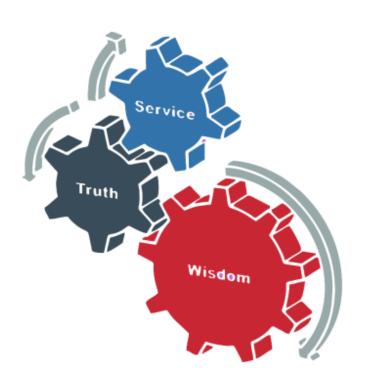


# DIGITALIZATION OF RAWALPINDI MEDICAL UNIVERSITY

A SYSTAMIC PATHWAY TO DIGITAL TRANSFORMATION

## Motto



## Vision

- ❖ To Impart Evidence Based Research Oriented Medical Education.
- \* To Provide Best Possible Patient Care.
- ❖ To Inculcate the Values of Mutual Respect & Ethical Practice of Medicine.

## MESSAGE BY THE VICE CHANCELLOR RMU



The world as we know is changing at a very rapid pace due to the advancements in the field of IT. The future that once seemed so distant is now within our grasp and the importance of the embracing the latest technologies in the field of IT in this digital age cannot be undermined. The COVID19 outbreak has taught the world some important lessons and one of these is to define and adopt the "New Normal". When all the educational, official as well as research activities came to a standstill during the pandemic, where doctors emerged as frontline warriors, fighting for the survival of the ailing mankind, the IT professional played their role on another front to help the mankind resume their daily business as well as educational and research activities without interruptions in safety of their homes coining the importance of adapting to the latest information technologies and opening up a new chapter of the Digital

Age. Rawalpindi Medical University has also remained open to adopting to the new changes that can help in progress of its students and faculty thus empowering them to serve the mankind in a better way. Taking the bold step of Digitalization of the Rawalpindi Medical University is one of the endeavors of this direction. The project that has been envisioned right from the inception of the RMU is now a reality thanks to the handful of dedicated team members of the IT department of the Rawalpindi Medical University who have spent countless hours to ensure that the university is well-equipped and prepared to meet the challenges of the digital era. The digitalization of the RMU is also a step towards the e-governance initiative of the Government of Pakistan for efficient working of the offices as well as an environment friendly solution. The following booklet is a glimpse of all the activities that are in progress for the Digitalization of RMU.

#### PROFESSOR MUHAMMAD UMAR (S.I)

MBBS, MCPS, FCPS (PAK), FACG (USA), FRCP (L),FRCP (G), ASGE-M(USA), AGAF (USA)
Vice Chancellor, Rawalpindi Medical University
Professor of Medicine Rawalpindi Medical University
Chief Gastroenterology & Hepatology Division
Clinical Coordinator of Hepatitis Prevention and Control Program,
Holy Family Hospital Rawalpindi Pakistan
Ex-Governor, American College of Gastroenterology (ACG)
Chairman Asia Hep Pakistan
Past President Pakistan Society of Gastroenterology
Past President Pakistan Society of Hepatology
President Rawalians' Research Forum

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## INTRODUCTION

## DEPARTMENT OF INFORMATION TECHNOLOGY

It would be a great honor and privilege for me to represent the newly established Department of Information Technology at Rawalpindi Medical University. With the years of development in technology, Information Technology is leading all other fields of technology. Nowadays, information and communication technologies are an important part of academic and non-academic activities.

The Information Technology Department strives to anticipate the needs of the university by looking beyond traditional services and systems to provide ingenious services and comprehensive support to our academia. I strongly realize and recognize that technology is a vital component to the support of learning, teachina, scholarly activities and administration educational in anv environment. A balance of innovative and transformative technology along with effective and efficient implementation, support and use of technology are key enablers to assisting the University to achieve its mission and strategic goals.



HAFIZ SHAHID RASOOL
DIRECTOR IT

## DEPARTMENT'S MISSION, AIMS & OBJECTIVES MISSION

IT Department of RMU committed to providing an innovative, reliable and progressive digital environment for faculty, researchers, students and staff. We are dedicated to lead collaborating and supporting cost effective digital services that align with university's mission.

## **AIMS & OBJECTIVES**

- ✓ Deliver a reliable scalable and sustainable information technology infrastructure.
- Create and support a maintained, responsive, technology oriented enriched environment for teaching, researching and learning.
- ✓ Deliver information and services in an integrated environment that promotes an open, collaborative, and unifying university culture.
- ✓ Optimize IT resources.
- ✓ Promote ethical behavior, professional and cultural values.

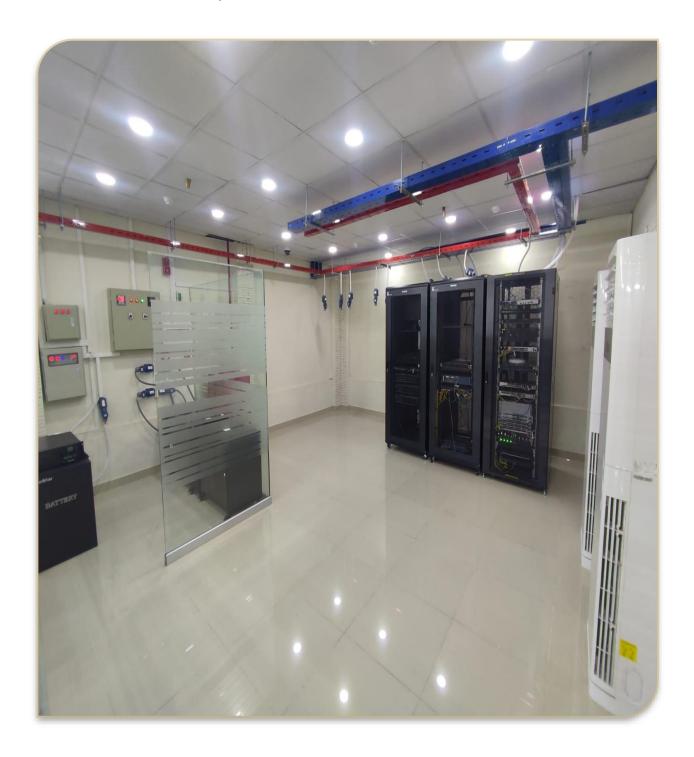
## PROJECT AND SERVICES

## **COMPLETED PROJECT**

- 1. Data Center (Main Campus), NOC (NTB)
- 2. Pakistan Education and Research Network (PERN)
- 3. Smart Classroom (Main Campus and NTB)
- 4. Secure IT Network Infrastructure:
- 5. Smart University & Safe Campus
- 6. Digital Library
- 7. Online Patient Data
- 8. E Logbook
- 9. Campus Management System (CMS)
- 10. Learning Management System (LMS)
- 11. Dengue Training Management program through LMS
- 12. Dashboard View of Online Patient Data and E-Logbook
- 13. Dengue Dashboard for HFH, BBH and DHQ
- 14. Re-structuring of Web Portal
- 15. Web Portal for RMU Golden Jubilee
- 16. Web Portal of International Scientific Conference 23
- 17. Web Portal Divisional Dengue Expert Advisory Group RMU & Allied Hospitals
- 18. Web Portal for Rawalian's Conference Registration
- 19. Deployment of E-mail System
- 20. Software Licensing
- 21. Fiber Connectivity
- 22. Journals of Rawalpindi Medical University JRMU (Technical Support)
- 23. QR Code Generation System

## 1. Data Center (Main Campus), NOC (NTB)

Rawalpindi Medical University has established a cost-effective data center for centralized control of IT operations and services.



### **Technical Description:**

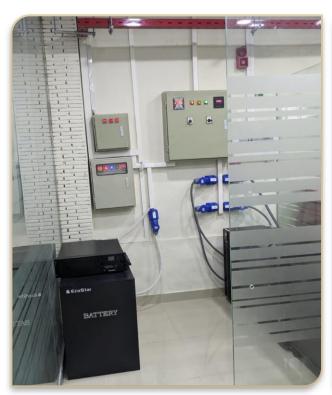
In November 2022, Rawalpindi Medical University achieved a significant milestone with the development of its state-of-the-art data center. This technological advancement marked a crucial step in enhancing the university's IT infrastructure and capabilities. The establishment of the data center reflects the institution's commitment to modernization and its recognition of the pivotal role technology plays in education, research, and administrative functions. The data center's development signals a strategic move towards centralizing and optimizing IT operations.

Its comprehensive facilities include state-of-the-art fire detection, alarm, suppression systems, and 24x7 CCTV for remote monitoring ensuring the utmost safety and security. Redundant AC units guarantee an environment conducive to optimal equipment performance, complemented by a precision UPS and a robust power system that safeguards against disruptions.

The RMU-IT data center is acting as a hub for the dissemination of LAN, Internet, Web Services, and Server Farm which includes LMS, CMS, Firewalls, Wireless LAN Controller, Directory servers, Proxy, Web, and Network Management Systems. More hardware has been added in a data center in 2022 including additional racks for housing additional servers and LED for network monitoring. This robust infrastructure serves as the backbone for the university's digital ecosystem and enables students, faculty, and staff to stay connected, access information, and engage in online activities efficiently.





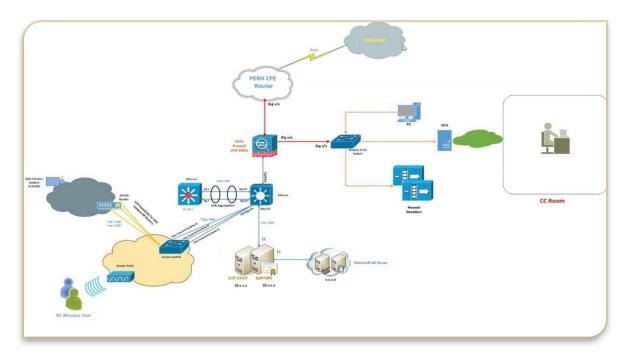




## 2. Pakistan Education and Research Network (PERN)

Pakistan education and research network initiated by Government of Pakistan under the administration of HEC. The main objective of PERN to support and enhance the research and educational capabilities of public sector universities. PERN provides the following research and educational facilities.

