

# EDUCATIONAL NETWORK



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*Pakistan*

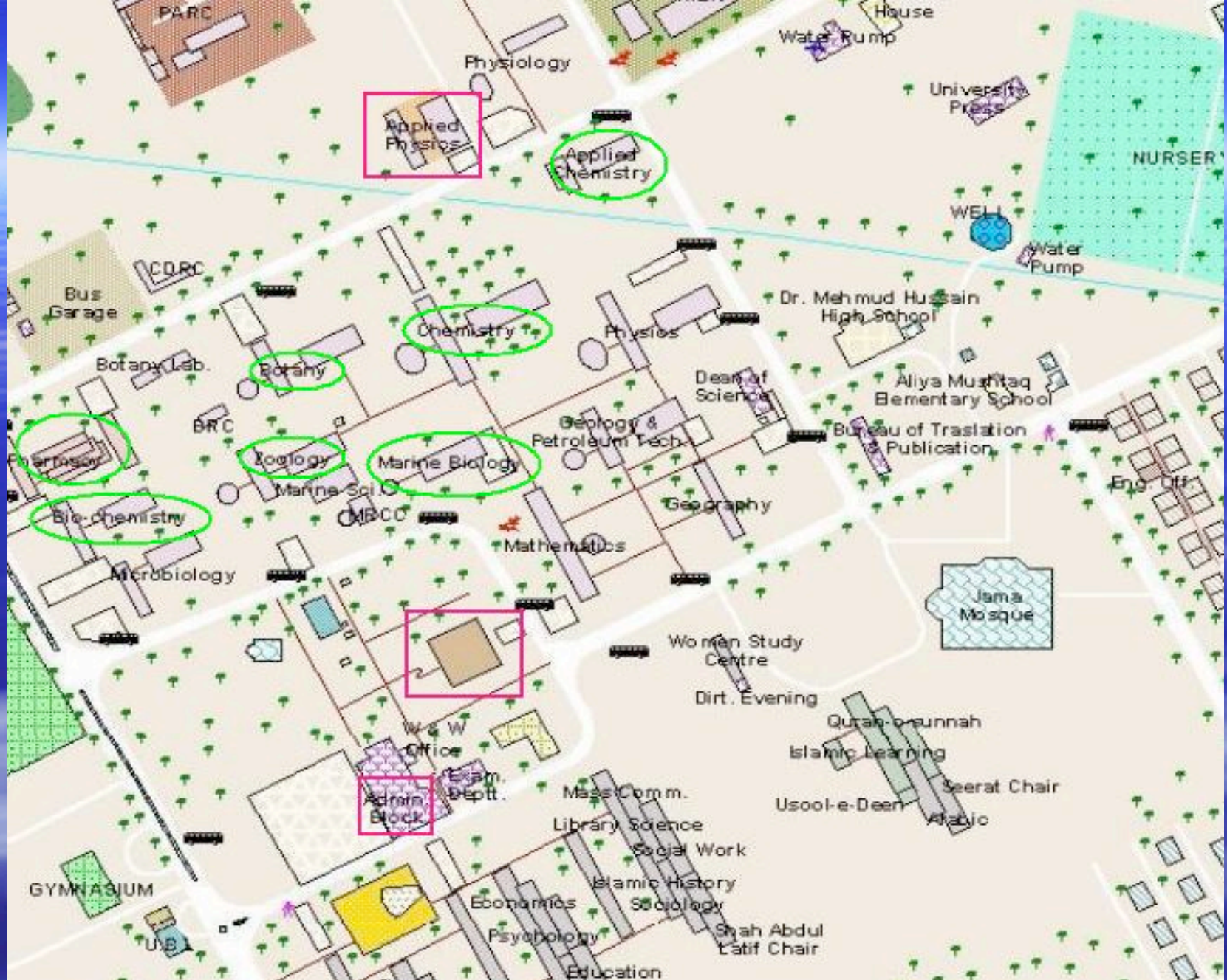
# Introduction to University of Karachi

- § The campus is spread over 1279 acres of land, situated 12 Km away from the city center.
- § Altogether over 12,000 regular students are enrolled in the 51 departments functioning under 5 faculties of Arts, Business Administration, Commerce, Islamic Studies, Pharmacy and Science, as well as 17 research institutes and centers. Of Almost 4 percent of the students are foreigners who have come to the University of Karachi from 23 different countries of the world.

