



Quantum Key Distribution

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- Quantum Key Distribution (QKD) is a **secure communication method** that implements a cryptographic protocol incorporating components of quantum mechanics. It enables two parties to generate a shared random secret key known only to them, which is used to encrypt and decrypt the messages.
- Both sides use a single photon (a quantum particle) in the operation of QKD system, different QKD are designed to prevent the entire communication system from being tampered with in the photons used in communication.
- **QKD is the most developed application of quantum cryptography.** Different QDKs are designed in such a way that if there is any discrepancy in the photons being used, the entire communication system can be stopped.
- Recently, the indigenous quantum key distribution technology was unveiled by the Center for Development of Telematics (C-DOT). It is capable of carrying a distance of more than 100 kilometers on standard optical fiber. **This will be helpful in addressing the threats related to data security in the advancement of quantum computing.**

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श्री अखिल मूर्ति के निर्देशन में

सामान्य अध्ययन फाउंडेशन (प्रिलिम्स + मेन्स)

ऑफलाइन बैच

📅 कक्षा आरंभ : 15 नवंबर 2021

🕒 समय : 3:00 PM – 6:00 PM

ऑनलाइन लाइव कोर्स

📅 कक्षा आरंभ : 11 अक्टूबर 2021

🕒 समय : 6:30 PM – 9:00 PM



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