



**JSS MAHAVIDYAPEETHA**  
**JSS ACADEMY OF TECHNICAL EDUCATION, NOIDA**  
**DEPARTMENT OF PHYSICS**

**Webinar Report on: “INTRODUCTION TO QUANTUM COMPUTATION”**

Date: **10<sup>th</sup> June 2023**

Venue: Online Google meet platform

Time: 10.00 AM

Objective: To introduce the participants with the concepts of Quantum computation with an objective to motivate faculties and students alike, to learn quantum computation.

Number of participants: 60

With the divine blessings of His holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji, President, JSS Mahavidhyapeetha, Mysuru; the Department of Physics Organized Webinar on **“INTRODUCTION TO QUANTUM COMPUTATION”** on **10<sup>th</sup> June 2023 at 10.00 AM.**

The inaugural function of the webinar started with introduction and welcome to all dignitaries by coordinator of the event Dr. Pratima. She thanked Principal Dr Amarjeet Singh, Vice Principal, Dean Academics, Dean Students, First year Coordinator, All Departmental HOD's, Faculty members, students and other participants. Blessings were given by Vice principal Dr. T.G.Mamatha and Dean Academics Dr. R.S. Jagdish for the event. Dr. Richa Verma, Head of the Physics Department, stated the purpose of the Webinar and thanked everyone for giving their valuable time to participate in the event.

**Name, Designation and Organization of the Guest speaker**

Speaker of the webinar was Mr. Aman Gupta, who is an alumni of JSS academy of Technical Education, Noida. He is currently working as team leader in Blind quantum Computing, Quantum Research Associate, Qulabs Software (India) Pvt. Ltd., Hyderabad.

**Objective of the Event**

The objective of the event was to introduce the participants with the concepts of Quantum computation with an objective to motivate faculties and students alike, to learn quantum computation. Mr. Aman Gupta explained about the main concepts of quantum mechanics which

are important in quantum computing and explained how the knowledge of quantum computation and information is relevant to engineers and how the future architecture will evolve.

## Date and venue

The webinar was conducted on Google meet platform. The event was ably conducted by Dr. Pratima. Dr. Manisha Chaudhary presented the vote of thanks. Other departmental faculty members Dr. Nidhi Yaduvanshi, Dr. Divya Ghildiyal and Dr. Pankaj Sharma and our Technical staff Mr. Rajesh Dubey and Mr. Basavrajull gave valuable contribution in the event. Some Photographs of the event are as follows.



<p align="center">  <b>JSS MAHAVIDYAPEETHA</b>  <b>JSS ACADEMY OF TECHNICAL EDUCATION, NOIDA</b>  <small>Approved by All India Council for Technical Education (AICTE), New Delhi.            UG programs are Accredited by National Board of Accreditation (NBA), New Delhi.            Affiliated to Dr. APJ Abdul Kalam Technical University, Uttar Pradesh, Lucknow.            www.jssaten.ac.in</small> </p>	
<p><b>DEPARTMENT OF PHYSICS</b></p>	
<p>Webinar on</p>	
<p><b>Introduction to Quantum Computation</b></p>	
<p><b>Aim and Scope</b></p>	
<p>Do you have an idea of Quantum computation? How quantum mechanics important in quantum computing? Relevance of quantum computing to engineers and other fields? This webinar introduces the participants with the concepts of Quantum computation with an objective to motivate faculties and students alike, to learn quantum computation. The speaker, Mr. Aman Gupta is an alumni of JSS academy of Technical Education, Noida. He is currently working as team leader in Blind quantum Computing, Quantum Research Associate, Qulabs Software (India) Pvt. Ltd., Hyderabad.</p>	
<p><b>Important Instructions</b></p>	
<ol style="list-style-type: none"> <li>1. Kindly fill the google form for the registration</li> <li>2. Registration Link: <a href="https://forms.gle/Jbyp4mYwryBNG7dMS">https://forms.gle/Jbyp4mYwryBNG7dMS</a></li> <li>3. Participants are advised to join WhatsApp group <a href="https://chat.whatsapp.com/LVBLWEKybb520vtmKOC0Bb">https://chat.whatsapp.com/LVBLWEKybb520vtmKOC0Bb</a></li> <li>4. Last date of registration: 09/06/2023</li> <li>5. Target Audience: Faculty &amp; Students</li> </ol>	<p align="center"> <b>Mr. Aman Gupta</b>            Blind quantum Computing            (Team Lead), Quantum            Research Associate, Qulabs            Software (India) Pvt. Ltd.,            Hyderabad.         </p> <p align="center"> <b>Date: 10/06/2023</b>  <b>Time: 10:00 AM to 11:00 AM.</b> </p>
<p>Convener: Dr. Richa Verma, HoD Physics, Coordinator: Dr. Pratima, Organizing committee: All Faculty Members, Department of Physics</p>	

