



सत्यमेव जयते

Government of India**Ministry of Electronics and information Technology****National Informatics Centre, Himachal Pradesh, Shimla****Technical Presentations by NIC HP Officials: 22-March-2025**

The NIC Technical Talk session held on **22 March 2025** followed its standard format insightful presentations. The session featured ten-minute technical presentations by three participants, either from the State Center or districts. The session concluded with a five-minute highlighting the technical news.

The details of the presenters, are as follows:

Sr. No.	Name	Designation	Topic	Rating (5.0)
1.	Sh. Shailender Kaushal	Scientist-F	Technical News	-
2.	Sh. Anurag Gupta	Scientist-E	Android Basics	4.1
3.	Sh. Sarvjeet Kumar	Scientist-C	GIGW Guidelines	4.0
4.	Smt Vandana Devi	Scientist-C	Ethical Hacking	4.6

In addition to the presentations, a quiz competition was organized related to technical content delivered. A total of 27 officials participated in the quiz, which was conducted on the Hindi Bodh Mobile App, developed by NIC Himachal Pradesh. The quiz featured 16 multiple-choice questions, all based on the technical presentations delivered by NIC officials.

The result of the quiz competition are as follows:

Position	Participant Name	Designation	Location
1 st	Sh. Lalit Kapoor	Scientist-F	NIC HP State Centre
2 nd	Sh. Ashish Sharma	Scientist D	NIC HP State Centre
3 rd	Sh. Sarvjeet Kumar	Scientist C	NIC HP State Centre



NIC HP officials attending the technical session

The following officials were present in the technical talk on 22-03-2025

Sr. No	Name of official	Designation	Centre (State/District)
1.	Sh. Ajay Singh Chahal	SIO-Cum-Scientist-G	NIC State Centre
2.	Sh. Lalit Kapoor	Scientist-F	NIC State Centre
3.	Sh. Bhupinder Pathak	Scientist-F	NIC State Centre
4.	Sh. Sandeep Sood	Scientist-F	NIC State Centre
5.	Sh. Vimal Kumar Sharma	Scientist-F	NIC State Centre
6.	Sh. Vijay Kumar Gupta	Scientist-F	NIC State Centre
7.	Sh. Shailender Kaushal	Scientist-F	NIC State Centre
8.	Sh. Pankaj Gupta	Scientist-F	NIC State Centre
9.	Sh. Ashish Sharma	Scientist D	NIC State Centre
10.	Sh. Mukesh Kumar	Scientist D	NIC State Centre
11.	Sh Sarvjeet Kumar	Scientist C	NIC State Centre

12.	Sh. Prithvi Raj	Scientist C	NIC State Centre
13.	Smt. Vandana Sankhyan	Scientist C	NIC State Centre
14.	Sh. Himanshu Gupta	Steno Grade-III	NIC State Centre
15.	Sh. Vinod Kumar Garg	Scientist-F	NIC HP CGO Complex
16.	Sh Mangal Singh	Scientist-D	NIC HP CGO Complex
17.	Sh. Jitender Sharma	Scientist-B	NIC High Court
18.	Sh. Rakesh Kumar	Scientist-D	NIC District Centre, Bilaspur
19.	Sh. Anurag Gupta	Scientist-E	NIC District Centre, Hamirpur
20.	Sh. Akshay Mehta	Scientist-E	NIC District Centre, Kangra
21.	Sh. Brijender Dogra	Scientist-E	NIC District Centre, Kullu
22.	Sh. Balwan Singh	Scientist-D	NIC District Centre, Kinnaur
23.	Sh. Ashwani Kumar	Scientist-E	NIC District Centre, Mandi
24.	Sh. Deepak Kumar	Scientist-C	NIC District Centre, Shimla
25.	Sh. Sanjeev Kumar	Scientist-C	NIC District Centre, Solan
26.	Sh Swetansh Shatak	Scientific/Technical Assistant-B	NIC District Centre, Solan
27.	Sh. Vijay Kumar	Scientist-E	NIC District Centre, Sirmaur
28.	Sh. Mohan Rakesh Aggarwal	Scientist-D	NIC District Centre, Sirmaur

Overview of Technical Presentations

Android Basics:



What Is Android OS?

