

NIC RAJASTHAN

## **Our Heritage**



Shreenath Ji Temple is dedicated to one of the Avatars of Lord Krishna, Shreenathji. It is a symbol of Rajasthan's holy and spiritual zeal and is an important pilgrimage point situated in Nathdwara Rajsamand District, town of Rajasthan.

Nathdwara is a city in Rajasthan state of western India. It is located in the Aravalli hills, on the banks of the Banas River in Rajsamand District, and 48km north of Udaipur. This holy town is famous for its temple of Krishna which houses the Shrinathji, a 12th century "infant" incarnation idol (murti) of Krishna.

Nathdwara is a place of great sanctity for the Vaishnavas of the Pushti Margi or Vallabha sect. Nathdwara is known for Pichwais (Large paintings on cloth depicting legends from the life of Lord Krishna) and Haweli music (devotional music, akin to dhrupad singing with composition meant for various seasons, festivals and sections of the day).

Shrinathji is the childhood image of Lord Krishna. There are two different types of pooja - one is 'Nityotsava', daily routine and another 'Varshotsava', occasional or special. The former includes "Mangla, Shringar, Gwal, Rajbhog, Uthapan, Bhog, Arti and Shayan." Whereas the later includes "Prakatyotsava, Patotsava, Basantotsava, Dolotsava, Nand Mahotsava, Shardotsava, Janmashthami, Snan Yatra, Gopashthami and Annakoot "etc.

:: For details visit website:: https://www.nathdwaratemple.org/

## **Events / Happenings**

Chief Secretary, Govt. of Rajasthan Reviewed NIC Activities in the State



The Chief Secretary, Government of Rajasthan Smt. Usha Sharma, IAS reviewed the NIC activities and initiatives in the state, in presence of Principal Secretary Finance and Information Technology and Communication (IT&C), Shri Akhil Arora IAS, ACS Home and Transport, Principal Secretary Revenue, Secretary Food and Civil Supplies and other senior officers also participated in the meeting through video conferencing. SIO Rajasthan, Shri Jitendra Kumar Verma made a detailed presentation on activities and projects of NIC. Shri I.D. Variyani, Senior Technical Director NIC and Shri Amit Agarwal, Senior Technical Director, NIC were also present during the meeting. All senior officials of NIC Rajasthan attended the meeting through Video Conferencing. Chief Secretary has shown the keen interest on each projects developed by NIC and asked the present status, progress and new initiatives of each project. She appreciated the IT initiatives of NIC and said she is hopeful to see new applications from NIC in the coming years. She said these IT projects have saved huge manpower resources, papers and useful for the development in the state.



A lecture on "Blockchain technology – A practical approach" was organized by NIC Rajasthan to aware all the NIC officers of Rajasthan about the Blockchain technology and its adaption in the e-Governance projects. Lecture was delivered by Shri Bhuwnesh Soni, Manager IT & DevOps from Department of Global Automation, AT&T bell Labs, USA. SIO Rajasthan, Shri Jitendra Kumar Verma briefed about the requirements of Blockchain for NIC projects and desired to use the knowledge for onboarding major projects in the state. NIC has already established Centre of Excellence for Blockchain at Bengaluru which can be contacted for any technical help and capacity building. All NIC state unit officers and DIOs/ADIOs have attended the session through Video Conferencing. Shri Soni briefed about the Blockchain technology and its usages for government project with the practical example. A code in Python was also explained to understand the technology. Technical queries of the participants were also answered.

## Gang Canal Regulation Computerization System Launched in Sri Ganganagar



NIC Sri Ganganagar developed Gang Canal Regulation Computerization System is conceptualized for providing up-to-date information of canal regulation system through a web portal. The information will be updated by district irrigation department in every 3 hours on daily basis. The online system provides updation of gauge value by the department, which shows the water level on each head of canal and schedule of opening and closing of canals in the district. The system will facilitate about 3.0 lakhs farmers of the district.