Figure 1. Webinar Brochure



Figure 2. Introduction by Dr. Pratima



Figure 3. Address by Principal

The screenshot shows a Zoom webinar interface. The main content is a presentation slide with a purple background. The slide title is "One Example: Cryptographic security in danger". Below the title, it says "Discrete log problems, RSA". On the left, there is a box with the text "Quantum Computers Destroy Internet Security" and an illustration of a stick figure with a green arrow pointing to a lock. Below this is "Shor's Algorithm". On the right, there is a flowchart titled "Solutions" with two branches: "Quantum Cryptography" and "PQC". Below the flowchart is a diagram with a red-to-green gradient bar. At the bottom of the slide, there is a small red warning icon and some text: "Quantum computing will threaten security of cryptographic systems based on the discrete log problem".

Aman is presenting

Participants visible in the grid:

- Aman
- Dr. M...
- shrut...
- You (N)
- Princ...
- At 39 others...

Figure 4. Webinar by Mr. Aman Gupta



Figure 5. Address by HoD Physics





Figure 6. Classroom audience

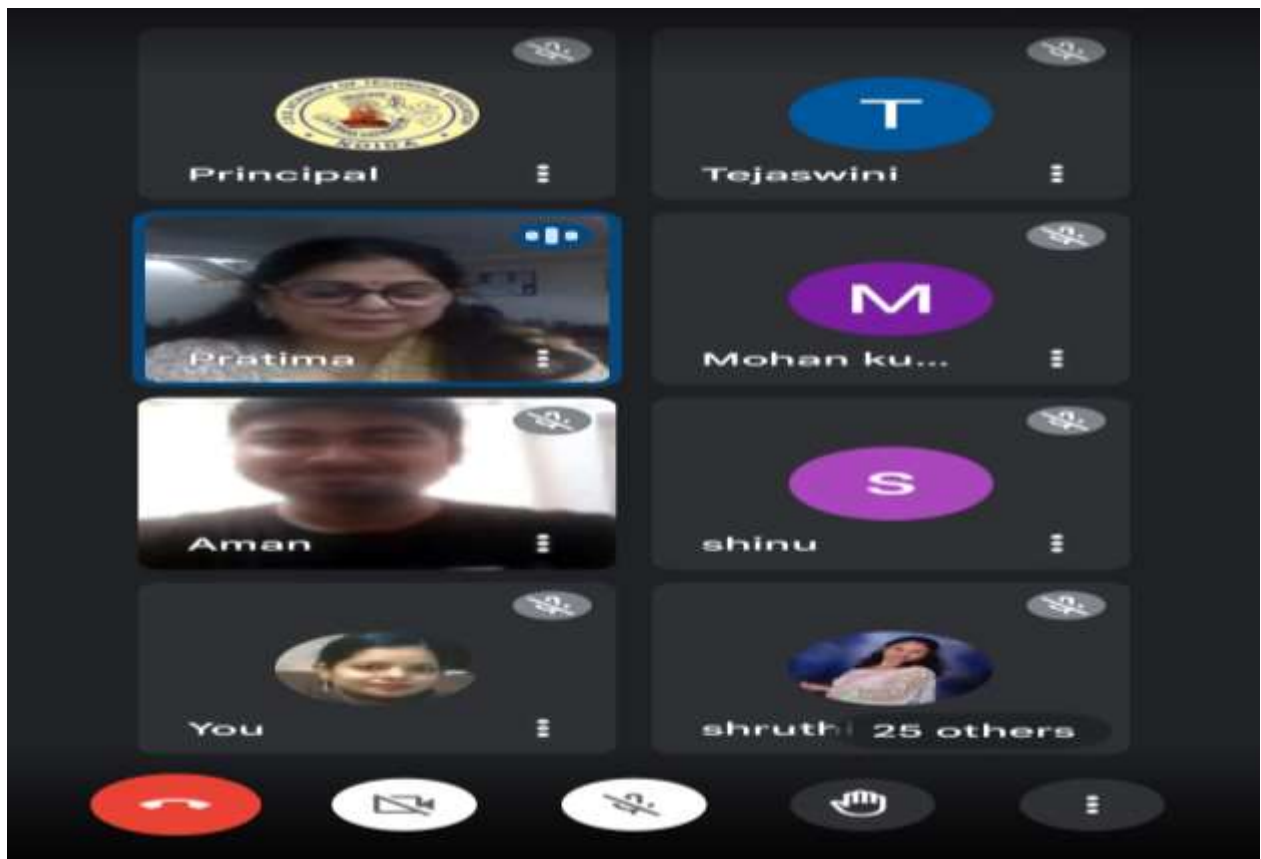


Figure 7. Thank you note by Dr. Manisha Chaudhary