**ANNAUL REPORT**

 **2020**



 **DEPARTMENT**

 **OF**

**BIOCHEMISTRY**



 **INTRODUCTION
 TO
 BIOCHEMISTRY DEPARTMENT**



**INFRASTRUCTURE OF DEPARTMENT**

The Biochemistry Department of Rawalpindi Medical University

01 Lecture Hall

01 Laboratory

01 Tutorial Room

01 Departmental Library

**Lecture Theater**

An air-conditioned lecture theater with accommodating capacity of 200 student each. Over head projector multimedia and white boards are used as teaching aid to facilitate the students.

**Tutorial Room**

One room with capacity of 100 students for small group discussion.

**Biochemistry Laboratory**

It is well equipped with the basic gadgets required for Biochemical research

* Equipment available in Lab
* Spectrophotometer
* Centrifuge machine
* Analytical Balance
* pH meter
* Refrigerator
* Water Distillation plant
* other items used in routine such as

 ( test tubes, pipettes, burettes, stoves etc)

**Annexure – I**

**Map of the Department of Biochemistry**

**Research Lab & Female Demonstrator Room**  (34x12.9ft)

**Stairs**

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**Department Washroom (Teachers) 16x10ft**

**Girls Washroom**

**Girls Washroom**

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| **Chemical Store Room****16x11ft** |

**Entrance Right Side**

**Bio**

**Kitchen**

**10x10ft**

**Biochemistry Lab**

 **Assistant Professor Room**

 **(Female)**

 **13x11ft**

 **Assistant Professor Room**

 **(Male)**

 **13x11ft**

**Record Room**

**16x10ft**

**HOD Office**

**16x13ft**

**Male Demonstrator Room**

**16x11ft**

**CONTENTS**

* OBJECTIVES
* LIST OF FACULTY
* UNDERGRADUATE COURSES
* TEACHING METHODLOGIES
* MODE OF EVALUTION/ASSESSMENT
* INFRASTRUCTURE
* POSTGRADUATE COURSES

**The aims and objectives of teaching Biochemistry:**

1. To make the students aware of the basic biochemical processes occurring in the human body

2. To help them understand biochemical basis of commonly encountered disorders

3. To provide them solid foundations to become good doctors in future, by applying their knowledge of biochemistry to diagnose and treat common illnesses

 **INTRODUCTION TO THE DEPARTMETN OF BIOCHEMISTRY**

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| --- | --- |
| ***S.NS. No*** | ***Teacher Name***  |
|  | Dr. Tehmina Qamar |
|  | Dr. Aneela Jamil |
|  | Dr. Kashif Rauf |
|  | Dr. Shahrukh Khan |
|  | Dr. Almas Ijaz |
|  | Dr. Rahat Afzal |
|  | Dr. Faiza Zafar |
|  | Dr. Nayyab Ramzan  |
|  | Dr. Uzma Zafar  |

**LIST OF SUPPORT STAFF BIOCHEMISTRY DEPARTMENT**

 Mushtaq Ahmad Lab Technician

 Rehman Ali Clerk

 Muhammad Farooq Lab Attendant

 Muhammad Irfan Lab Attendant

 Muhammad Ishfaq Lab Attendant

 Muhammad Asif Peon

 Shamoon Masih Sweeper

 Arif Youhana Sweeper

**TRAINING PROGRAMMES UNDERGOING IN RMU**

**UNDERGRADUATE COURSES**

1. 1st Year MBBS
2. 2nd Year MBBS

**ALLIED HEALTH SCIENCES**

1. DPT (Doctor of Physiotherapy)
2. B.Sc Allied Health Sciences

 Medical Imaging Technology (MIT)

 Optometry

 Medical Laboratory Technology (MLT)

 Orthodontics

**PNS Nursing**

**Methods of Teaching**

* The Teaching and training program for Medical students during the first two years of MBBS course at the Department of Biochemistry comprises of:

 1. Lecture 2 Batches(Odd & Even)

 2. Tutorial Batch 70 Students

 3. Practical Batch 70 Students

**LECTURES**Approximately 150-200 Lectures are delivered to cover the important aspects of human Biochemistry
The modern audiovisual methods of teaching are used.