### **Events / Happenings**

Countdown Programme on Yoga and Celebration of International Day of Yoga



A Countdown Programme on Yoga (CYP) on IDY 2022 organized at NIC RSU Jaipur. **Shri Manoj Nagar, Scientist 'F'** delivered a lecture cum demo on guided meditation and **Shri Vinod Sharma DIO Jaipur,** delivered lecture on 'Food & Lifestyle Management for Yoga'



through VC to NIC officials at Jaipur & district centers. Program presided by SIO Rajasthan, was organized on 21<sup>st</sup> June to celebrate International Day of Yoga. SIO Rajasthan emphasized on practicing Yoga regularly. All NIC Rajasthan Officials actively participated in IDY.



### Awareness Program for DIOs/ADIOs

As an initiative to aware NIC District Centers about NIC products, best practices and innovative works implemented in the districts, weekly presentation is given by one district to all DIOs/ADIOs. SIO Rajasthan, Shri Jitendra Kumar Verma has instructed all Districts officers to aware district administration and other officers about the NIC products and applications to make best use of already developed applications. DIO Sikar Presented NIC product, DARPAN (Dashboard for Analytical Review of Projects across Nation) to all the districts. It was explained that Darpan provides Analytical Monitoring of the Plans and Schemes of Government at various

levels through one consolidated dashboard with anytime and anywhere access. It may provide individual Dashboards to DC/DM for Analytical review of Projects in their district/division. DIOs was requested to aware district administration about the dashboard and make use of this product. ADIO Jhalawar Presented Mobile App - designed and developed under NIC's DGMC initiative for Citizens of Jhalawar District. The App is developed in Flutter Technology using PHP APIs. The core objective of this app is to bring already developed Citizen Services on a single platform integrating Apna Khata, Scholarship Status, Pension Status, DLOs contact list, Utility numbers, Tourism Info etc.

### Online 5th and 8th Board Results Declaration in Rajasthan



NIC Rajasthan has developed application "Shala Darpan" to prepare and declare 5th and 8th Board results for 27+ Lakh students of Rajasthan. Hon'ble School Education Minister of Rajasthan, Shri B.D. Kalla declared the result online on <a href="https://rajshaladarpan.nic.in">https://rajshaladarpan.nic.in</a>. Rajasthan is the only state who conducts Board examinations for 5th and 8th Class. Activities from Application form filling to Result declaration was carried out with the help of Shala Darpan portal. Core activity includes like Exam Centre Details, Roll Number Allotment, Admit Card, Exam Reports, Result Processing, Result declaration, TR Register, Mark-Sheet Printing and Results Statistics etc. are generated through portal. Traffic of 3 Gbps with 2.1 Lacs concurrent sessions were observed on the web application during the Peak hours that was very well handled by our NIC State Network and Education Team. It was first time that 5th

and 8th Class Board Exam results were declared Simultaneously for the state. All necessary arrangements at Server side, Network side and Application level were ensured to show result without any interruption. About 25+ lacs students from different locations including remote places seen their result on portal.

### **District Review of State Projects by SIO Rajasthan**



SIO Rajasthan, Shri Jitendra Kumar Verma reviewed all 33 districts regarding involvement of each district in State Projects. In the review meeting, all DIOs/ADIOs opt for one of the State Project of their interest, so that they may contribute their technical skills for development and implementation activities of opted Project. Teams created from districts for each project as per their interest and technical skills. District NIC officers were motivated to further explore the assigned Project and provide their technical contribution.

