



# **Shri Ramswaroop Memorial University**

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## **CYBER SECURITY**

### **Introduction of cyber security**

- Cyber security or information technology security are the techniques of protecting computers, networks, programs and data from unauthorized access of attacks that are aimed for exploitation.

### **Challenges of cyber security**

- **Network security** : It is consists practices adopted to prevent and monitor unauthorized access and denial of a computer network.
- **Application security** : Most of application security issues are caused due to poor coding practices which lead to poor application code.
- **Data security** : Data security means protecting digital data, such as those in database, from unauthorized access.
- **Critical infrastructure** : It is the body of systems, networks and assets that are so essentials that their continued operation is required to ensure the security of a given nation, its economy, and the public's health and/of safety.
- **Cloud security** : It is a set of policies, controls and procedures, combined with technologies that work together to protect data, infrastructure, and cloud-based systems.
- **Internet of things(IoT) Security** : IoT security is the technology areas concerned with safeguarding connected devices and networks in the internet of things (IoT). Allowing devices to connect to the internet opens them up to a number of serious vulnerabilities if they are not properly protected.
- **Operational Security** : Includes the processes and decisions for handling and protecting data assets.

# Benefits of Cyber security

## Followings benefits of cyber security -

- 1. Protection :** Safeguards sensitive data.
- 2. Prevents attacks :** Reduce risks of cyber threats.
- 3. Maintains Trust :** Builds confidence with stakeholders.
- 4. Ensure continuity :** Averts operational disruptions.
- 5. Compliance & Reputation :** Adheres to laws and preserves reputation.
- 6. Facilitates Growth :** Fosters a secure environment for innovation.