- ✓ High speed internet bandwidth.
- ✓ Intranet Bandwidth.
- ✓ Research Bandwidth Connectivity to following research networks.
  - National research and education network (NREN) Global research network.
  - 2. Trans Eurasia Information Network (TEIN),
  - 3. China Education and Research Network (CERNET)
  - 4. GEANT is the pan-European data network for research
  - Canadian Network for the Advancement of Research, Industry and Education CANARIE (Canada)



## **Technical Description:**

Leveraging the strides in technological innovation, RMU-IT has successfully rolled out a comprehensive Wi-Fi mesh network across its campus. This transformative step ensures seamless wireless connectivity both indoors and outdoors, significantly enhancing the digital experience for students, faculty, and staff members.

Embracing the cutting-edge wireless protocol 802.11n, this network empowers each Access Point to deliver an impressive bandwidth of up to 1000 Mbps to users.

In terms of infrastructure, the campus has been equipped with a total of 81 Access Points, strategically positioned across various locations including academic buildings, open spaces, and hostels. This comprehensive coverage ensures that users can seamlessly access the network regardless of their location on campus.

PERN Users and Bandwidth Details			
Main Campus	100 Mbps		
New Teaching Block	20 Mbps		
Total Bandwidth	120 Mbps		
Students	1385		
Faculty (RMU & Allied Hospitals)	360		
Management & Staff	78		
Technical	47		
Smart Classroom Users (Main Campus and NTB)	68		
Total Users	1938		

## 3. Smart Classroom (Main Campus and NTB)

The establishment of Smart Classroom setup can play a pivotal role to enhance students -teachers interaction through interactive online & distance learning, bridge the gap of good faculty, meet the shortage of faculty members at the universities/campuses located at far-flung areas and ultimately to uplift the standard of education across the board.

Rawalpindi Medical University established smart classrooms at the main campus and its branch site at NTB.



## Main Campus

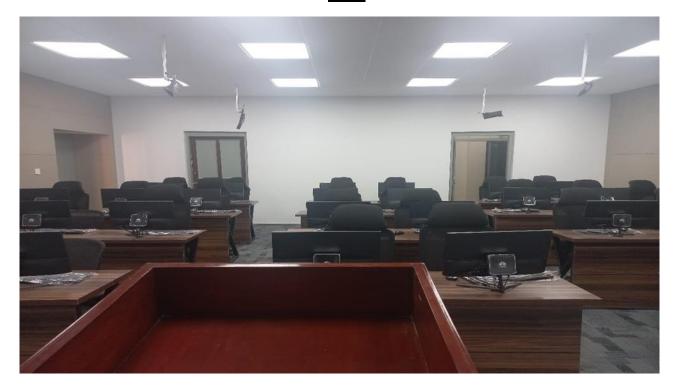


**Instructor View** 

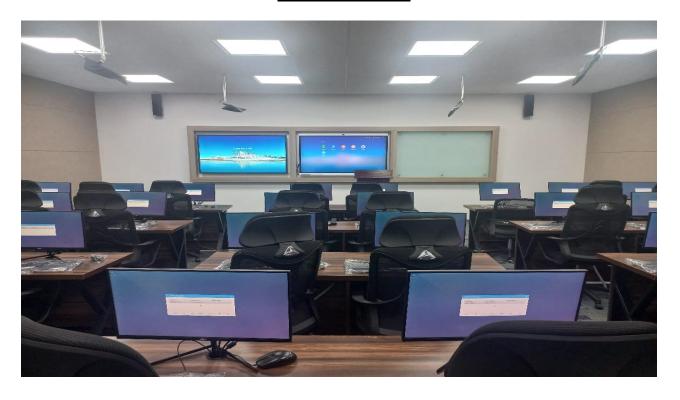


**Student View** 

## **NTB**



**Instructor View** 



**Student View** 

#### 4. Secure IT Network Infrastructure

The campus network at our institution is structured around a collapsed core architecture, designed for efficiency and security. This architecture is divided into distinct layers: security, distribution, and access. The network backbone is comprised of both primary and backup fiber optic links that connect to network and communication rooms in each academic building. This network design employs utilizing routing and switching technologies.

At the core of the network, high-end switching fabric core and distribution switches are deployed. These switches ensure seamless data flow and provide the necessary capacity for the network's traffic. To fortify security and accommodate high transmission rates, firewalls with speeds ranging from 1 Gbps to 10 Gbps have been integrated into the architecture.

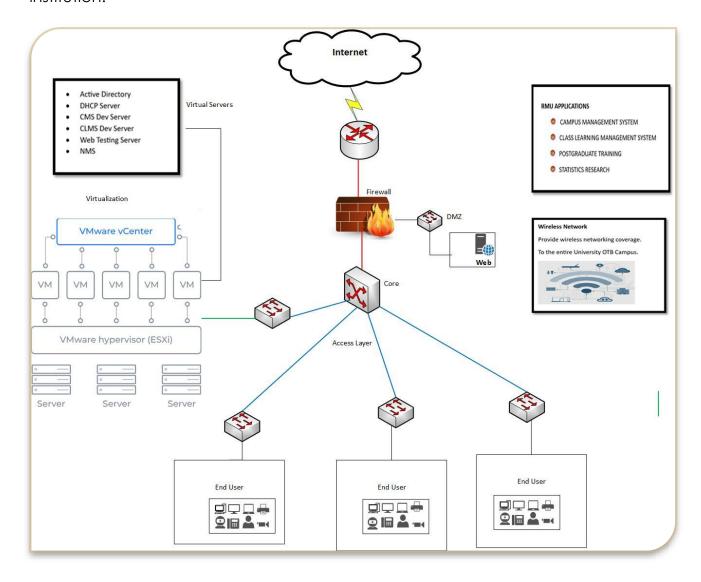
A Gigabit Access Network has also been implemented to enable fast and efficient computing at the user level. Access switches with substantial switching capacities are strategically placed to handle data and multimedia traffic efficiently. Redundant fiber optic links are established from each access switch to the core switch, guaranteeing reliable layer-3 connectivity for every LAN user. This redundancy at the device and link level ensures uninterrupted ICT services for all users.

For the connectivity between switches and users, top-of-the-line Gigabit Unshielded Twisted Pair (UTP) copper cabling is employed. This robust cabling solution guarantees reliable and high-speed connections between devices.

To effectively monitor and manage the entire network, proprietary Network Management Systems (NMS) are put in place. These NMS tools provide administrators with the capability to oversee network performance, troubleshoot issues, and make informed decisions to maintain a smooth and efficient network operation.

In summary, our campus network boasts a collapsed core architecture that optimizes efficiency and security. With a focus on redundancy, high-speed connections, and advanced management systems, the network is well-

equipped to provide reliable and uninterrupted ICT services to all users across the institution.



## 5. Smart University & Safe Campus

WIFI Coverage of whole campus (which includes hostel cafeteria open area classroom auditorium corridors grounds etc.). Surveillance Camera installation for security purposes.

For Research User International Roaming service. A User automatically connected within more than three hundred universities in Pakistan and international universities which are connected to PERN network.







## 6. Digital Library

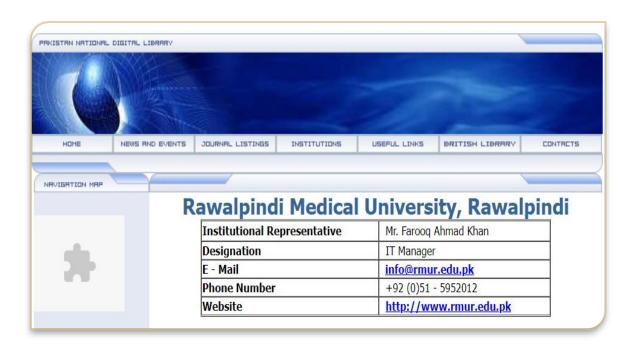


Provide access to online international scholarly literature for research purposes. It also provides access to high quality general articles and e-books through PERN.

RMU is now offering the HEC Digital Library facility to the faculty and students, as an on-campus facility.

The Digital Library is a collection of electronic resources that provides direct/indirect access to a systematically organized collection of digital objects.

- ✓ HEC National Digital Library (DL) is a program to provide access to international scholarly e literature.
- ✓ Providing access to high quality, peer-reviewed journals, databases, articles and e-Books across a wide variety of disciplines to researchers within public and private universities in Pakistan and non-profit research and development organizations.
- ✓ It provides 50,000 online full text e-books in addition to more than 23,000ejournals.



#### **Available Resources**

- ✓ INSTITUTE FOR OPERATIONS RESEARCH AND THE MANAGEMENT SCIENCES (INFORMS)
- ✓ SPRINGERLINK
- ✓ TAYLOR & FRANCIS Journals
- ✓ WILEY-BLACKWELL JOURNALS
- ✓ WOLTERS KLUWER OVID SP

Link: http://www.digitallibrary.edu.pk/rmc.html

#### **Available Resources**

## INSTITUTE FOR OPERATIONS RESEARCH AND THE MANAGEMENT SCIENCES (INFORMS)

- The Institute for Operations Research and the Management Sciences (INFORMS) is the largest professional society in the world for professionals in the field of operations research (O.R.).
- INFORMS publishes 12 scholarly journals that describe the latest O.R. methods and applications and a membership magazine with news from across the profession. (More Info...)

#### SPRINGERLINK

- SpringerLink provides access to 503 full-text Springer-Verlag Journals and 738 full-text journals formerly published by Kluwer Academic Publishing.
- · One of the world's leading information services for Science, Technical and Medical journals.

#### **TAYLOR & FRANCIS Journals**

- Taylor & Francis has grown rapidly over the last two decades to become a leading international academic publisher.
- . More than 1000 journal titles in a full range of disciplines. (More Info...)

#### WILEY-BLACKWELL JOURNALS

- Since the Blackwell-Synergy merger with Wiley-Interscience, all the journals available to HEC consortium are now available through Wiley-Interscience.
- Online database containing over 1,234 journals in science, technology, medicine, humanities and social sciences. (More Info...)

