Project Name: OCN Software
Post code: 01
No. of Post(s): 2
Location: New Delhi
Roles and Responsibilities:
□ Research & development of appropriate ML algorithms to analyze huge volumes of historical data, make predictive analysis and automation as per project requirements □ Identify appropriate data sets, data collection and data modeling □ Statistical analysis of big data sets to improve models. □ Keeping abreast with the latest development in Al/ML □ Design & Development of quality software to enhance software reusability & scalability □ Code reviews and Release management
Skills and Abilities:
□ Experience of writing robust code in Python and R , NLP □ Familiarity with machine learning algorithms and use of Al/ML frameworks such as TensorFlow or Keras □ Working knowlege of NoSQL and RDBMS □ Knowledge of statistical & algorithmic models, fundamental mathematical conceptssuch as linear algebra and probability □ Knowledge of data structure & algorithms, object-oriented design principles and bestpractice patterns and code profiling. □ Familiarity with Linux environment for software development □ Knowledge of Smart Energy Meter (SEM), Head-end System(HES) and Meter Data Management(MDM) □ Knowledge of developing ChatBot shall be an added advantage □ Excellent problem solving and debugging skills Proficient in software version maintenance tools such as Git, SVN □ Excellent communicator, team player who can work independently also
Minimum Qualifications:
☐ Min 65% in (10 th , 12th and B.E/B.Tech in Computer Science & Engineering orequivalent degree from a recognized college/university).
Eligibility Criteria:
□ 0-3 years of professional work experience post qualification. Preference will be given to GATEqualifiedcandidates.

Project Name: OCN Software

Post code: 02

No. of Post(s): 4

Location: New Delhi

Roles and Responsibilities:

- Identify and analysis of software requirements
- Design & Development of software modules using C/C++
- > Design & Development of quality software to enhance software reusability &scalability
- Coding, Code reviews, unit testing and Release management Integration of Software modules & System Integration testing

Skills and Abilities:

- Must have knowledge of building application in Linux environment, Knowledge of Makefile
- ➤ In-depth understanding and working knowledge of C & C++
- Object oriented design using C++, understanding of OOP principles and design patterns
- In-depth knowledge of data structure & algorithms and it's application in softwaredesign & development
- Working knowledge of database management system.
- Knowledge of code profiling
- ➤ Good understanding and knowledge of Linux IPCs, TCP/IP internals, network programming and concepts of networking devices
- Familiarity with system calls, wrapper functions and library routines
- Proficient in Software design & development in multi-threaded environment
- Knowledge and use of debugging tools for debugging of multithreaded application
- Knowledge of scripting languages like shell, Python
- ➤ Knowledge of building application for Packet Optical Transport Platform(POTP)/application for Broadcom Switches shall be an added advantage
- Excellent problem solving and debugging skills

- ➤ Proficient in software version maintenance tools such as Git, SVN or any other release management system
- > Excellent problem solving and debugging skills
- Familiarity with continuous integration/continuous deployment, Testing & Integration of software modules. Excellent communicator, team player who can work independently also

Minimum Qualifications:

 \square Min 65% in (10th, 12th and B.E/B.Tech in Computer Science & Engineering or equivalent degree from a recognized college/university).

Eliqibility Criteria:

Project Name: OCN Software

Post code: 03

No. of Post(s): 4

Location: New Delhi

Roles and Responsibilities:

- Identify and analysis of software requirements
- Design, Development, testing and debugging of back-end software in Java
- Design & Development of quality software to enhance software reusability & scalability
 Design and development of API structure
- Coding, Code reviews, unit testing and Release management
- Integration of Software modules & System Integration testing
- Contribute to all phases of the development lifecycle and hands-on with distributed computing systems.
- Collaborating with the front-end developers to establish objectives and design functional, cohesive codes to enhance the user experience.

