DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

**PROJECT PROPOSAL**

1. **Project Title: -**

Quantum Teleportation and It’s Implications for Secure Communication.

1. **Project Scope: -**

# The process of quantum teleportation typically involves three main components: Entanglement Creation: Two particles become entangled, meaning their quantum states become correlated in such a way that the state of one particle is directly related to the state of the other, regardless of the distance between them. This entanglement is a fundamental quantum phenomenon that enables the teleportation process. Quantum Measurement: The sender (Alice) who possesses the quantum information she wants to.

# Requirements: -

* + Hardware Requirements
    1. Computing Infrastructure
    2. Storage
    3. Graphics Processing Unit (GPU) (Optional but Recommended)
    4. Networking
  + Software Requirements
    1. Python
    2. IBM Quantum Lab
    3. Quantum Information Theory
    4. Qiskit
    5. Anaconda

**STUDENTS DETAILS:-**

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| --- | --- | --- |
| **Name** | **UID** | **Signature** |
| HARSH ANURAG | 20CBS1010 |  |
| AGAM PRATAP SINGH | 20CBS1024 |  |
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**APPROVAL AND AUTHORITY TO PROCEED**

We approve the project as described above, and authorize the team to proceed.

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| **Name** | **Title** | **Signature (With Date)** |
| Miss. Upasana Tiwari (E15791) | Supervisor |  |