#### WOLTERS KLUWER OVID SP

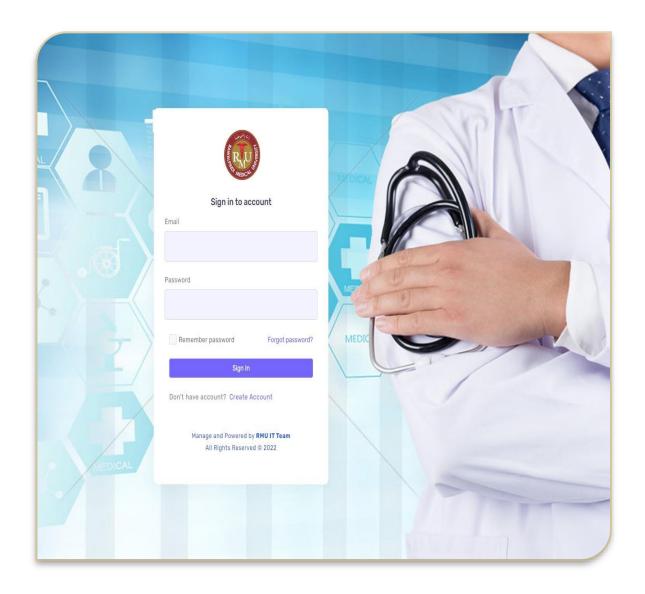
Lippincott Williams & Wilkins (LWW) started in 1792 and has a long history as a leading international publisher with a singular focus and strength in medicine, nursing and health. It provides professional information resources for physicians, nurses, specialized clinicians and students. It publishes over 275 journals, newsletters and loose-leaf products, including many of the industry's most respected titles. It is the publishing partner to more than 60 pre-eminent medical societies and offers high quality content and expert capabilities in editorial innovation. (More Info...)



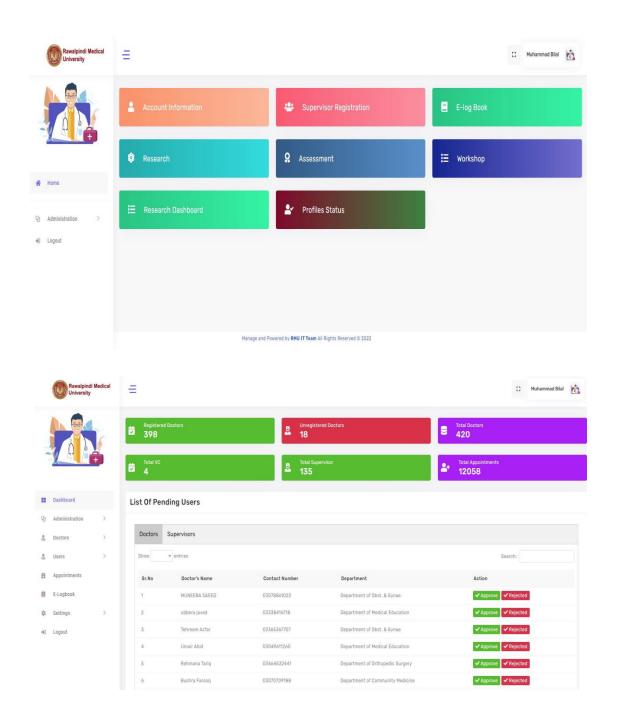


Rawalpindi Medical University Initiate first time in Pakistan to promote real time and authentic research base patient data through online system. This step promotes the authenticity of research and discourages fake patient data. A verification system is also in place to check the accuracy of this data.

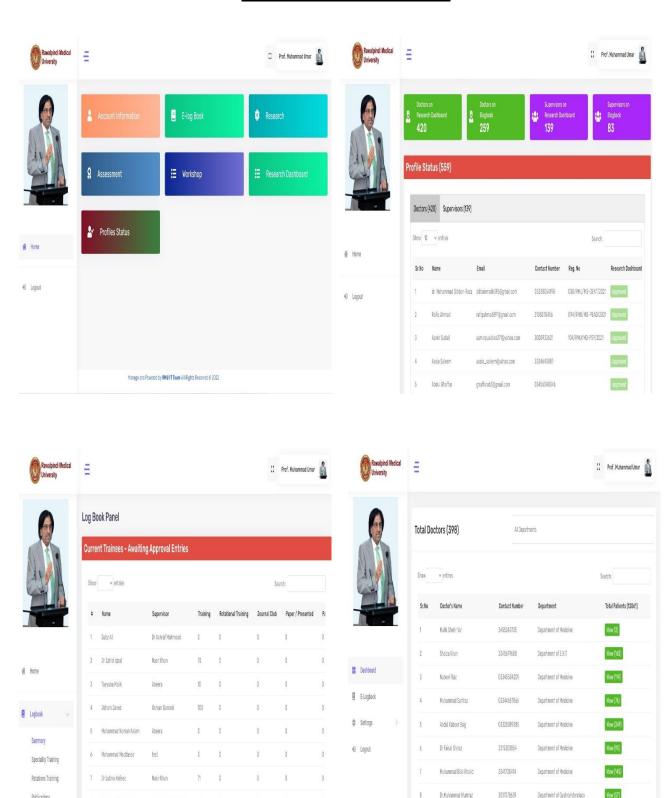
Link: <a href="https://pgt.rmur.edu.pk/">https://pgt.rmur.edu.pk/</a>



## **Admin View**



## Vice Chancellor's View



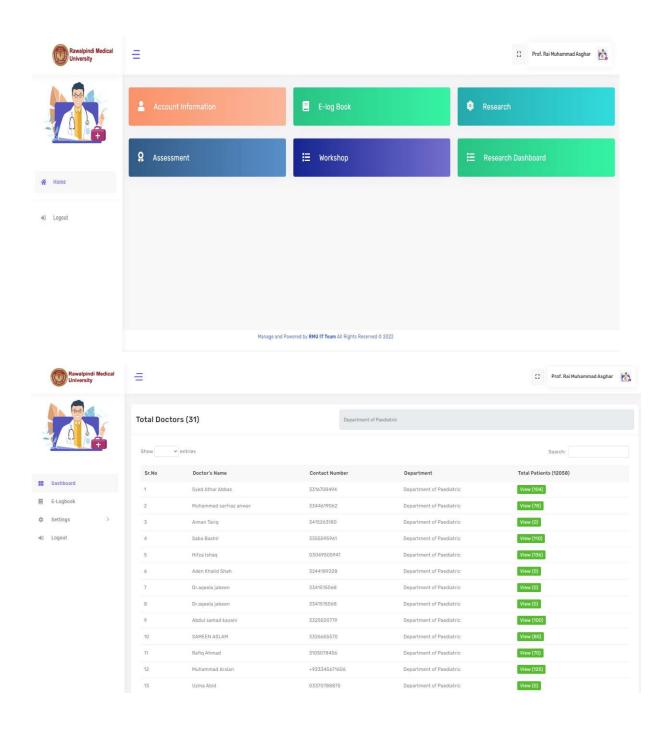
Drahsan nawaz

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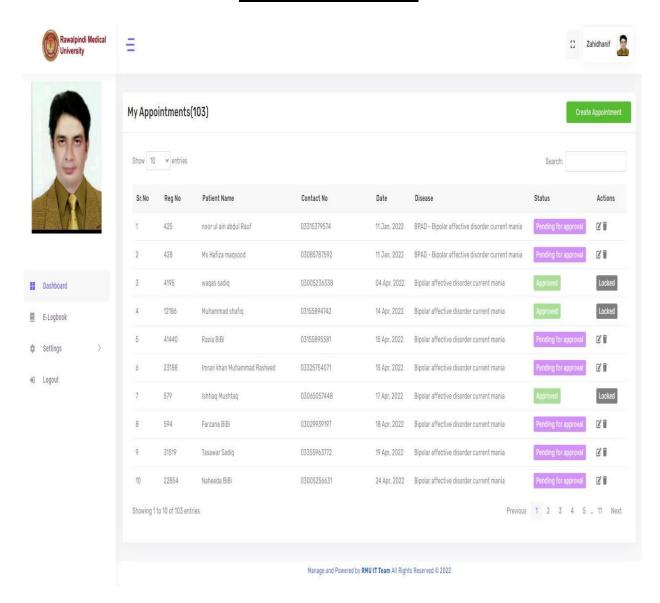
Department of Gastroenterology

Journal Club

## **Supervisor View**



## **Resident / PGT View**





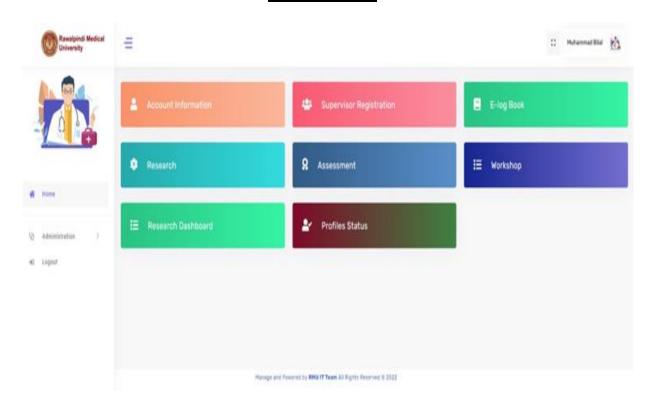


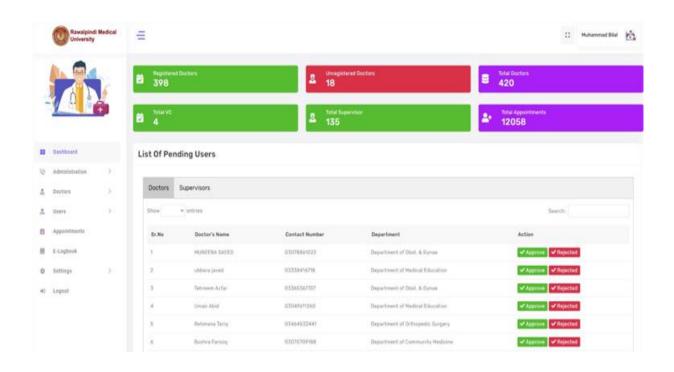
It is a structured portal in which certain types of educational activities and patient related information is recorded. E-logbooks are used for undergraduate to postgraduate training in electronic format.

