course Review Report

Islamic International Medical College faculty is running 45 courses for the MBBS program. All courses curriculum is reviewed periodically by the faculty to assess its effectiveness and contribution in achieving program objectives. Course review also contributes towards making any changes in the syllabi and enhancements required in areas identified as a result of Alumni Survey, Employer Survey and Graduating Students Feedback.

PT members launched HEC Performa 2 (Faculty Course Review Report) to all the faculty members, to obtain their feedback about courses.

The summary of the overall feedback of all courses identified the following improvement points:

- a. Syllabi review with a view to have more emphasis on clinical and diagnostic skills.
- b. History taking skills needs improvement.
- c. Students should be given exposure to patient oriented projects during study.
- d. Patient-Doctor relationship skills need to be included in the syllabi.

These improvement points are common to all courses and are under consideration in Board of Faculty for their implementation.

Annexure – M: Rubric Report

Self Assessment Report					
Criterion 1 – Program Mission, Objectives and Outcomes					Weight = 0.05
Factors					Score
1. Does the program have document measurable objectives that support faculty/ college and institution mission statements?	5	4	3	2	1
2. Does the program have documented outcomes for graduating students?	5	4	3	2	1
3. Do these outcomes support the Program objectives?	5	4	3	2	1
4. Are the graduating students capable of performing these outcomes?	5	4	3	2	1
5. Does the department assess its overall performance periodically using quantifiable measures?	5	4	3	2	1
6. Is the result of the Program Assessment documented?	5	4	3	2	1
Total Encircled Value (TV)	19				
SCORE 1 (S1) = [TV/ (No. of Question * 5)] * 100 * 0.05	1.8				

Criterion 2– Curriculum Design and Organization					Weight = 0.20
Factors					Score
1. Is the curriculum consistent?	5	4	3	2	1
2. Does the curriculum support the program’s documented objectives?	5	4	3	2	1
3. Are the theoretical background, problem analysis and solution design stressed within the program’s core material?	5	4	3	2	1
4. Does the curriculum satisfy the core requirements laid down by PEC?	5	4	3	2	1
5. Does the curriculum satisfy the major requirements laid down by HEC and the PEC?	5	4	3	2	1
6. Does the curriculum satisfy the professional requirements as laid down by PEC?	5	4	3	2	1
7. Is the information technology component integrated throughout the program?	5	4	3	2	1
8. Are oral and written skills of the students developed and applied in the program?	5	4	3	2	1
Total Encircled Value (TV)	38				
SCORE 1 (S1) = [TV/ (No. of Question * 5)] * 100 * 0.05	1.9				

Criterion 3– Laboratories and Computing Facilities					Weight = 0.10
Factors					Score
1. Are the laboratory manuals/ documentation/ instructions etc. for experiments available and readily accessible to faculty and students?	5	4	3	2	1
2. Are there adequate number of support personnel for instruction and maintaining the laboratories?	5	4	3	2	1

3. Are the University's infrastructure and facilities adequate to support the program's objectives?	5	4	3	2	1
Total Encircled Value (TV)	15				
SCORE 1 (S1) = [TV/ (No. of Question * 5)] * 100 * 0.05	10				

Criterion 4– Student Support and Advising		Weight = 0.10				
Factors	Score					
1. Are the courses being offered in sufficient frequency and number for the students to complete the program in a timely manner?	5	4	3	2	1	
2. Are the courses in the major area structured to optimize interaction between the students, faculty and teaching assistants?	5	4	3	2	1	
3. Does the university provide academic advising on course decisions and career choices to all students?	5	4	3	2	1	
Total Encircled Value (TV)	12					
SCORE 1 (S1) = [TV/ (No. of Question * 5)] * 100 * 0.05	8					

Criterion 5– Process Control		Weight = 0.15				
Factors	Score					
1. Is the process to enroll students to a program based on quantitative and qualitative criteria?	5	4	3	2	1	
2. Is the process above clearly documented and periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1	
3. Is the process to register students in the program and monitoring their progress documented?	5	4	3	2	1	
4. Is the process above periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1	
5. Is the process to recruit and retain faculty in place and documented?	5	4	3	2	1	
6. Are the process for faculty evaluation & promotion consistent with the institution mission?	5	4	3	2	1	
7. Are the process in 5 and 6 above periodically evaluated to ensure that they are meeting their objectives?	5	4	3	2	1	
8. Do the processes and procedures ensure that teaching and delivery of course material emphasize active learning and that course learning outcomes are met?	5	4	3	2	1	
9. Is the process in 8 above periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1	
10. Is the process to ensure that graduates have completed the requirements of the program based on standards and documented procedures?	5	4	3	2	1	
11. Is the process in 10 above periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1	
Total Encircled Value (TV)	51					
SCORE 1 (S1) = [TV/ (No. of Question * 5)] * 100 * 0.05	13.91					

Criterion 6– Faculty		Weight = 0.15				
Factors	Score					
1. Are there enough full time faculty members to provide adequate coverage of the program areas/courses with continuity and stability?	5	4	3	2	1	
2. Are the qualifications and interest of faculty members sufficient to teach all courses, plan, modifies and updates courses and curricula?	5	4	3	2	1	
3. Do the faculty members possess a level of competence that would be obtained through graduate work in the discipline?	5	4	3	2	1	
4. Do the majority of faculty members hold a Ph.D. degree in their discipline?	5	4	3	2	1	
5. Do faculty members dedicate sufficient time to research to remain current in their disciplines?	5	4	3	2	1	
6. Are there mechanisms in place for faculty development?	5	4	3	2	1	
7. Are faculty members motivated and satisfied so as to excel in their profession?	5	4	3	2	1	
Total Encircled Value (TV)	26					
SCORE 1 (S1) = [TV/ (No. of Question * 5)] * 100 * 0.05	18.57					

Criterion 7– Institutional Facilities		Weight = 0.15				
Factors	Score					
1. Does the institution have the infrastructure to support new trends such as e-learning?	5	4	3	2	1	
2. Does the library contain technical collection relevant to the program and is it adequate staffed?	5	4	3	2	1	
3. Are the class rooms and offices adequately equipped and capable of helping faculty carry out their responsibilities?	5	4	3	2	1	
Total Encircled Value (TV)	15					
SCORE 1 (S1) = [TV/ (No. of Question * 5)] * 100 * 0.05	15					

Criterion 8– Institutional Support		Weight = 0.10				
Factors	Score					
1. Is there sufficient support and finances to attract and retain high quality faculty?	5	4	3	2	1	
2. Are there an adequate number of high quality graduate students, teaching assistants and Ph.D. students?	5	4	3	2	1	
Total Encircled Value (TV)	8					
SCORE 1 (S1) = [TV/ (No. of Question * 5)] * 100 * 0.05	8					

$$\begin{aligned}
 \text{Overall Assessment Score} &= S1+S2+S3+S4+S5+S6+S7+S8 \\
 &= 1.9+1.8+10+8+13.91+18.57+15+8 \\
 &= 76.18
 \end{aligned}$$