- § More than 90 colleges are affiliated to this University, and therefore University of Karachi is an affiliating, examining and teaching body, and hence caters to the teaching requirement of 10 million population of the city. University also arranges examination, result and degrees of about 150000 students other than studying at the campus.
- § University being located in the port city of Karachi, serves as the window of higher education in Pakistan.

- § Up until now 150 Ph.D., 400 M.Phil, degrees have been awarded, and only from the Faculty of Pharmacy more than 400 research papers have been published.
- § The university has acquired a high status in the field of education in Pakistan as well as abroad within a short span of 54 years.
- § Presently it occupies a prominent place especially in the teaching and research in Science, Pharmacy, Business Administration and Medicine.





Map of Karachi University

# Basic Setup:

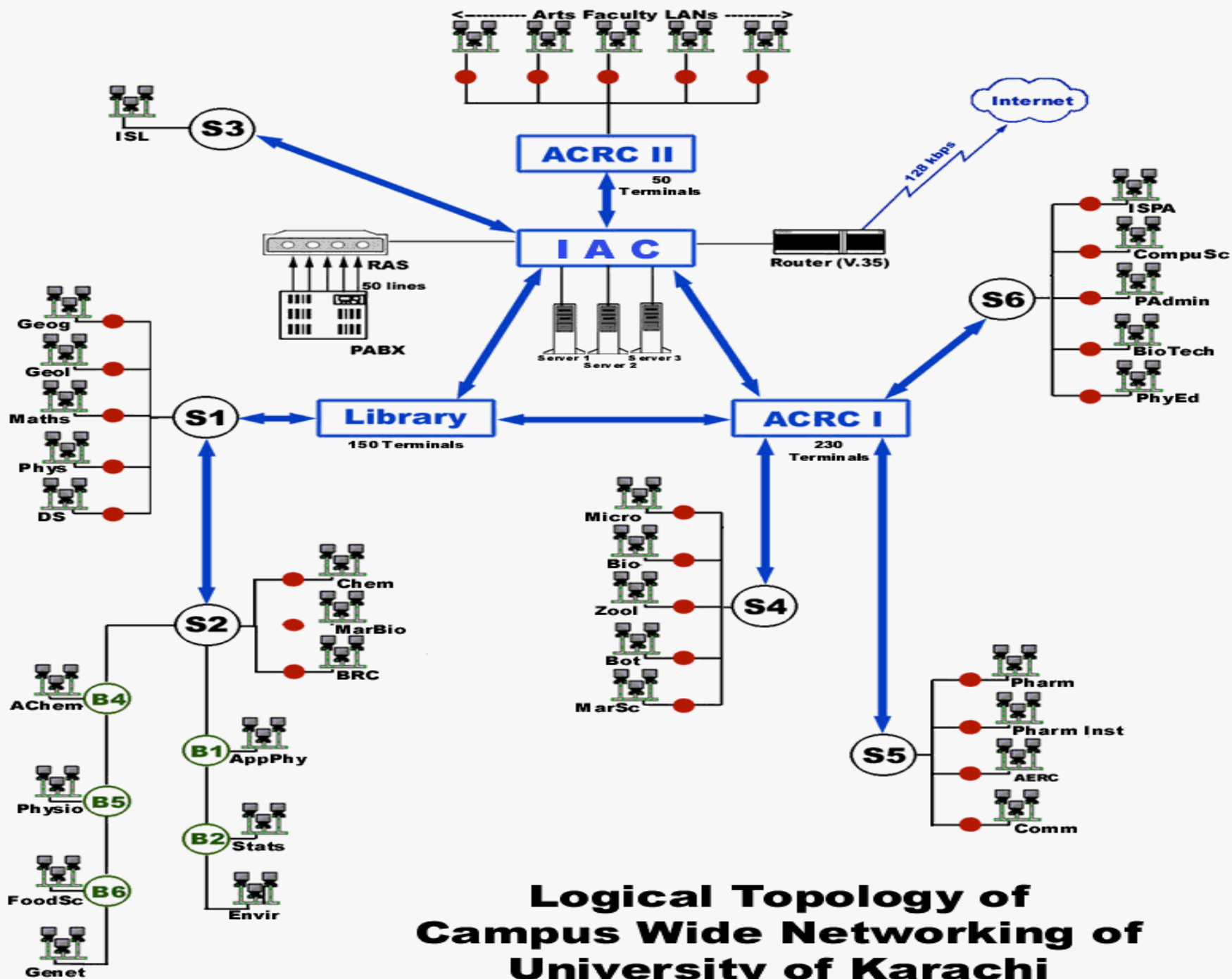
- There is a central point for accessing internet, called Internet Access Centre (IAC). It is located in main administration block at ***Karachi University, Pakistan.***
- Internet bandwidth has been provided by a local ISP via fiber optic cable to the **IAC.**
- This **IAC** has been developed with the financial support of local Government.