Skills and Abilities:

- Hands on experience with programming languages like Java, JavaScript, PHP and Python
- Knowledge of Spring Boot, Spring Framework and understanding of Web Application framework (Express Framework)
- In-depth knowledge of data structure & algorithms and its application in software design & development
- Experience with container based application development and Troubleshooting, testing and maintenance of the existing software, including applications, databases, interfaces and new functionalities.
- Working knowledge of Relational Database (Knowledge of NoSQL database is an added advantage)
- Experience with Cloud Environments like AWS / Azure / GCP.
- Knowledge of Optical Link Validation, Network Planning Tool for WDM/POTP
- Architectural knowledge of handling millions of devices in HES of Smart Energy Meters
- Knowledge of Testing & debugging tool and version control system(GIT
- Knowledge of web server configuration for Apache, Tomcat, Nginx.
- Excellent communicator, team player who can work independently also

Minimum Qualifications:

☐ Min 65% in (10th, 12th and B.E/B.Tech in Computer Science & Engineering or equivalentdegree from a recognized college/university).

Eliqibility Criteria:

Proiect Name: OCN Software

Post code: 04

No. of Post(s): 4

Location: New Delhi

Roles and Responsibilities:

- Identify and analysis of software requirements
- Design, Development, testing and debugging of Web application software
- Web Performance optimization and development of quality components for speed, reusability and scalability
- Design & development of mobile based features
- Collaborate with back-end developers and web designers to improve quality & usability
- Implementation of data manipulation/ data binding through REST API
- Implementation of quality mockups and prototypes of User Interface
- Code reviews and Release management

Skills and Abilities:

- Knowledge of Material UI, ReactJS, Redux, NPM, bootstrap, JQuery
- In-depth knowledge of data structure & algorithms and it's application in softwaredesign & development
- Understanding of front-end framework
- Working knowledge of GIS integration
- Knowledge of Optical Link Validation, Network Planning Tool for WDM/POTPshall be an added advantage
- Architectural knowledge of handling millions of devices in HES of Smart EnergyMeters
- Understanding of browser rendering behavior and performance.
- Knowledge of tools like ELK, Grafana, Elasticsearch
- Experience in dynamic website or portal and API integration
- Understanding of web application protocols.
- Knowledge of Web application security
- Knowledge of testing & debugging tool and version control system(GIT)
- Stay up-to-date on emerging technologies
- Familiarity with input validation techniques and approaches
- Excellent communicator, team player who can work independently also

Minimum Qualifications:

☐ Min 65% in (10th, 12th and B.E/B.Tech in Computer Science & Engineering orequivalent degree from a recognized college/university).

Eligibility Criteria:

Project Name: OCN Software

Post code: 05

No. of Post(s): 3

Location: New Delhi

Roles and Responsibilities:

- Identify and analysis of software requirements
- Design, Development, testing and debugging of embedded software, Linux device driver
- Design & Development of quality software to enhance software reusability & scalability
- Porting of Linux, U-boot, SDK on embedded systems
- Porting and Integration of third party and open source software stack
- Interface with hardware design and development
- Code reviews and Release management

Skills and Abilities:

- Solid programming experience in C/C++
- In-depth knowledge of data structure & algorithms and it's application in software design & development
- Understanding of Linux framework, RTOS and embedded system architecture
- Experience in embedded systems design with preemptive, multitasking real-time operating systems. Knowledge of working with SDK in cross-platform environment and understanding of cross-platform toolchains
- Working knowledge of board bring-up having microprocessors, microcontrollers, SoCs, device driver development and porting.
- Good understanding of communication protocols like SPI, I2C, PCI and UART
- Understanding of universal bootloaders(U-Boot). Knowledge of embedded file-systems(journalling flash file system)
- Experience with development of networking protocols (TCP/IP stack, routing, IPv4/IPv6, L2/L3 protocol, IPCs)
- Knowledge of code profiling and application containerization (application in embedded domain)
- Knowledge of building drivers for PowerPC processors T1022,P5040 shall be an added advantage. Proficient in software version maintenance tools such as Git, SVN
- Knowledge of Renesas RL78 family of MCU and ARM Cortex series of microcontrollers
- Knowledge of Broadcom switches Arad+ and Jericho shall be an added advantage
- Excellent problem solving and debugging skills, communicator and a team player.