Link: <a href="https://pgt.rmur.edu.pk/">https://pgt.rmur.edu.pk/</a>

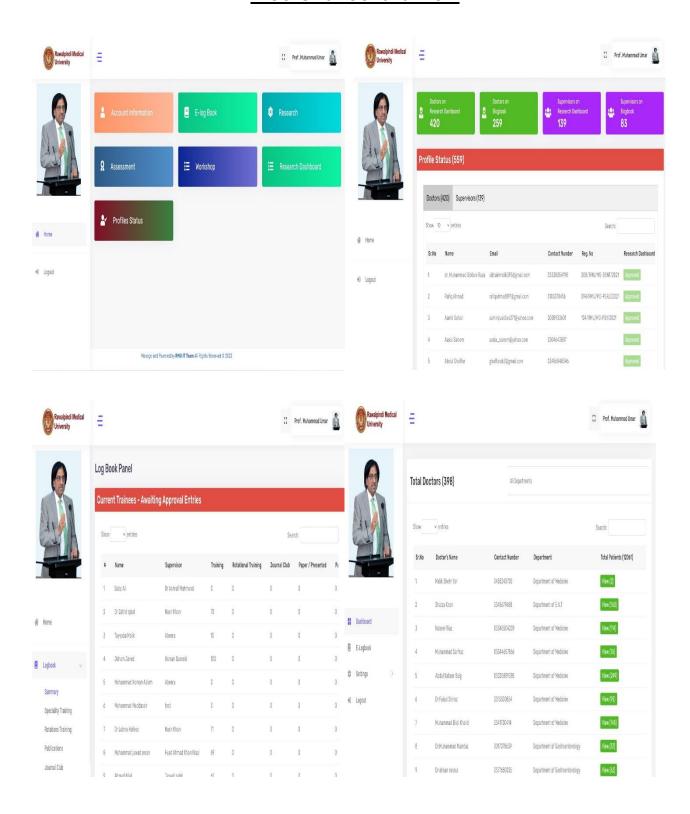


## **Admin View**

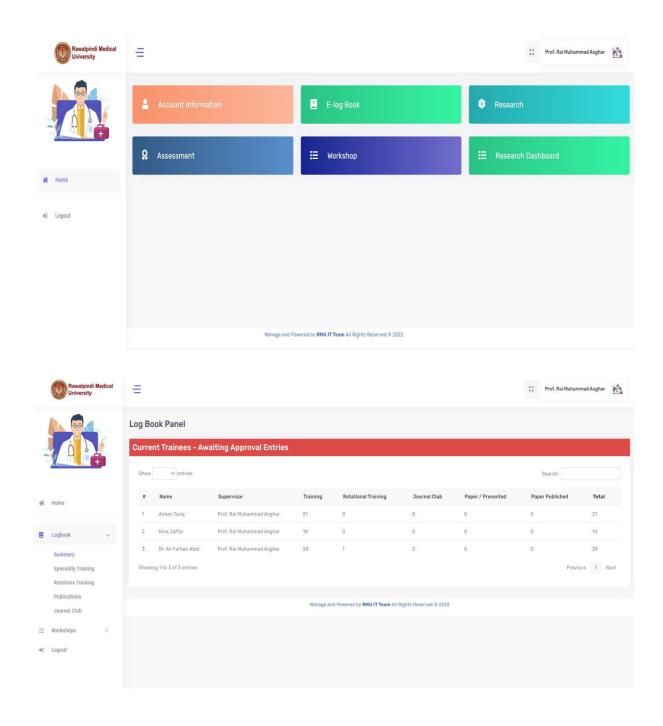




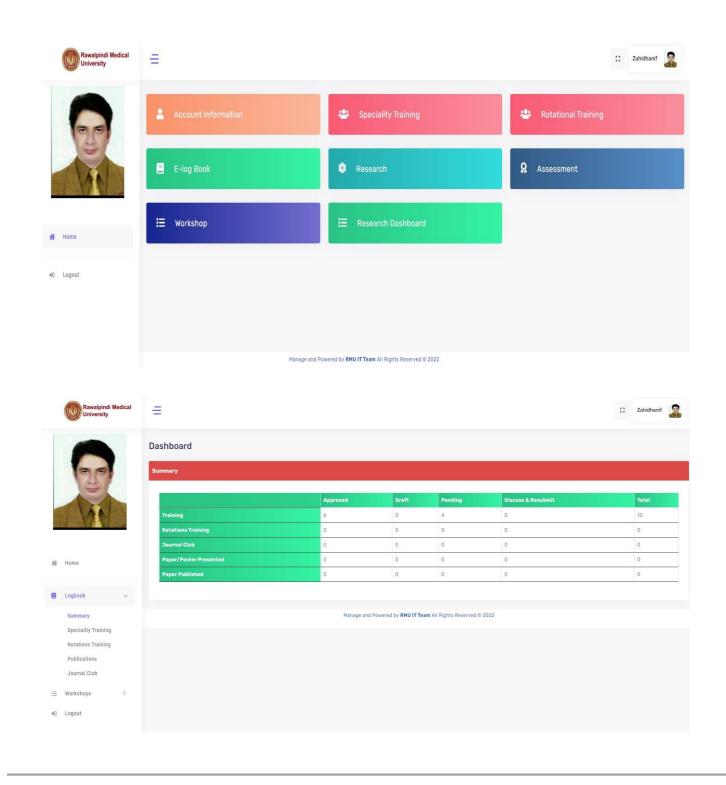
## Vice Chancellor's View



## **Supervisor View**



## **Resident / PGT View**





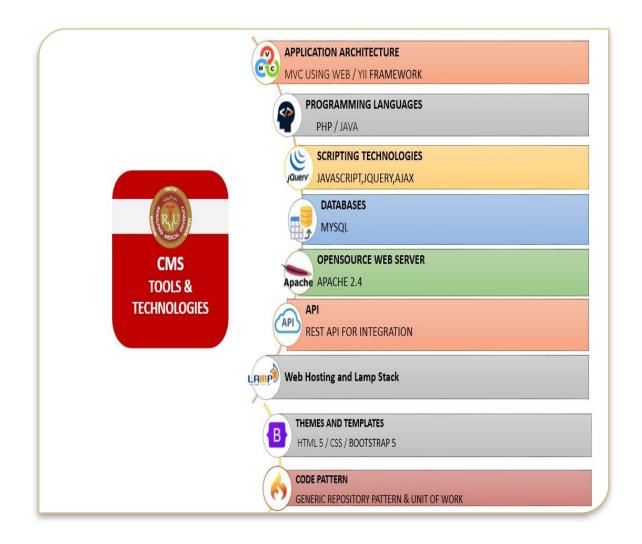


A Campus Management System (CMS) is in implementation stage in the RMU. It will automate the different key processes of university. From admission to examination.

The following modules have created:

- i. Student Profiling
- ii. Student Registration
- iii. Faculty Profiling
- iv. Academic Module

Link: <a href="https://cms.rmur.edu.pk/">https://cms.rmur.edu.pk/</a>



## i. Student Profiling

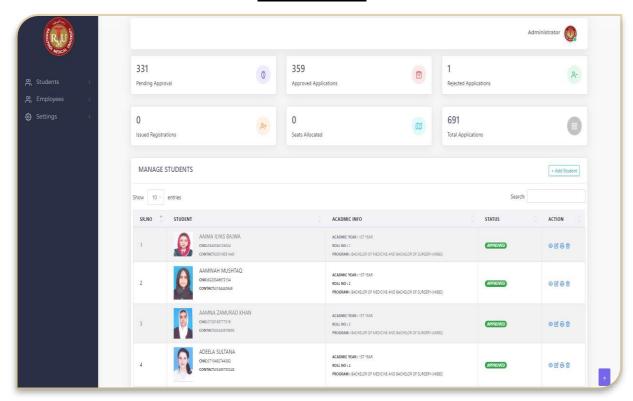
It includes student personal and educational information.

#### Sub Modules:

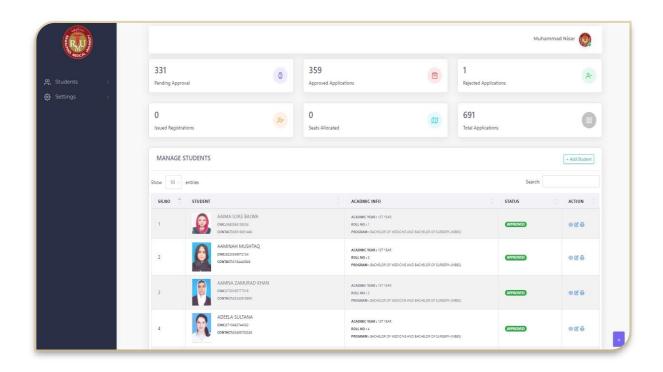
- a) Digital Admission Form with supporting documents.
- b) Verification by Student Section
- c) Timetable and Calendar View.
- d) E-Card printing