**PRACTICALS**

 The applied and Clinical aspects of Biochemistry are taught in the form of practical’s consisting of a number of experiments in the Biochemistry laboratory

**TUTORIALS**
Tutorials are group discussions. The students are encouraged to discuss their problems in the learning of Biochemistry
They are given problems to solve in the light of their knowledge obtained during lectures

**1st Year BIOCHEMISTRY SYLLABUS**

**Block I**

1. Cell organelles
2. Cell membrane and transport across cell membrane
3. Physicochemical properties of cell
4. Enzymes
5. Cancer
6. Genetics
7. PCR and recombinant DNA technology
8. Minerals
9. Fat soluble vitamins A, D & E
10. Water soluble vitamins B1, B3 & C
11. Amino acid structure & classification

**Block II**

1. Protein chemistry
2. Hemoglobin and related disorders
3. Heme synthesis and porphyrias
4. Heme degradation and jaundice
5. Plasma proteins & immunoglobulins
6. Vitamin K, B12 & folic acid
7. Iron
8. HIV & AIDs

**Block III**

1. Carbohydrate chemistry
2. Lipid chemistry
3. Electron transport chain and its inhibitors
4. Oxidative phosphorylation and uncouplers
5. Xenobiotics
6. Normal pH regulation
7. Vitamins: riboflavin, biotin, pantothenic acid and pyridoxine

**2nd** Year **BIOCHEMISTRY SYLLABUS**

**Block –I**

Metabolism of Carbohydrates

Biochemistry of Gastrointestinal Tract

Nutrition

Protein metabolism

Water and Electrolyte Metabolism

Acid Base Imbalance

**Block – II**

Metabolism of Lipids

Metabolism of Nucleic acids

Sex hormones

**Block- III**

Receptors

Second messengers, signal transduction

Hormones classification, mechanism of action

Thyroid, adrenocortical, insulin, glucagon and PTH

Blood glucose regulation

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|  **ACTIVITES DURING 2020 BEFORE AND DURING COVID 19 PENDAMIC**  |  |
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**PROVISIONAL SCHEDULE FOR FIRST AND SECOND YEAR MBBS 2020-21**

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|  | **IST YEAR MBBS**  | **2ND YEAR MBBS**  |
| End of Session | 7th October,2020 | 24th October,2020 |
| Sendup Dates | 16th Nov to 30th Nov,2020 | 27th Nov to 14th Dec,2020 |
| Result Receiving in DME | 1st December,2020 | 18th December,2020 |
| HOD, Meeting for admission criteria | 2nd December,2020 | 19th December,2020 |
| UHS Admission date with single fee | 14-12-2020 | 28-12-2020 |
| UHS Admission date with double fee | 21-12-2020 | 4-1-2021 |
| Annual dates of examination by UHS | 1-1-2021 to 8-1-2021 | 12-1-2021 to 22-1-2021 |

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**ACTIVITIES BEFORE PANDEMIC 2020**

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| **FIRST YEAR MBBS** |
| **Activities**  | **Date**  |
| Foundation Module  | 18-11-2019 to 04-01-2020 ( On Campus) |
| MSK-I Module | 6-01-2020 to 08-02-2020( On Campus) |
| Block-I | 03-02-2020 ( On Campus) |
| OSPE | 04-02-2020 ( On Campus) |
| MSK-II Module | 10-02-2020 to 07-03-2020 ( On Campus) |
| Module Exam | 07-03-2020 ( On Campus) |
| Blood & Immunity Module | 09-03-2020 to 14-03-2020 ( On Campus) |
| **SECOND YEAR MBBS** |
| GIT Module  | 20-01-2020 to 22-02-2020 ( On Campus) |
| GIT Module Exam | 22-02-2020 ( On Campus) |
| Renal Module | 24-02-2020 to 14-03-2020 ( On Campus) |
| Renal Module Exam | 14-03-2020 ( On Campus) |
| **ACTIVITIES DURING PANDEMIC 2020** |
| **FIRST YEAR MBBS** |
| **Activities**  | **Date**  |
|  Blood & Immunity Module (LMS) | 16-03-2020 to 11-04-2020 |
| CVS Module (LMS) | 20-04-2020 to 20-05-2020 |
| Respiration Module (Microsoft Team) | 08-06-2020 to 27-06-2020 |
| Send-up  | Conducted On Campus16-11-2020 to 30-11-2020 |
| **SECOND YEAR MBBS** |
| Reproduction Module(LMS) | 17-03-2020 to 29-03-2020 |
| CNS Module (LMS) | 30-03-2020 to 29-04-2020 |
| Special Senses Module (Microsoft Team) | 22-06-2020 to 04-07-2020 |
| Endocrinology Module (Microsoft Team) | 06-07-2020 to 23-07-2020 |
| Send-up  | Conducted On Campus27-11-2020 to 14-12-2020 |
| **inter Departmental Meeting** |  |  |

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