



POST GRADUATE DEPARTMENT OF COMPUTER SCIENCES

University of Kashmir, Srinagar-190006

NAAC Accredited Grade "A+"

NOTES

Minutes of the Departmental Committee Meeting held on 17th April, 2026

A Departmental Committee Meeting was held on 17th April 2026 at 2:00 p.m under the Chairmanship of the Head of the Department in his office chamber and following were present.

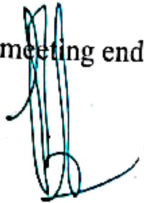
1. Prof. Javaid Iqbal	Professor & Head	in the Chair
2. Prof.M. Arif Wani	Professor	
3. Prof. Majid Zaman	Professor	
4. Dr. Manzoor Ahmad Chachoo	Scientist-D	
5. Dr. Sajad M. Khan	Scientist-C	
6. Dr. Sajid Yousuf Bhat	Sr. Assistant Professor	
7. Dr. Abid Sarwar	Sr. Assistant Professor	

The following issue was discussed:

Item-I:

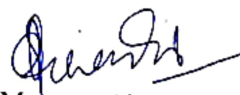
In light of letter No.F(Syllabus)DR/KU/26 dated: 17-04-2026 regarding framing of syllabus for the post of Senior Technical Assistant advertised vide notification Notice No.06 of 2026, dated: 28-03-2026 issued by Chairman, Screening Committee, the Departmental Committee framed the syllabus for the said post comprising 10 units, duly vetted and approved, as annexed in the Annexure-I to these minutes.

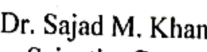
The meeting ended with a vote of thanks to the chair


Prof. Javaid Iqbal
HOD

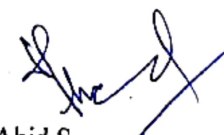

Prof. M. Arif Wani
Professor


Prof. Majid Zaman
Professor


Dr. Manzoor Ah. Chachoo
Scientist-D


Dr. Sajad M. Khan
Scientist-C


Dr. Sajid Y. Bhat
Sr. Assistant Professor


Dr. Abid Sarwar
Sr. Assistant Professor

Proposed Unit-wise Syllabus for the post of Senior Technical Assistant

Unit 1: Network Device Configuration and Secure Access

- Configure console, Telnet, and SSH access on Cisco devices with authentication and encryption settings.
- Configure enable secret and service password encryption.
- Assign IP addresses to interfaces, including calculating subnet masks, determining wildcard masks, broadcast addresses, and default gateways.
- Use both classfull and classless addressing schemes.

Unit 2: VLANs and Inter-VLAN Communication

- Configure VLANs on managed switches.
- Assign switch ports to specific VLANs.
- Set up trunk links using IEEE 802.1Q encapsulation.
- Implement Inter-VLAN routing using Router-on-a-Stick (ROAS) or Layer 3 switches.
- Verify connectivity between VLANs.

Unit 3: DHCP and Network Address Translation

- Configure DHCP services on routers or dedicated servers.
- Configure DHCP pools, excluded addresses, lease time, and verify DHCP bindings.
- Implement NAT (Static, Dynamic, PAT) for private-to-public IP translation.
- Validate NAT functionality through simulation and testing.

Unit 4: Network Security and Switching Protocols

- Secure switch ports using Port Security (sticky MAC, shutdown, restrict, protect modes).
- Configure Spanning Tree Protocol (STP) and Rapid STP (RSTP).
- Assign bridge priority manually to optimize path selection and prevent switching loops.

Unit 5: Routing Protocols and Access Control

- Implement Static Routing and Default Routing.
- Configure dynamic routing protocols.
- Implement route redistribution between protocols (e.g., OSPF and EIGRP).
- Configure Standard and Extended Access Control Lists (ACLs) for traffic filtering based on IP, protocols, and ports.

Unit 6: Windows Server Installation & Virtualization and Hardware Troubleshooting

- Install and configure Windows Server OS.
- Perform initial configuration (hostname, IP settings, domain membership).
- Enable remote management and server roles.
- Create and configure virtual machines using Hyper-V or Oracle Virtual Box.
- Allocate CPU, memory, storage, and configure virtual network adapters.
- Hardware Troubleshooting (RAM, Processor, BIOS, Peripheral, Power Supply, Network)
- Installation of SATA and NVMe SSDs; Common RAM issues and diagnostics
- Power-on Self Test (POST), Memory testing tools (e.g., MemTest)

Unit 7: Directory Services and DNS Management

- Install and configure Active Directory Domain Services (AD DS).
- Deploy a sample web page and configure IIS Web Server.
- Install and configure DNS Server.
- Create forward and reverse lookup zones.
- Configure A, CNAME, MX, and PTR records.
- Test DNS functionality.

Unit 8: File Services and Backup Management

- Configure shared folders on Windows Server.
- Implement NTFS and share permissions.
- Enable offline files and access auditing.
- Create user accounts manually or via Group Policy.
- Implement Windows Server Backup, scheduled backups, system image backup, and restoration.

Unit 9: Linux System Administration and Automation

- Install and configure Linux distributions (Ubuntu, CentOS, Debian).
- Manage users, groups, and permissions (chmod, chown).
- Manage storage using LVM and NFS.
- Configure and manage services using systemd (start, stop, enable, disable).
- Configure SSH with key authentication and firewall rules using iptables/firewalld.
- Use monitoring tools: top, htop, df, du, netstat.
- Write Bash scripts for automation.
- Schedule tasks using cron and systemd timers.

Unit 10: DGX A100 AI Server Administration

- Understand DGX A100 architecture, NVIDIA A100 Tensor Core GPUs, NVLink interconnect, and DGX OS.
- Install and update DGX OS and NVIDIA drivers.
- Configure Docker and NVIDIA Container Toolkit for GPU-accelerated containers.
- Monitor GPU utilization, temperature, and performance using nvidia-smi and DCGM tools.
- Manage deep learning environments using NGC containers and frameworks such as TensorFlow, PyTorch, and RAPIDS.
- Configure high-speed data transfer using Mellanox/InfiniBand interfaces.
- Implement system-level security and access control for multi-user AI research environments.
- Backup and restore critical data and system configurations in DGX environments.

[Handwritten signatures and date]
17.4.26