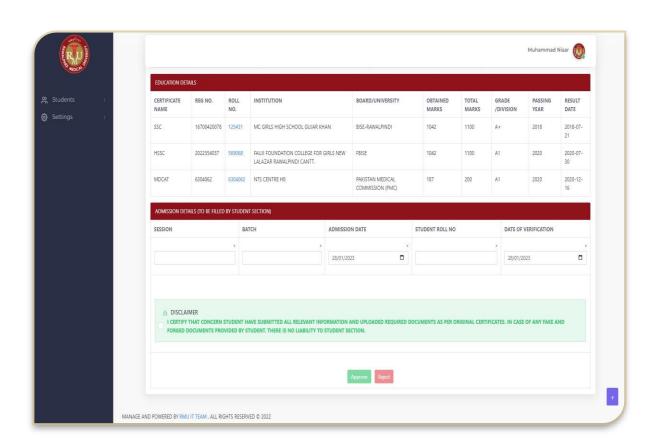


## **Admin View**

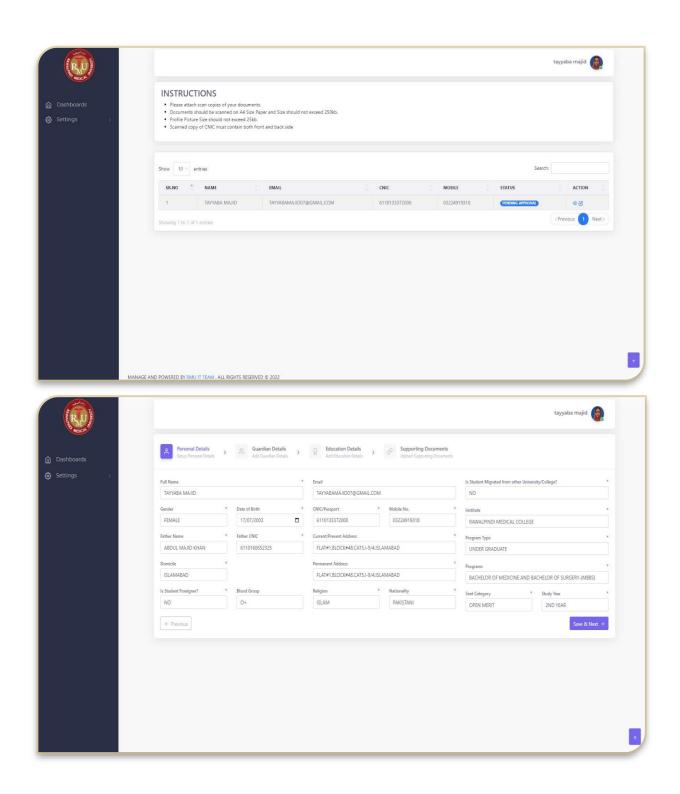


## **Verification By Student Section**



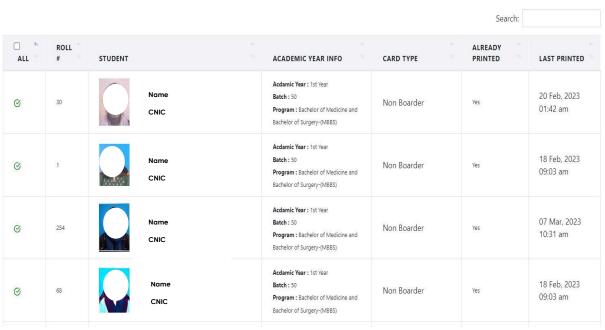


## **Student View**

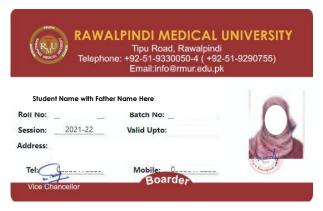


## **E-card Printing**

List of Students (359)







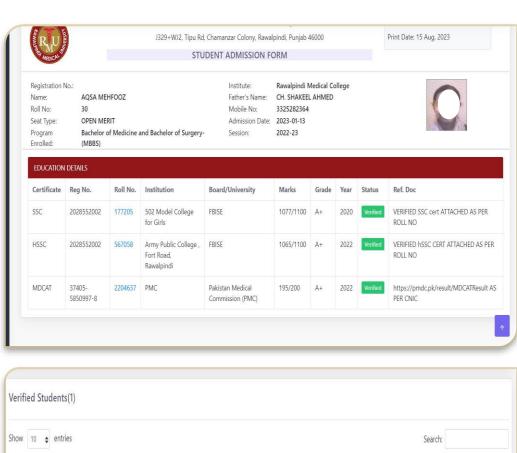
# ii. Student Registration

It includes student registration information.

#### Sub Modules:

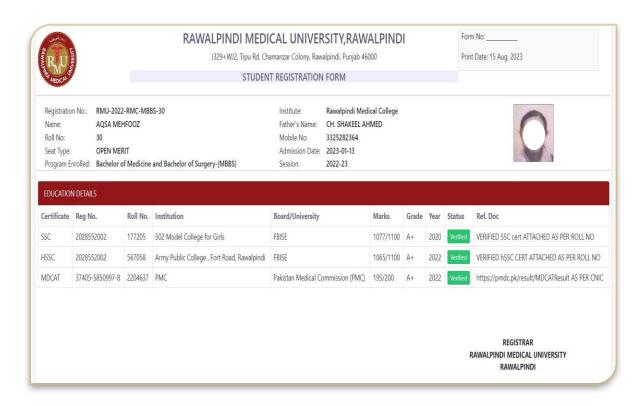
- a) Issuance of Registration Number
- b) Issuance of Registration Cards.

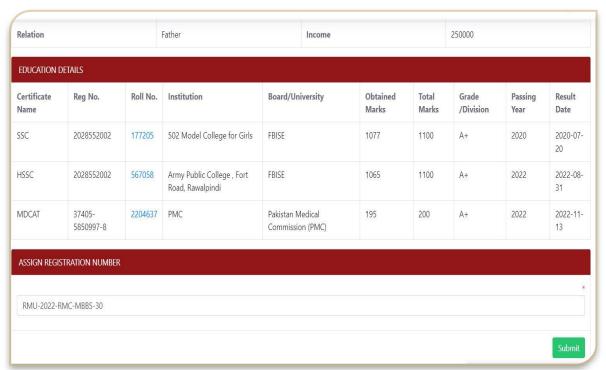
# **Documents Verification by Registrar Office**





# **Assign Registration Number and Print Certificate**



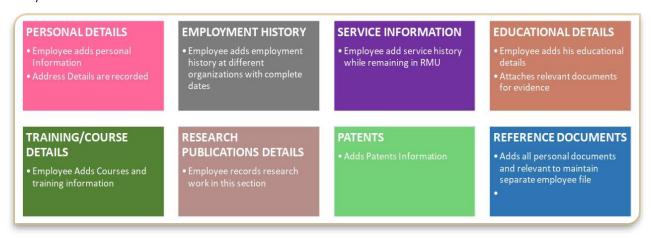


# iii. Faculty Profiling

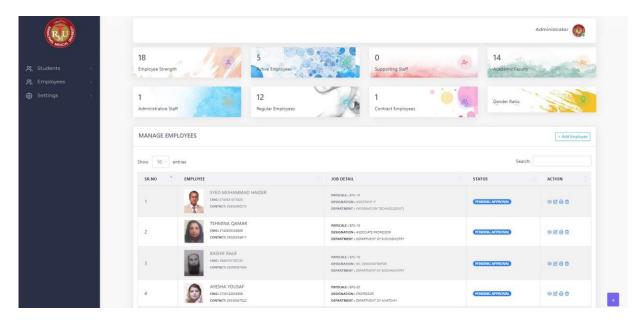
It includes faculty personal, educational, research and all relevant information.

#### Sub Modules:

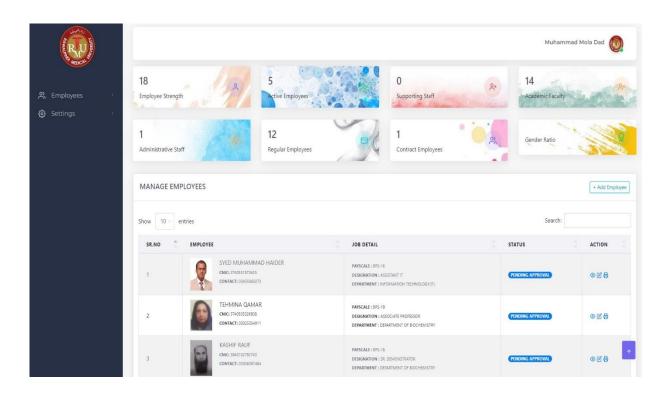
- a) HR Section Verification
- b) Dashboard
  - i. My Profile View
  - ii. My Academic Sessions View
- c) Teacher's Attendance
- d) Student's Attendance

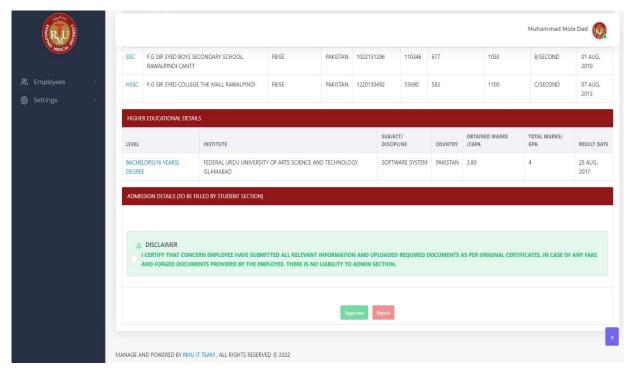


## **Admin View**

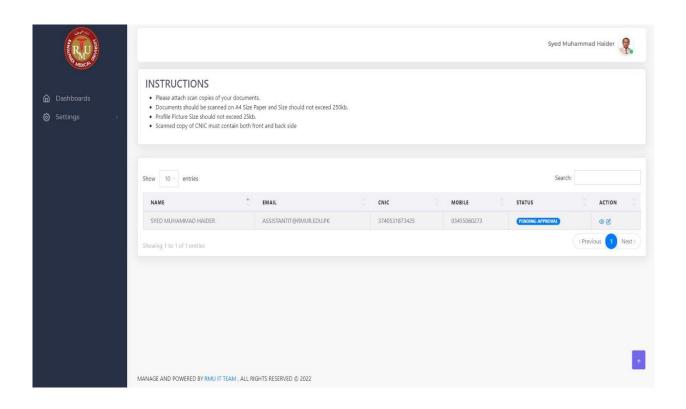


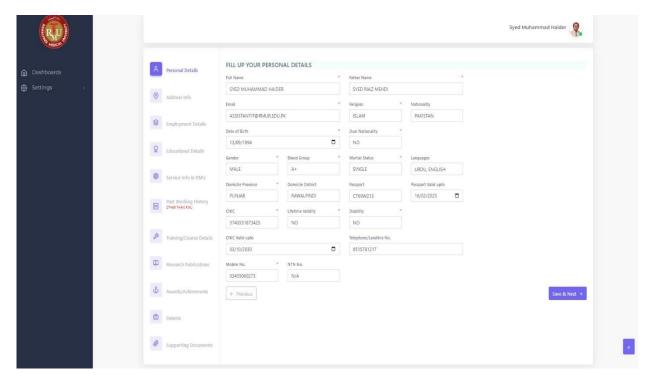
# **Verification By HR Section**





# **Faculty View**





#### iv. Academic Module

It includes all academic activities of integrated modular system.

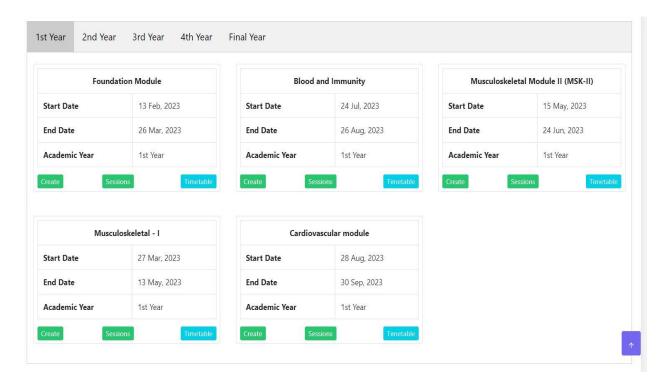
Department of medical education (DME) creates and manages the modules/Sessions/Batches etc.