# CYBER SECURITY TIP

**Use A Secure File Sharing Solution** 

"The files you share are only as secure as the tools you use to share them with. Adopt a secure file sharing solution to encrypt your files while they're in transit and at rest to prevent unauthorized access and keep your files safe. "





PVC Birth Card





a government. It is the recognition of a new member in a society, who is entitled for all the rights and responsibilities of a valued citizen. Similarly, Death and Marriage Registrations are equally important, which entitle a person to receive various citizen benefits. Registration of Birth and Death is mandatory in the Registration of Births & Deaths Act, 1969 to register every Birth/Still birth and death with the concerned state/UT Government within 21 days of its occurrence. The Government accordingly has provided for well-defined system for registration of Birth & Death with the Registrar General at the Centre and the Chief Registrars in the States, running through District Registrars, Registrars to the Panchayats and Town Registrars at the periphery. In Rajasthan, Registration of Births & Deaths is compulsory as per provisions of Registration of Births & Deaths Act, 1969 and Rajasthan Registration of Births & Deaths Rules, 2000. Registration of Marriages being done under Rajasthan Compulsory Marriage Registration Act 2009. Without an efficient Civil Registration System, it is virtually impossible to plan or implement effective development strategies. Earlier Registrars were registering the events manually by entering in Birth and Death Register and issuing signed and sealed paper certificates to citizens. This is very time consuming and there was almost NIL or delayed consolidation

of information which defeats the very purpose of registering them. To overcome this problem and to introduce the transparency in the registration process, the Government of Rajasthan, in technical collaboration with NIC has introduced the online system of Civil Registration called *Pehchan* with the objective of having timely registration of Birth- Death and Marriage and effective monitoring of the system. The web application aims to reduce information gap between citizens and Government and to reach the un-reached digitally. It also serves by building up the capacity of the local bodies for prompt and responsive e-service delivery. **Pehchan** is the unified portal for Birth, Death and Marriage Registrations in Rajasthan. It is the single source of truth for all Civil Registrations in the

#### Salient Features of Pehchan

- Issuance of Digitally / e-Signed Signed Certificates
- Online reporting from Private Hospitals.
- Facility for Citizen to apply online through 80,000+ e-Mitra Kiosks across state.
- Applications integrated with PCTS portal of Medical department.
- Online application facility on Portal and Mobile App for citizens.
- Digitally/e-Signed Certificate Delivery by email to citizens.
- QR Code verification for insurance claims settlement.
- Eliminated requirements of pre-printed stationary.
- Option to maintain Legacy Registration.
- Facility for bilingual registration certificate.
- Dashboard for public.
- Facility to register delayed registration with Affidavit.
- Facilitates Aadhaar enabled registration.
- Facility to register twin children birth and death.
- Facility to register adopted child.
- Option for unclaimed (Lawaris) death registration.
- Facility to register widow registration in marriage.
- Online Baby name addition facility.
- Online Legacy Certificate computerization facility.
- Certificate availability in DigiLocker.
- Android and iOS Mobile App for citizens.
- NICCI Chatbot Digital Assistance.
- Certificate Download Facility to citizens through OTP.
- PVC birth card facility through eMitra Kiosks
- MCCD enabled Death Registration.
- Responsive & device friendly portal.
- SMS alert facility for citizens (on application/ objection/ registration).
- Birth registration of foreign national's child settled in India under Section 20.
- SMS alert for the date of physical presence of groom and bridegroom with Registrar office.
- Online workflow for selective changes request by Registrar and approval by District Registrars
- Toll free centralized Helpline.
- Registration reporting from Orphanages.



state. Used by all 11,500+ Registrars and 3100+ Sub registrars (Government Hospitals, CHC/PHC), the system is also accessible to 1700+ Private Hospitals and 80,000+ e-Mitra kiosks. A citizen can also apply online either through the web portal or Pehchan mobile app. Digitally Signed Certificates are generated and delivered to citizens. All certificates have QR code implementation that is useful for insurance agencies and citizens for authentication. So far, about 2.68 crore Registrations have been done on the portal. Pehchan is integrated with Applications of Medical & Health, Settlement, Palanhar Scheme, Aadhaar and Jan Aadhaar etc. No manual certificates are being processed in the state.





## Technology Talk on Concept of Blockchain



Why Blockchain Technology

A Blockchain is an open-source distributed database consists of chain of blocks containing immutable transaction data that are cryptographically secured, or It is a distributed public ledger with no central authority. A digital ledger of immutable transactions is duplicated and distributed across the entire network of computer systems on the blockchain. i.e. Blockchain does not store information in a central location. In 2009, Satoshi Nakomoto created bitcoin and introduced concept of a blockchain as a decentralized ledger maintained by anonymous consensus.