- The internet facility is available to all faculties, staff members, and students through dialup connection.
- Departmental local area networks will be connected to the **IAC** via fiber optic channel. Currently only the Dr.Mahmud Husain Library is connected through the fiber optical link.
- Through this university intranet, researchers can exchange their ideas and can arrange research activities of their interest.

- § Internet connectivity was started from a local ISP and that internet connectivity was of 64 kbps.
- § Now, we have a leased line at 128 kbps that will be upgraded to 2 Mbps after the completion of local area fiber network.





# Equipments:

The **IAC** houses the following equipments:

- § Remote Access Server
- § Radio Modems
- § Router (Cisco 2600 Series)
- § Windows 2000 Server for DNS and user authentication
- § Red Hat Linux for Proxy Servers
- § Proxy Servers = Squid/Cache Org.
- § Email Server = MS exchange 5.5
- § Web Server = IIS 5.0

# Email, Authentication servers





# Servers

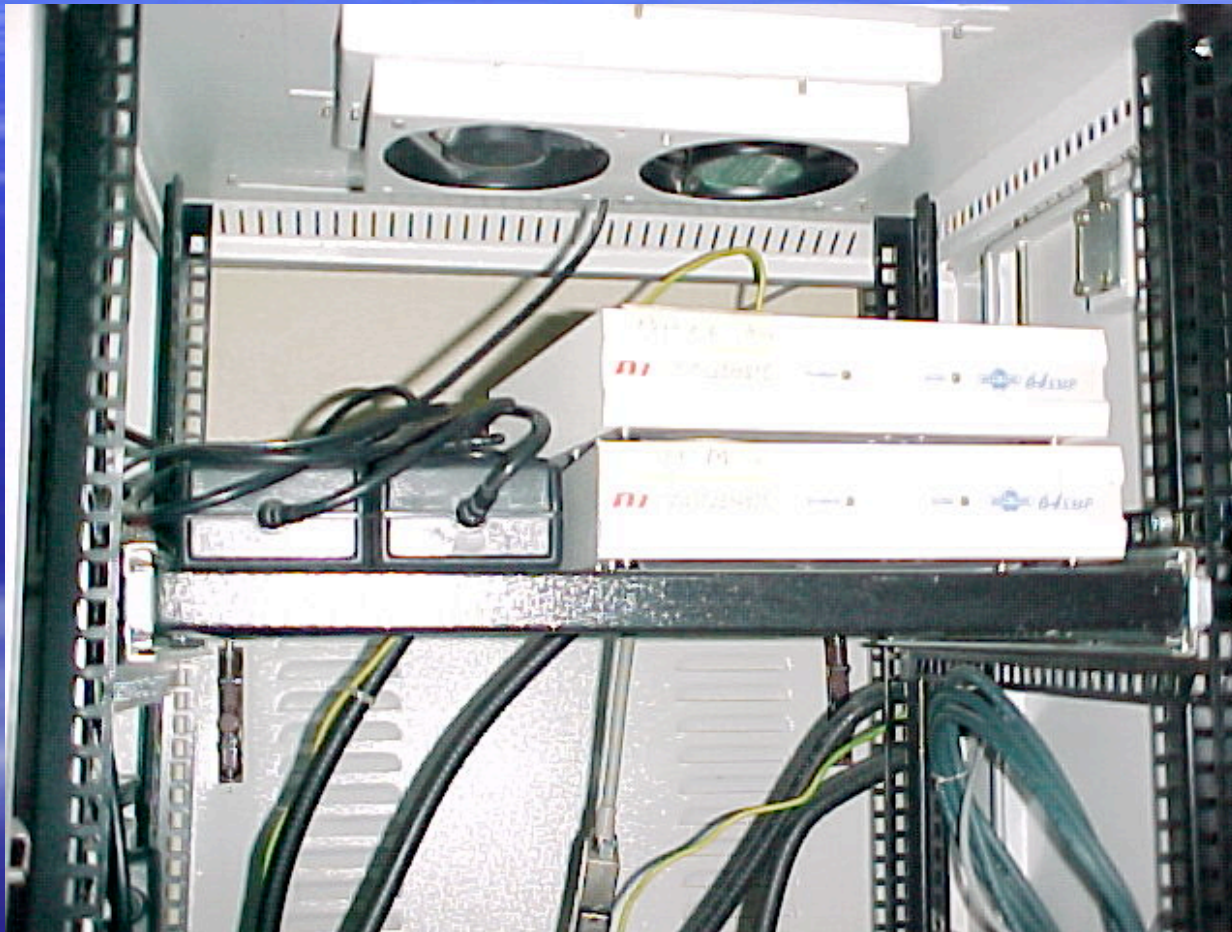


# Rack mount



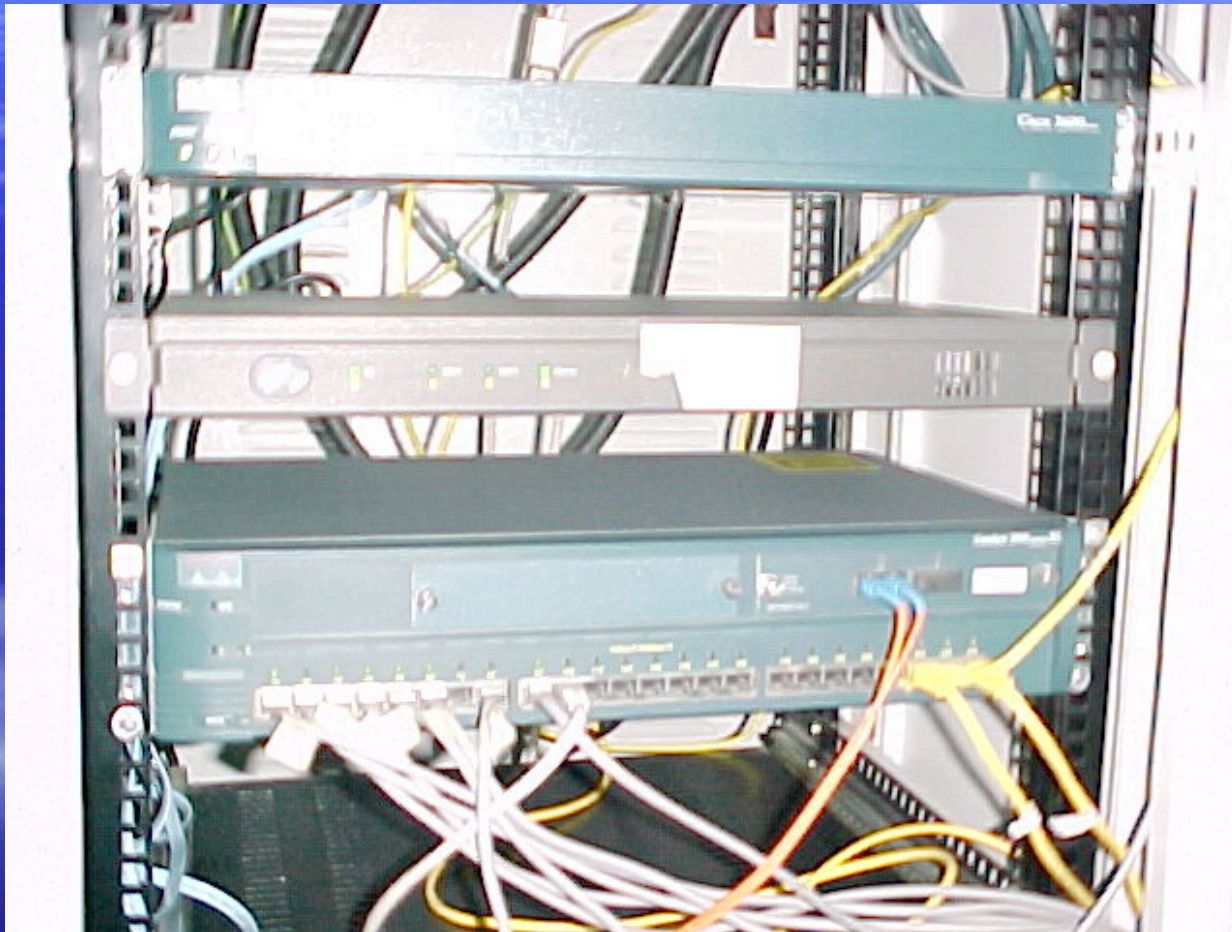