Faculty and Students are directly engaged with their own profiles, Sessions, Timetable and Academic Colander.

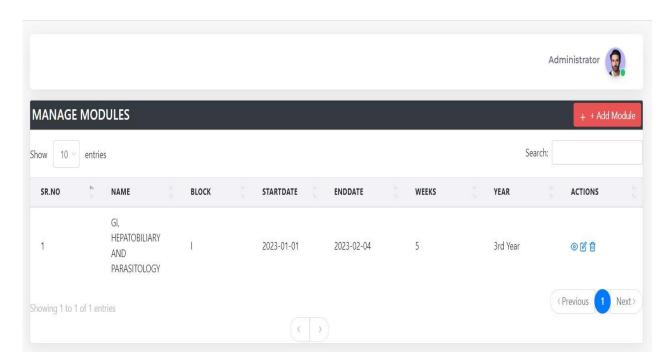
- 1. Configuration
  - ✓ Campuses/ Hospital
  - ✓ Departments
  - ✓ Venues
  - ✓ Batches
  - ✓ Programs
- 2. Academic
  - ✓ Module
  - ✓ Attendance
  - ✓ Schedules
  - ✓ Event
  - ✓ Calendar



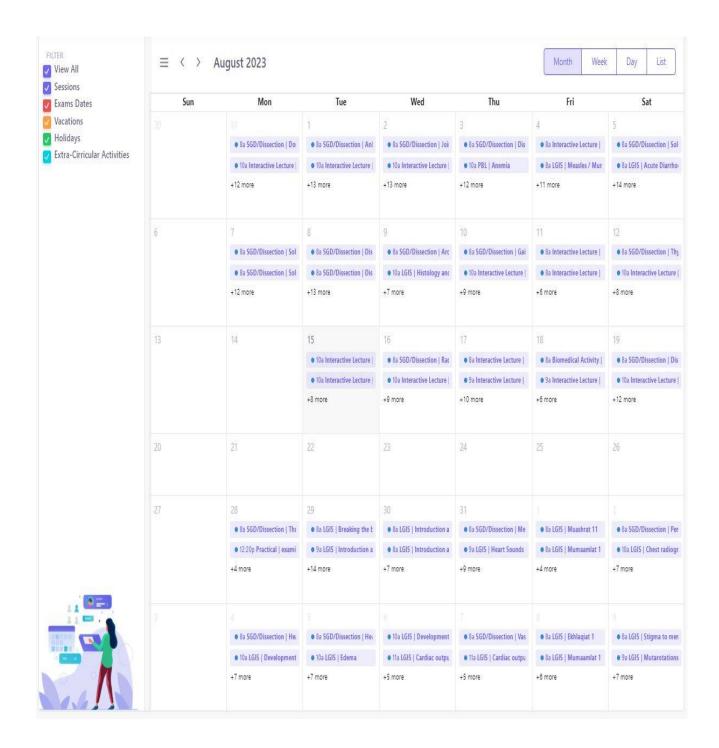
#### **Sessions**



# **Modules**



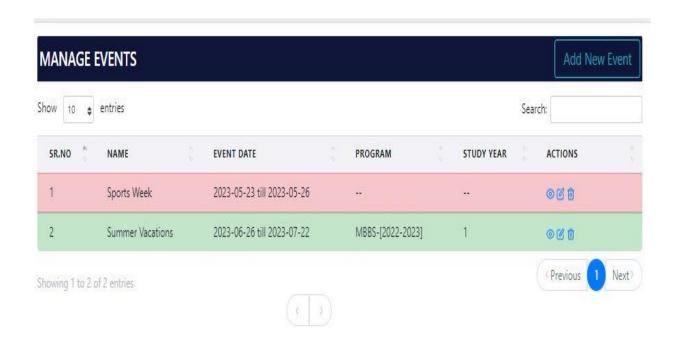
# **Academic Calendar**



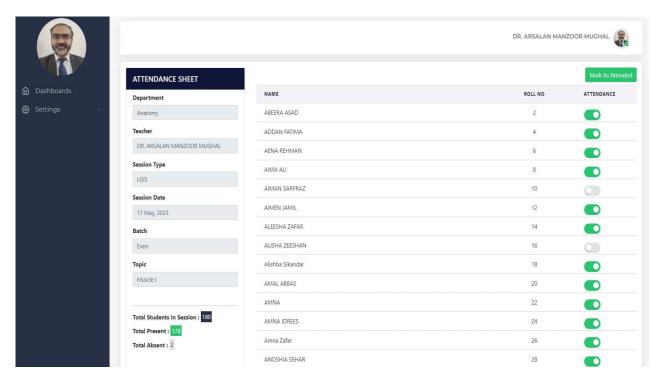
# **Configurations**

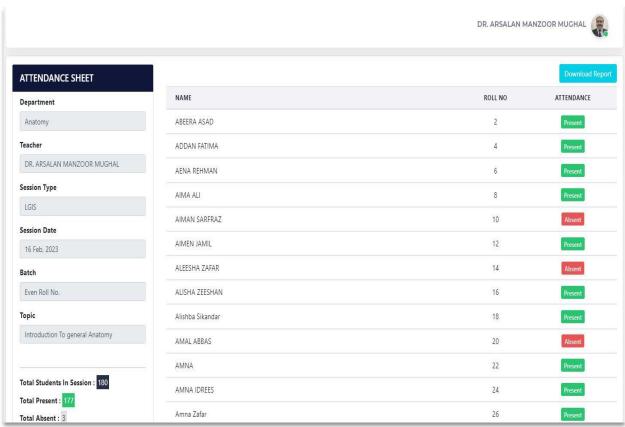


## **Events**

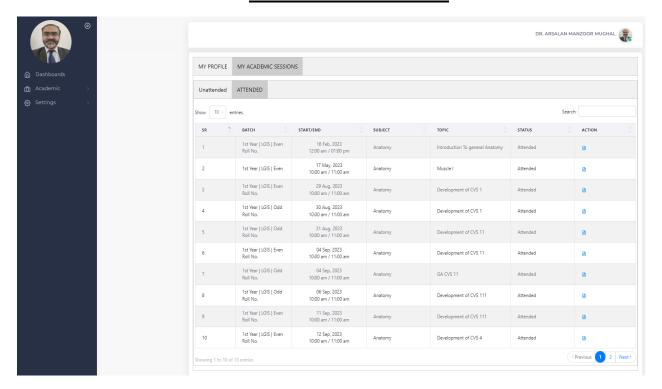


# **Student's Attendance**



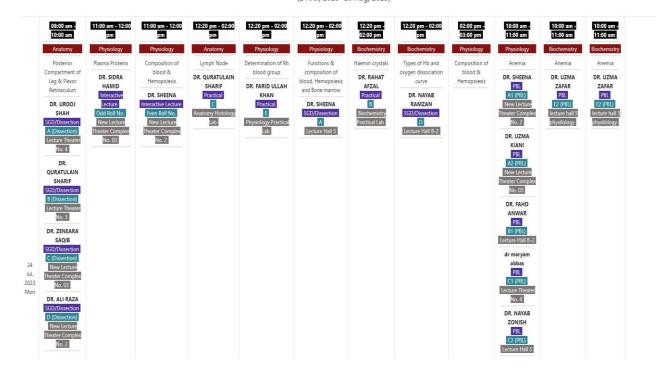


#### Teacher's Attendance



#### **Timetable**

Time Table For Blood and Immunity (24 Jul, 2023 -26 Aug, 2023)

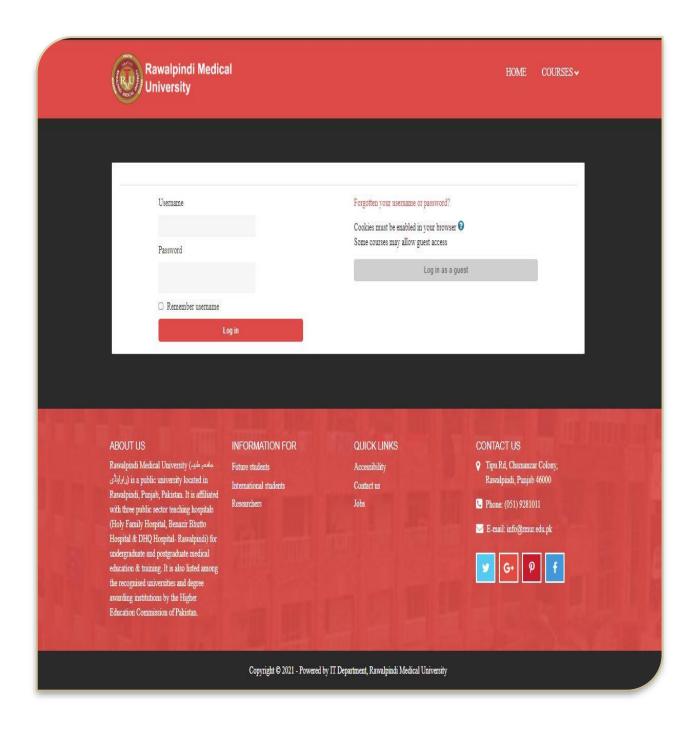




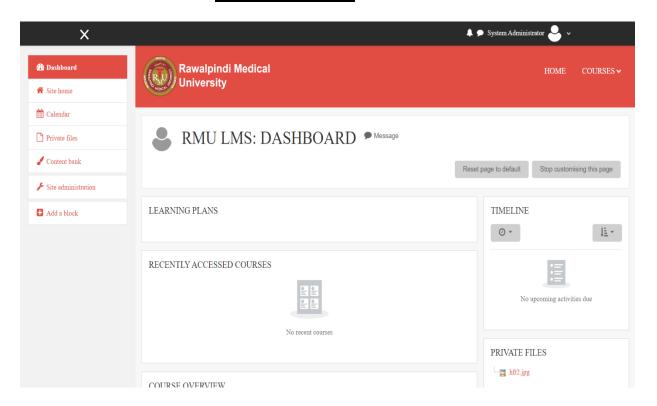


An online integrated software used for creating, delivering, tracking, scheduling, assessments and reporting of educational courses.