Minimum Qualifications:

□ Min	65%	in	(10 th ,	12th	and	B.E/B.Tech	in	Computer	Science	&	Engineering	O
equivalentdegree from a recognized college/university).												

Eliqibility Criteria:

	0-3 years of profess	sional work expe	erience post qual	ification. Preferen	ce will be given to
GΑ	TEqualifiedcandidates	S.			

Proiect Name: OCN Software

Post code: 06

No. of Post(s): 1

Location: New Delhi

Roles and Responsibilities:

- Investigating user experience design requirements for our products.
- Gathering and evaluating user requirements, in collaboration with productmanagers and engineers
- Illustrating design ideas using storyboards, process flows and sitemaps
- Developing and conceptualizing a comprehensive UI/UX design strategy.
- Producing high-quality UX design solutions through wireframes, visuals and graphic designs, flow diagrams, storyboards, site maps, and prototypes.
- Designing UI elements and tools such as navigation menus, search boxes, tabs,and widgets for our products.
- Testing UI elements such as CTAs, banners, page layouts, page designs, pageflows, and target links for landing pages.
- Collaborating with the marketing team, and internal and external designers toensure the creation and delivery of tailored experiences for users.
- Providing advice and guidance on the implementation of UX research methodologies and testing activities in order to analyze and predict user behavior.
- Identify and troubleshoot UX problems (e.g. responsiveness)
- Adhering to style standards on typography and graphic designs.

Skills and Abilities:

- A portfolio of professional UI/UX design work for both web and mobile platforms.
- Expertise in Photoshop, Illustrator, and Adobe XD.
- Working knowledge of the following technologies and software: Sketch, InVision, Figma, Visio, HTML, CSS (SCSS), iOS, Android, Design Systems and Adobe Creative Suite.
- Excellent written and verbal communication skills.
- Multi-tasking and time-management skills, with the ability to prioritize tasks.
- Excellent communicator, team player who can work independently also

Minimum Qualifications:

☐ Min 65% in (10th, 12th and B.E/B.Tech /B. Des (Fashion Communication) in ComputerScience & Engineering or equivalent degree from a recognized college/university)

Eligibility Criteria:

<u>Project Name:</u> NDMA CAP Integrated Alert System (DSA group)

Post code: 09

No. of Post(s): 16

Location: New Delhi

Roles and Responsibilities:

- Experience/Knowledge of design, development of full stack web application using Java, HTML, JavaScript, CSS etc. Or,
- Experience/Knowledge of design, development of Android and iOS App development using React Native Framework.
 Or,
- Experience/Knowledge of writing automated test cases using jMeter/ Selenium/ jUnit etc.
 Or.
- Experience/Knowledge of Software Security Audit, Assessment, Penetration testing, Threat analysis and Modelling etc. Or,
- Experience/Knowledge of Cloud Administration, CI/CD, DevOps Deployment, Cloud Orchestration and Cloud Migration etc.

Skills and Abilities:

- Ability to work in a dynamic, delivery oriented workplace
- Good written and
- Worked on live portals, User experience strategies.

Minimum Qualifications:

• Min 65% in (10th, 12th B.E/B.Tech in Computer Science & Engineering/IT/ECE or equivalent degree from a recognized college/university)

Eliqibility Criteria:

Project Name: Wi-Fi Technology Enhancement and Rollout

Post code: 16

No. of Post(s): 02

Location: New Delhi / Bengaluru

Roles and Responsibilities:

Installation and Field Work for Wi-Fi

- RF survey and requirement finalization for any Wi-Fi deployment
- Installation of Wi-Fi solution, Network configuration with respect to TSP/ISP, Testing and Acceptance Testing as per the customer requirement.
- Provide support after installation.
- Training for operation and maintenance of network.
- Require extensive traveling for field deployment.