# Radio modems

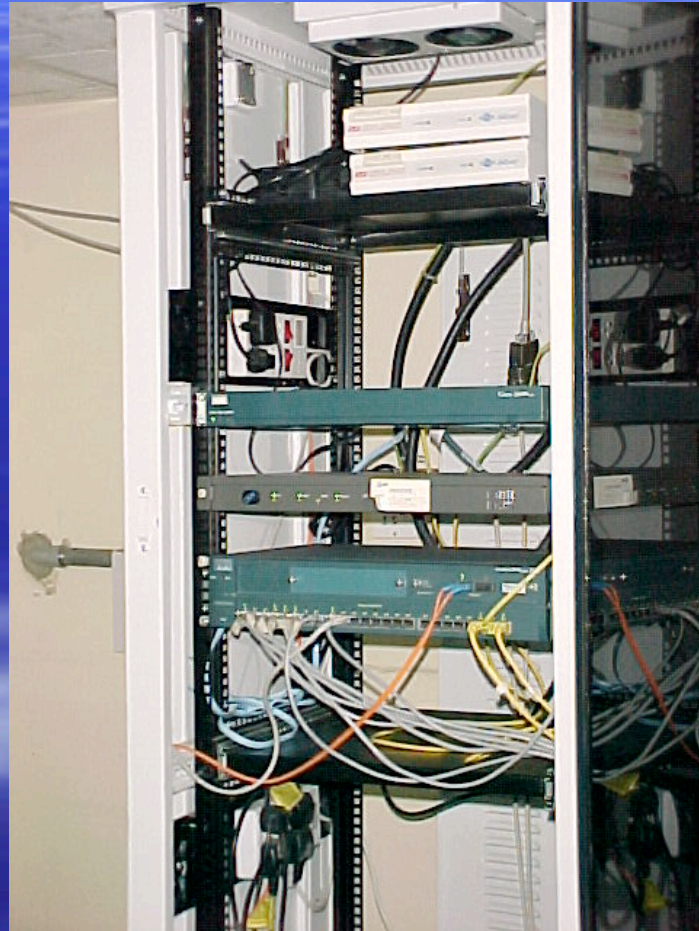




# Cisco core Routers

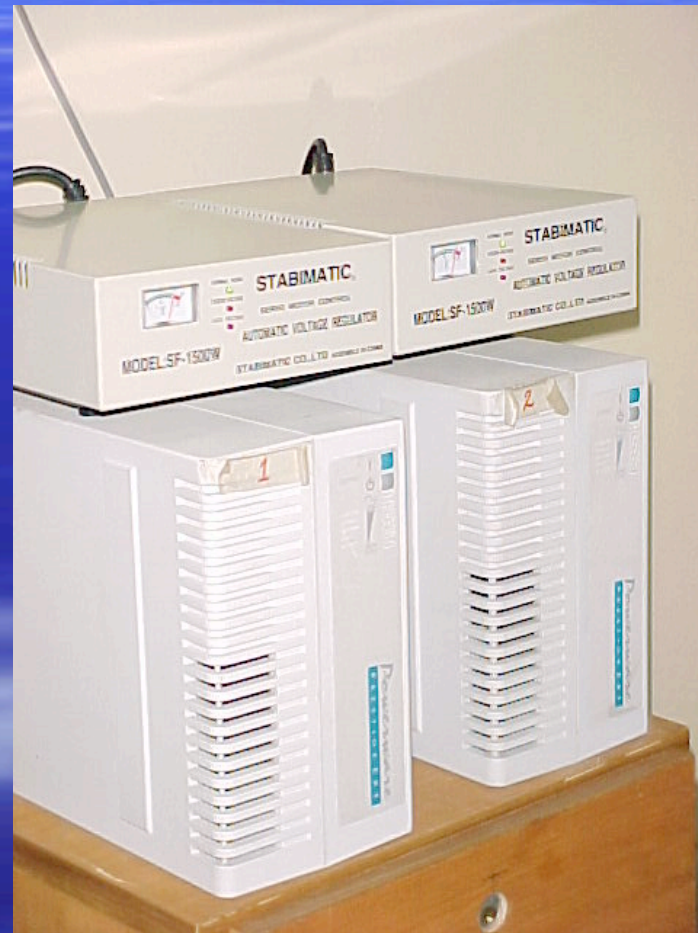


# Core switch with Routers



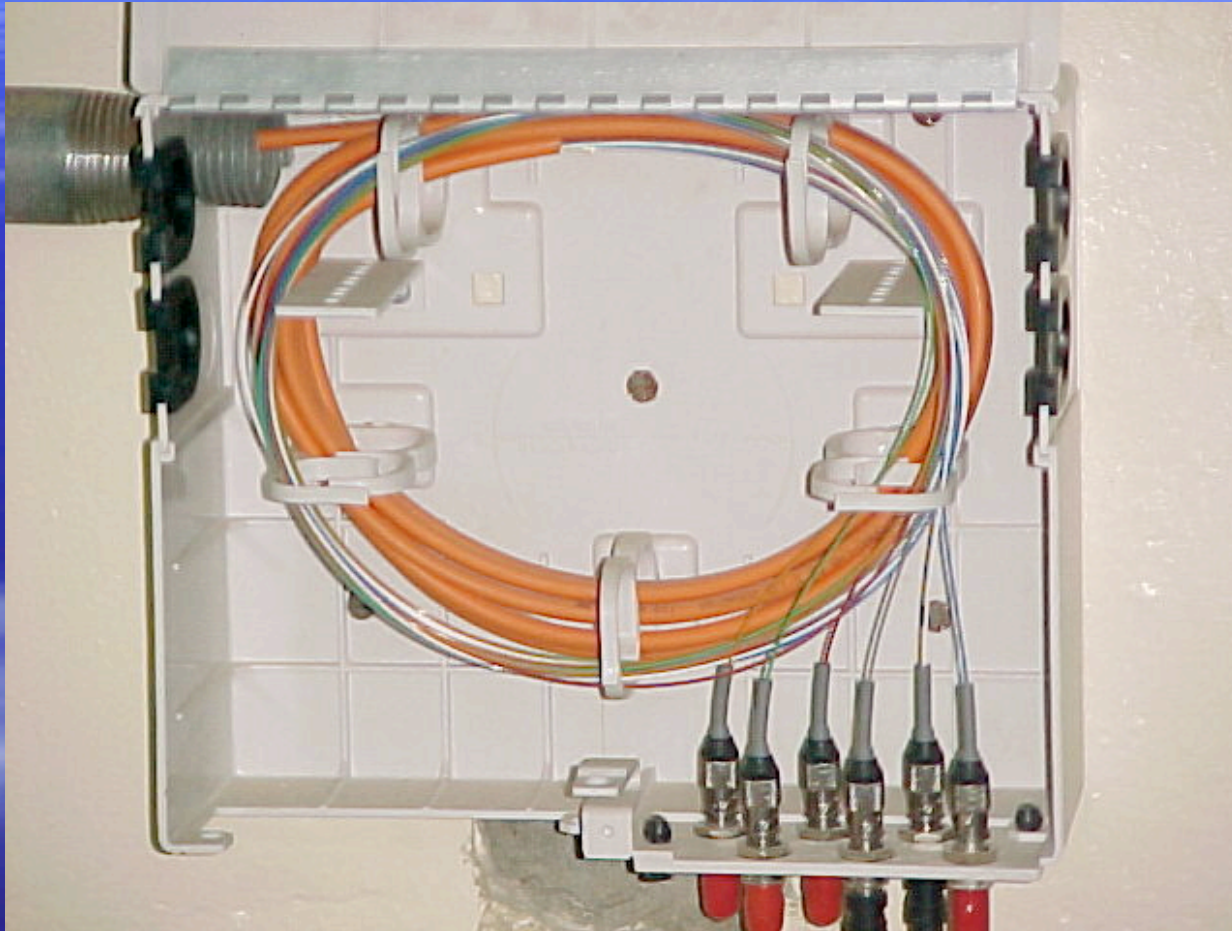


# UPS (Uninterrupted power supply)





# Fiber Connectivity to the Dr.Mahmud Husain Library



# Fiber Cable enclosed in pipes (Library)



# Facilities:

§ Provide dialup access to all faculty members through existing local telephone exchange setup.

§ Internet Services:

- Email
- Web Browsing



## Facilities at Library:

§ Word Processing

§ Web Browsing

§ Scanning

§ Printing

# Web Hosting:

- § <http://www.ku.edu.pk>
- § <http://www.aphy.ku.edu.pk>
- § <http://www.apchem.ku.edu.pk>
- § <http://www.biochem.ku.edu.pk>
- § <http://www.botany.ku.edu.pk>
- § <http://www.chem.ku.edu.pk>
- § <http://www.library.ku.edu.pk>
- § <http://www.phil.ku.edu.pk>
- § <http://www.pharm.ku.edu.pk>
- § <http://www.zoology.ku.edu.pk>

# Benefits:

- § Students are now getting as much information as they want for their research work and can have the latest information through internet.
- § Through educational intranet, we are collaborating with all government and private universities.



# Future Enhancements:

- § Development of large internet lab in the central library that can accommodate approximately 100 students at a time.
- § LAN is now in progress to connect all the faculties and its subsidiary department, on the back bone of optical fiber.
- § This optical fiber will not only provide the data network but also accommodate the voice and video facilities among the faculty staff.
- § We will also implement the upcoming technologies like wireless networks.



Thank you!!