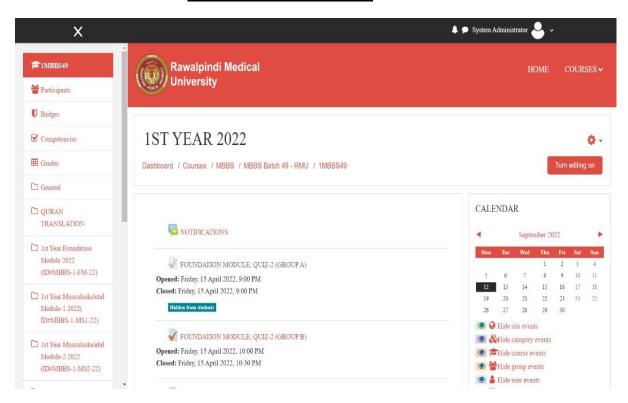
Link: https://clms.rmur.edu.pk/login/index.php



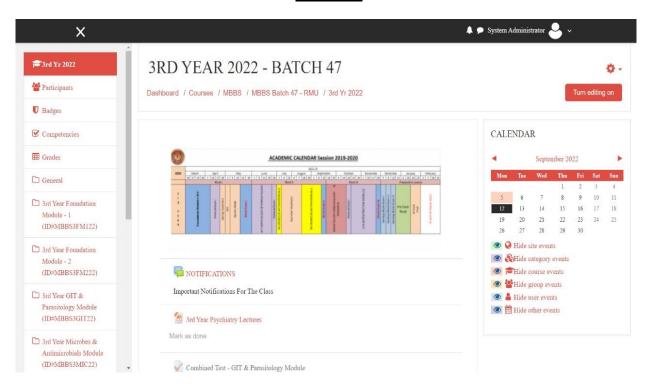
#### LMS Dashboard



# **Course/Assignments**



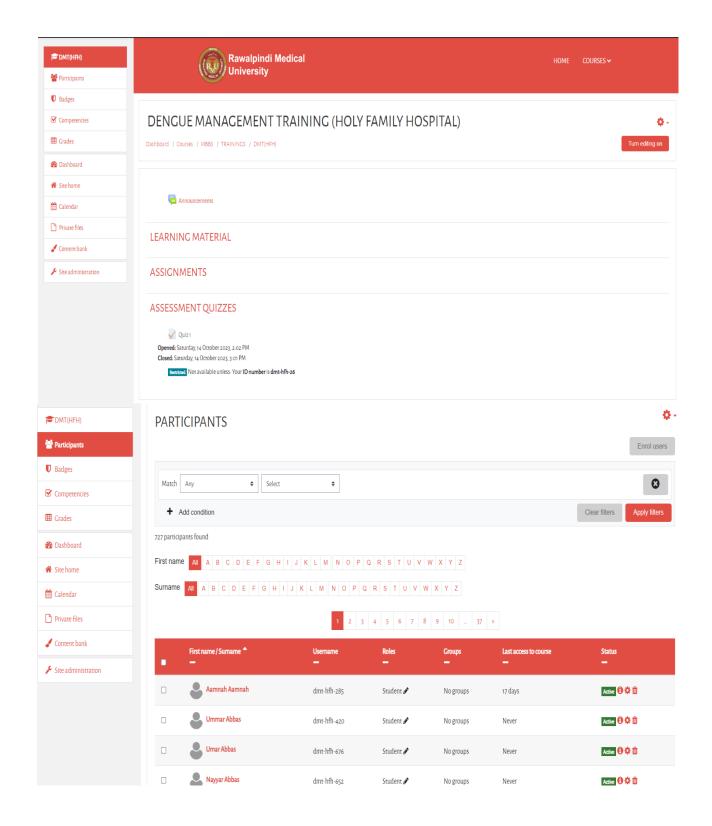
# **Reports**



<u>Statistics</u>				
Users:	3176			
Courses:	(Active 10)			
Questions:	4136			
Folders:	325			
Books:	3			
Attempted Quizzes and Results:	278			
Files / Notes:	64			
External Links:	18			
Assignments:	27			



# 11. Dengue Training Management program through LMS





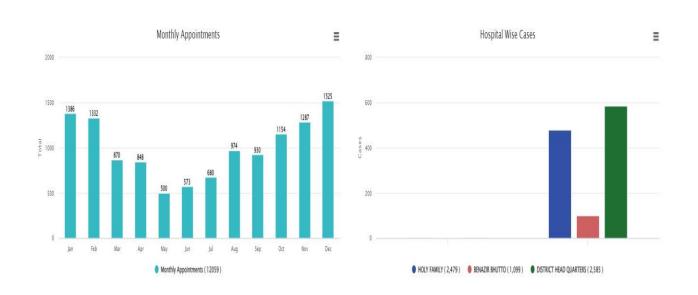




#### **CURRENT STATISTICS OF RESEARCH**

#### RAWALPINDI MEDICAL UNIVERSITY AND ALLIED HOSPITALS









Resume

#### **CURRENT STATISTICS OF DENGUE CASES**

#### RAWALPINDI MEDICAL UNIVERSITY AND ALLIED HOSPITALS

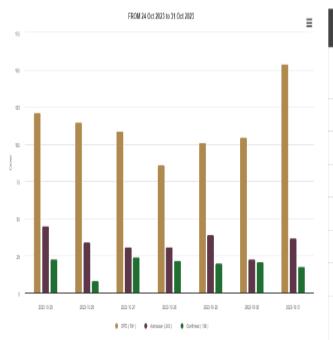
Since 1st January 2023











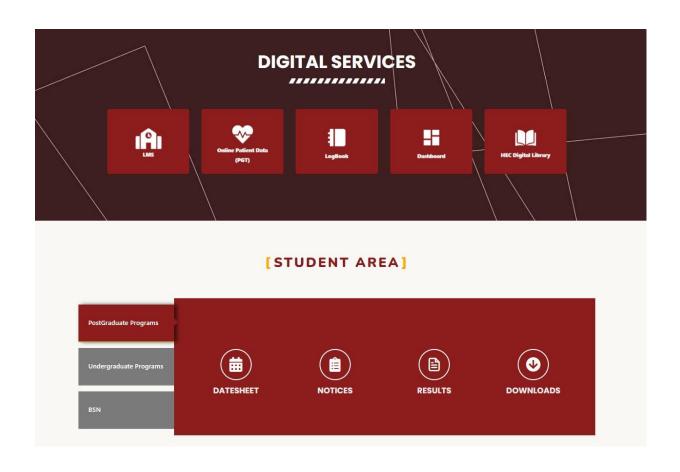
INDICATORS	HOLY FAMILY HOSP	BENAZIR BHUTTO HOSP	DISTRICT HEAD QUARTERS HOSP	TOTAL
Patients registered in Outdoor patient department (OPD)	715	51	25	791
Patients admitted	229	5	6	240
Confirmed Patients (Dengue fever)	113	13	10	136
Patients currently Admitted	56	-38	-27	-9
Patients admitted during last 24 hours	23	23	23	23
Patients discharged in last 24 hours	25	25	25	25
Patients Presented to (OPD) in last 24 hours	105	105	105	105
Confirmed Patients (Dengue Fever) in last 24 hours	21	21	21	21













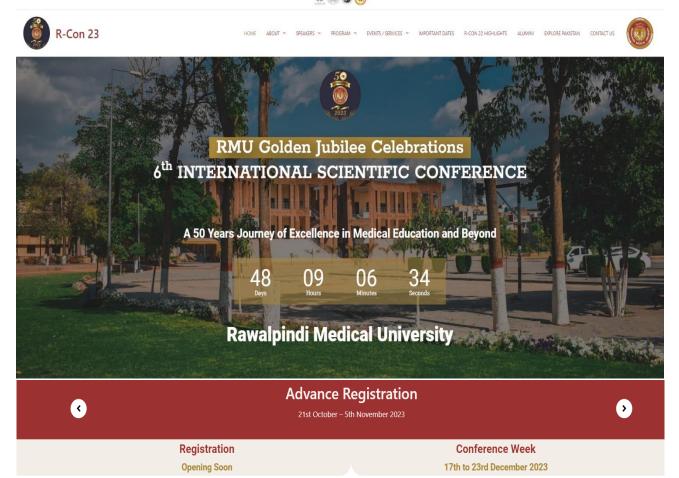
#### 15. Web Portal for RMU Golden Jubilee





#### 16. Web Portal of International Scientific Conference 23







Prof. Dr. Muhammad Umer
(Sitara-e-Imtiaz)
VICE CHANCELLOR, RMU

I am delighted to convey my immense pleasure as we approach the historic Golden Jubilee celebration of Rawalpindi Medical University (RMU) through its sixth international scientific conference, held in collaboration with esteemed partners such as APPNA, RMCAANA, RMCOF, APNEE, UK alumni, Australian Alumni, New Zealand Alumni, Rawalian and others. This event stands as a Mega Scientific Endeavor in the rich history of RMU. This momentous occasion presents a unique opportunity to share knowledge, innovations, and cutting-edge research with experts from the first world and professionals from the developing world. I extend my best wishes to all participants for a wonderful and successful Golden Jubilee RMU Conference, scheduled from 17<sup>th</sup> to 23<sup>rd</sup> December 2023. May this event serve as a beacon of excellence in medical education and research, and may it foster lasting connections and collaborations.



Prof. Dr. Jahangir Sarwar Khan (Principal RMC) CHAIRMAN ORGANIZING COMMITTE

This gives me immense pleasure to write about the fifth international conference of RMU in collaboration with APPNA, RMCAANA, UK alumni, Australian and New Zealand alumni, and others. It is indeed a Mega Scientific Endeavour in the history of RMU. This will be a great opportunity to share the knowledge, innovations, and cutting-edge research with the experts from first world and the professionals of developing world. The alumni from different countries will provide hands on training to the young doctors and students as Well as faculty of RMIJ, This time the APPNA merit is holding a full day research meeting and particularly involving the industry, local researchers and the regulatory bodies, There will be a Gala Dinner and Social Evening that will provide an opportunity to share the past memories of student life and social linkages of Alumni, The Host committee of RMU is working very hard to make this conference a great success. I am sure participants will enjoy the beautiful biossoming flowers of twin cities. I wish great success to all for a wonderful conference.