Call Centre and Certification Related Activity:

- To provide extensive support to PDOAs and APP providers in day-to-day operation and maintenance.
- 24x7 Call-Centre support through mobile operator
- Full-fledged Control Room / Helpdesk between 9 AM to 8 PM
- Certification of PDOA stack and APP along with the preparation of reports.

Skills and Abilities:

- Knowledge of IT and server-based system and fundamental of IP/LAN/Wi-Fi technology.
- Knowledge of remote installation and support to customer

Minimum Qualifications:

• Min 65% in (10th, 12th ,B.E/B.Tech in ECE or equivalent degree from a recognized college/university).

Eligibility Criteria:

Project Name: OCN Project: C04

Post code: 18

No. of Post(s): 6

Location: New Delhi

Roles and Responsibilities:

- Hardware board testing.
- · Good analytical skills for hardware debug
- Handling sensitive instruments like oscilloscope, optical analysers etc.
- PCB Design exposure
- Should be able to work under minimal supervision.

Skills and Abilities:

Microcontroller C coding, VHDL, Python scripting

Minimum Qualifications:

• Min 65% in (10th, 12Th, B.E/B.Tech in ECE from a recognized college/university).

Eliqibility Criteria:

Project Name:

a. QKD Software

b. OAAS (GPON) Software

Post code: 20

No. of Post(s): 2

Location: New Delhi

Roles and Responsibilities:

 Development and testing of system software for various modules for optical access and quantum network management

Skills and Abilities:

- Proficiency in programming languages, such as C/C++/Python/Java, SQL.
- Deep understanding of Web application technologies such as gRPC, REST, container, docker, Kubernets etc.
- Extensive experience in deploying, optimising and maintaining software.
- Excellent analytical and problem solving skills.

Minimum Qualifications:

• Min 65% in (10th, 12th, B.E/B.Tech in CSE/ ECE /IT or equivalent degree from a recognized college/university).

Eliqibility Criteria:

Project Name:

a. QKD Software

b. OAAS (GPON) Software

Post code: 21

No. of Post(s): 2

Location: New Delhi

Roles and Responsibilities:

• Design and development of switching and routing software. Working closely with the switch SDK to develop various L2 and L3 features for optical access devices.

Skills and Abilities:

- Proficiency in C/C++, shell scripting.
- Deep understanding of TCP/IP protocol stack, IPV4 and V6, switching and routing protocols.
- Experience of working on linux kernel and network layer.
- Excellent analytical and problem solving skills.

Minimum Qualifications:

• Min 65% in (10th, 12th, B.E/B.Tech in CSE/ECE /IT or equivalent degree from a recognized college/university.

Eliqibility Criteria:

Project Name:

a. QKD Software

b. OAAS (GPON) Software

Post code: 23

No. of Post(s):1

Location: New Delhi

Roles and Responsibilities:

 Expect to participate in all phases of the optical product development cycle, from definition, design, documentation, implementation and testing.

Skills and Abilities:

- Proficiency in any one programming languages C/C++, Python
- Knowledge of Al/ML for modelling and performance evaluation
- Deep understanding and experience of TCP/IP protocol stack, HTTP (S) and other protocols.
- Experience with Agile development methodologies and DevOps environments.
- Practical knowledge of system architectures and networking.
- Knowledge of databases
- Experience with version control such as git

Minimum Qualifications:

- Min 65% in (10th, 12th, B.E/B.Tech in CSE/ ECE /IT or equivalent degree from a recognized college/university).
- 0-3 years of professional work experience post qualification. Preference will be given to GATE qualified candidates.