- Android OS (operating system) is a powerful and versatile platform developed primarily for mobile devices such as smartphones, tablets, smartwatches, and other wearable devices. It is an open-source operating system based on the Linux kernel, providing a robust and flexible foundation for a wide range of applications and functionalities.
- At its core, Android OS serves as the software framework that enables users to interact with their devices, access various services, and run diverse applications seamlessly. Its architecture is designed to be modular and customizable, allowing device manufacturers and developers to tailor the user experience to specific hardware configurations and user preferences.

Sh. Anurag Gupta presenting on the Android Basics.

Sh Anurag Gupta delivered the presentation on Android Basics. Android OS is an open-source, Linux-based operating system designed for mobile devices, smart TVs, wearables, and IoT applications. Its architecture consists of six layers: the Linux Kernel, Hardware Abstraction Layer (HAL), Native Libraries, Android Runtime (ART), Java API Framework, and Application Layer. Android has evolved through multiple versions. It offers extensive customization, a vast app ecosystem, and affordability but faces challenges like fragmentation, pre-installed bloatware, and delayed updates. Android is widely used in industries such as healthcare, automotive, and IoT, making it a versatile and scalable platform.

Ethical Hacking:



Smt Vandana presenting on Ethical Hacking.

Smt Vandana delivered a presentation on Ethical hacking. Ethical hacking, also known as "White Hat" hacking, is the practice of probing systems for vulnerabilities with permission to enhance security. It helps prevent cyberattacks, protect sensitive data, ensure regulatory compliance, and identify weaknesses before malicious hackers exploit them. Ethical hacking follows structured phases, including reconnaissance, scanning, gaining access, maintaining access, and covering tracks. Common techniques include penetration

testing, social engineering, network sniffing, and password cracking, using tools like Burp Suite, Wireshark, Kali Linux, and Nessus. Companies like Tesla, Apple, and Google run bug bounty programs to reward ethical hackers for identifying vulnerabilities. The Act mandates security measures, consent mechanisms, and accountability through the Data Protection Board of India (DPBI). Significant Data Fiduciaries (SDFs) have additional obligations like appointing Data Protection Officers (DPOs) and conducting impact assessments. Ethical hacking actively tests and breaches security measures to improve resilience.

Guidelines for Indian Government Websites:



Sh. Sarvjeet Kumar presenting on Guidelines for Indian Government Websites

Sh. Sarvjeet Kumar delivered a presentation on Guidelines for Indian Government Websites. The Guidelines for Indian Government Websites and Apps (GIGW 3.0) are developed by STQC and CERT-In to ensure that government digital platforms are user-friendly, accessible, secure, and standardized. The guidelines emphasize usability, user-centricity, and universal accessibility, aligning with international standards like WCAG 2.1 and ISO 23026. GIGW 3.0 introduces structured roles for developers, evaluators, and government organizations, covering quality, accessibility, cybersecurity, and lifecycle management. It promotes content consistency, API integration (DigiLocker, Aadhaar, Single Sign-On), cybersecurity best practices (ISO 27001, OWASP), and accessibility enhancements for people with disabilities. These guidelines help ensure secure, well-maintained, and inclusive government digital services for all citizens.

Technical News:



Technical News

- Space Exploration.
- Regulatory and Legal Affairs.
- Government Initiatives.
- Product Launches and Innovations.
- Artificial Intelligence Advancements.



Shailender Kaushal

Sh. Shailender Kaushal, presenting the Technical News

Sh. Shailender Kaushal presented the technical news. Here's topics of the main news covered in the presentation: -

- Government Initiatives.
- Space Exploration.
- Regulatory and Legal Affairs.
- Product Launches and Innovations.
- Artificial Intelligence Advancements.