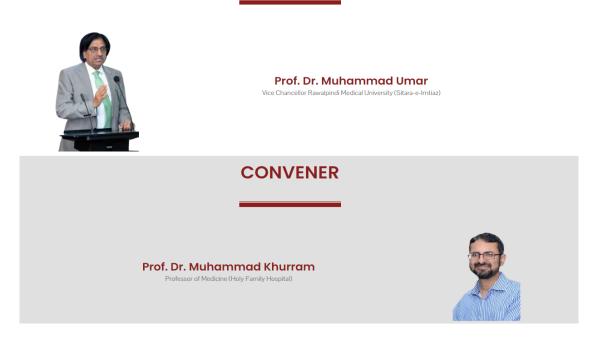




# 17. Web Portal Divisional Dengue Expert Advisory Group RMU & Allied Hospitals

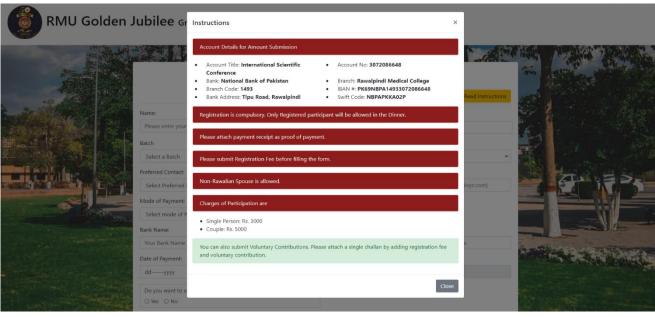


#### PATRON IN CHEIF



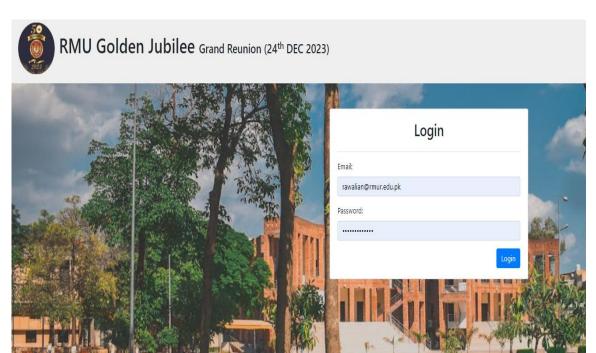


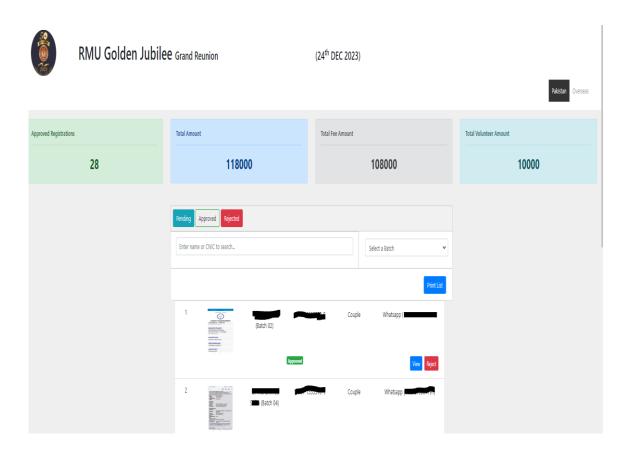
# 18. Web Portal for Rawalian's Conference Registration



#### Registration Form (Pakistan Only) Read Instructions CNIC: Please enter your name xxxxx-xxxxxx-x Batch Type of Registration: Select a Batch Select Registraion Type Preferred Contact: Contact Detail: Select Preferred contact Type (Preferred Whatsapp) Whatsapp or Mobile (+xx-xxx-xxxxxxx) or Email(abc@xyz.com) Mode of Payment: Select mode of Payment Transaction ID / Challan #: Your Bank Name Challan # for Bank Deposit / Transaction ID for Others Date of Payment: Amount of Payment: 3000 for Single/ 5000 for Couple Do you want to submit voluntary contribution? O Yes O No Challan Image: · Please uplaod a clear image. Maximum allowed size is 2 MB. · Only png / jpg formats are accepted Choose File No file chosen Copyright © 2023, Rawalpindi Medical, University | Powered & Developed by IT Department







# 19. Official / Institutional E-mail System



- i. Migration of unlicenced mailboxes to licenced mailboxes without any loss of data.
- ii. Enhance the capacity of data storage in mailboxes <u>1 GB to 1 TB</u> cloud storage per user.
- iii. Increase the number of email accounts from <u>200 to 5500</u> licenced account with the facility of one drive and Microsoft teams.
- iv. 150 Microsoft A3 activated licence for faculty.

#### Features:

- ✓ Outlook (Email)
- ✓ Teams (Meeting, Research Collaboration, Research Group)
- ✓ Forms (Survey, Quiz, Polls, Reviews)
- ✓ Office Applications (Word, Excel, Power point)

## 20. Software Licensing



Rawalpindi medical university has an engagement with Microsoft through HEC for volume licensing for their faculty students and researchers which includes Turnitin, Windows Server, MS Office 365 and MS Teams.

Turnitin (stylized as Turnitin) is an Internet-based plagiarism detection service.

- Unlimited license for faculty
- 300 licenses for students
- Faculty and students should have RMU official e-mail address.
- Instructor can create class and add students in class for research purpose.
- Uphold academic integrity.
- Superpower your assessment
- Foster original thinking

Link: <a href="https://turnitin.com/">https://turnitin.com/</a>

Microsoft Teams is a collaborative communication and collaboration platform developed by Microsoft. It is part of the Microsoft 365 suite of productivity tools and is designed to facilitate teamwork and communication within organizations. Microsoft

Teams offers a wide range of features and capabilities, including:

Chat and Messaging

· Video and Audio Conferencing

Channels

File Sharing and Collaboration

App Integration

Integration with Office 365 Apps

Notifications and Alerts

Security and Compliance

Mobile Accessibility

API and Developer Platform

Guest Access

Link: <a href="https://teams.microsoft.com/">https://teams.microsoft.com/</a>

21. Fiber Connectivity

Rawalpindi Medical University (RMU) has established fiber connectivity across various departments/auditorium/lecture halls and hostels, ensuring robust and high-speed communication throughout the campus. This initiative underscores RMU's commitment to providing efficient digital resources and connectivity to students,

faculty, and staff members.

Fiber Connectivity Highlights:

✓ Departmental Connectivity

✓ Hostel Connectivity

✓ High-Speed Data Transmission

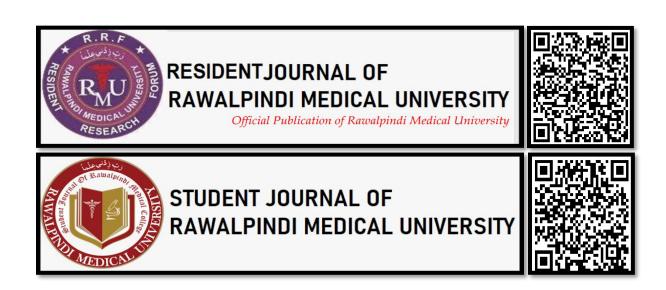
✓ Reliable Communication

# 22. Journals of Rawalpindi Medical University (Development and Technical Support)

RMU has a proper machoism for publishing and recognition of research work.

Following research journals are operated and managed by JRMU and IT department.

- i. Resident Journal of Rawalpindi Medical College
- ii. Student Journal of Rawalpindi Medical College
- iii. <u>Climate Change Journal</u>
- iv. Pakistan Medical Journal of Rawalpindi Medical College
- v. Journal of Nursing and Allied Health, Rawalpindi Medical College
- vi. <u>Journal of Rawalpindi Medical College</u>
- vii. Child Rights Journal









# PAKISTAN MEDICAL JOURNAL

Official Publication Of Rawalpindi Medical University





# JOURNAL OF NURSING AND ALLLIED HEALTH

Official Publication Of Rawalpindi Medical University





# JOURNAL OF RAWALPINDI MEDICAL COLLEGE

Official Publication of Rawalpindi Medical University





crJrmu

Children's Rights Journal of Rawalpindi Medical University Official Publication of Rawalpindi Medical University



#### 23. QR Code Generation System



Static URL based QR code generation system.

The implementation plan of the system is as follows.

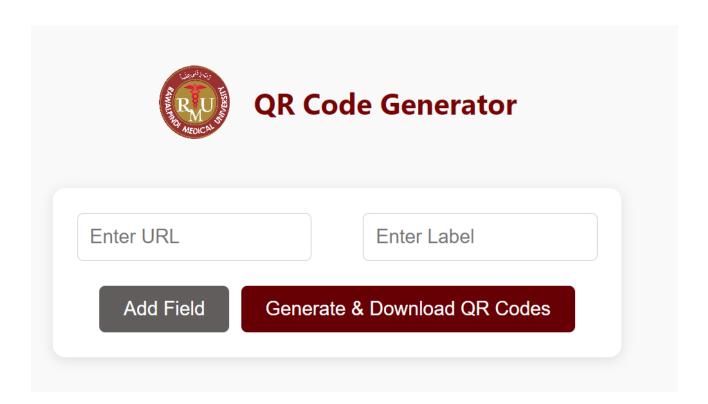
- ✓ Technical Evaluation
- ✓ Development
- ✓ Installation
- ✓ Integration
- ✓ Pilot Testing
- ✓ Training (Focal Person)

The QR Generation application is now fully operational and ready for use.

The salient feature of the system is as follows.

- ✓ Generates URL based QR codes.
- ✓ GUI Application

Link: <a href="http://qr.rmu.local:3000/">http://qr.rmu.local:3000/</a>



#### **ONGOING / FUTURE PROJECT**

- 1. Campus Management System (CMS)
  - i. Promotion/ Retention Module
  - ii. Archive Module
  - iii. Attendance management system and reporting.
- 2. IT base capacity building for faculty, researcher and staff
- 3. Authentication system Deployment (It includes Domain, DNS, File server, DHCP, Windows Software Upgrade Server WSUS etc.)
- 4. E Portfolio of Postgraduate Trainee Program
- 5. Job and Admission portal
- 6. Upgradation of IT infrastructure at NTB
- 7. IT infrastructure for RMU research lab complex
- 8. Faculty/Students facilitation center
- 9. Digitalization of RMU library
- 10. Application software for research lab management
- 11. Asset/Store management system
- 12. Indent and inventory management system
- 13. Complaint Management System
- 14. Examination Management System

# Department of Information Technology Rawalpindi Medical University, Rawalpindi