Blocks in Blockchain - Blocks are the components that bundle a set of transactions and distribute them among each node of a blockchain network. *Blocks are files where* recent DIO & Scientist E, Banswara

transactions are permanently recorded that have not yet entered any prior blocks. Thus, a block is like a page of a ledger or record book. These blocks are linked together using cryptography. Each block mainly contains a cryptographic hash of the previous block, a timestamp, and transaction data. Data stored inside a block depends on the type of blockchain. The first block in the chain is the Genesis block. Miners or accountants who record every transactions to the blockchain and create new blocks through a process called Mining. Once transaction is done, It is broadcasted 5-6 times per hour and all nodes receives broadcast of the transaction, which is further validated and recorded. After transaction is recorded, Nodes propagate transaction to other nodes. Thus, every node in Blockchain has a copy of complete transactions since the inception of Blockchain.



Multiple nodes maintain the Integrity of the Ledger through Consensus mechanisms. This means that most of the "nodes" must agree that the transaction is valid. Hence, all the transactions in a Public Blockchain are approved

**Blockchain Frameworks** d

and verified by using a proof-of-work consensus algorithm. Blockchain is safe as every node in the blockchain has a copy. Blockchain prevents "double spending" by ensuring that all the nodes have current copy of transactions. Security is ensured as sheer amount of computational power required to attack the database and keep up with Propagation. Blockchain is not immune to hacking but being decentralized gives blockchain a better line of defense. Each transaction in a Blockchain is secured by cryptography with a private key and verified with a public key.

Types of Blockchain - A Public Blockchain is open to public and anyone can join whenever they want. There are no restrictions, and all can see the ledger as well as take part in the consensus process. e.g. Bitcoin and Ethereum. In Private Blockchain, only a single organization has authority over the network. It is not open for public and do not allow anonymity but has permission-based solutions. Examples are Ripple and Hyperledger.

Hybrid Blockchains is a combination of public and private blockchain or is the best part of both the blockchain with controlled access and freedom at the same time. e.g. XinFin. In Consortium Blockchain, multiple organizations govern the platform and is a permissioned platform. Blockchain as a Service (BaaS) - Blockchain is an emerging technology but expensive to implement and manage. Blockchain as a Service are the cloud-based solution, which means that businesses do not have to

worry about Infrastructure & Maintenance. They must pay for it, like a service. e.g. Azure, Amazon, SAP & Oracle provides BaaS.



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भारत सरकार

**GOVERNMENT OF INDIA** 

Journey of NIC Officers

### PRAMOD SHARMA DIO & Scientist-'E' NIC-Rajasthan (May-1992 to May-2022)

- Joined NIC on 26-05 -1992 at NIC Udaipur district centre.
  - Served Udaipur, Churu and Pratapgarh district.
  - Retired from NIC Pratapgarh district center (Rajasthan).
  - Major contribution includes Software Application Development, Implementation, Coordination & Management, Trainings with Technical Support and Guidance to District Administration.
- Designed & Developed 21 Application Software, Implemented 79 Application Software in the above districts with major focus on Land Records.
- Establishment of computer infrastructure during VVIP visit. District Churu got ISO 9001:2000 during his tenure.
- 65 appreciation letters were given by the district administration and higher officials from time to time. •
- Certificate of eligibility for 9th National Voters' Day was given by the District Election Officer on 25th January19.
- Upgrading IT Skills by attending 405 Webinar, Vidyakosh Courses, GudApps, Online Training etc.
- Worked at NIC Pratapgarh district centre as a single person since its inception and handled complete NIC district centre setup, NICNET, published official website of Pratapgarh etc.

I learnt a lot from NIC, a premier organization of GOI and my NIC colleagues. I wish NIC to keep on flourishing as topmost IT organization of GOI by providing technical solutions and e-Governance activities in future endeavour. ~ Pramod Sharma

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