Project Name:

a. QKD Software

b. OAAS (GPON) Software

Post code: 24

No. of Post(s):2

Location: New Delhi

Roles and Responsibilities:

• Expected to work on Low level software such as boot-loaders, Linux kernel and configuration on various optical products.

Skills and Abilities:

- Proficiency in programming languages C/C++.
- Practical knowledge of system architectures, networking and embedded systems.
- Embedded Linux development experience on ARM or other processes.
- Practical knowledge of BSP, Linux kernel, Linux Device Drivers etc.
- Experience with version control software git.
- Experience with device drivers for devices having I2C, SPI, UART, Ethernet, PCIe Interfaces.

Minimum Qualifications:

• Min 65% in (10th, 12th B.E/B.Tech in CS/ ECE /IT or equivalent degree from a recognized college/university).

Eligibility Criteria:

Project Name:

1. QKD Software

2. OAAS (GPON) Software

Post code: 25

No. of Post(s): 1

Location: New Delhi

Roles and Responsibilities:

• Responsibilities: Developing GUI for Network Manager of optical networks.

• Roles: GUI design, development and integration testing.

Skills and Abilities:

- Python, C++/Java, Database (relational, non-relational), Micro-service architecture, inter-process communication.
- Working knowledge of HTML, Javascript, CSS
- Working experience of frameworks React JS / Angular is preferred.

Minimum Qualifications:

 Min 65% in (10th, 12th, B.E/B.Tech in Computer Science from a recognized college/university).

Eliqibility Criteria:

Project Name: Quantum Key Distribution

Post code: 30

No. of Post(s): 02

Location: New Delhi

Skills and Abilities:

- Strong Theoretical Background in Quantum Communications / Quantum Mechanics
- Expertise in analysing QKD Protocols (& security proofs for the same) and support teams implementing the same
- Practical QKD implementation experience desirable
- Good understanding of various types of attack strategies on different QKD protocol implementations
- Should have thorough knowledge of Quantum Mechanics in general and all aspects related to Quantum Communications in particular
- Strong documentation and presentation skills; must be proficient in relevant software tools used in the same

Minimum Qualifications:

- Min 65% in (10th, 12th, B.Tech. ECE / B.Tech (Engineering Physics) / M.Sc. (Physics) or equivalent from a recognized college/university)
- M.E/M.Tech/MSc or Doctrate in Quantum Mechanics/ Quantum communication will be given preference

Eliqibility Criteria:

Project Name: Quantum Key Distribution

Post code: 31

No. of Post(s):01

Location: New Delhi

Skills and Abilities:

- Experience in FPGA design, from low-level hardware description languages like Verilog/VHDL to high-level programming options like C, C++, and open computing language (OpenCL)
- Knowledge of Xilinx FPGA cards, and tools like Vivado for application development on FPGA, IP Core development and integration
- Experience of working on Optical Communication products desirable
- Strong digital design concepts as well as knowledge of Linux operating system
- Coding knowledge of C, C++, shell scripting, Python scripting
- Knowledge of Ethernet & other telecom protocols, error correction, privacy amplification, synchronization etc.
- Experience in handling lab instruments for debugging e.g. Mixed Signal Oscilloscope, signal generators etc.
- Experience in FPGA Timing closure
- Experience working with SoC based systems and knowledge of protocols such as SPI, UART, I2C, USB.
- Strong documentation and presentation skills; must be proficient in relevant software tools used in the same

Minimum Qualifications:

- Min 65% in (10th, 12th B/E/ B.Tech.in ECE or equivalent from a recognizedcollege/university)
- M.E/ M.Tech or equivalent in Electronics & Communication, Electrical, Instrumentation will be given preference.

Eliqibility Criteria:

Project Name: a) Quantum Key Distribution b) TWDM-PON.

Post code: 32

No. of Post(s): 5

Location: New Delhi

Skills and Abilities:

- Strong optical communication fundamentals
- Experience of designing optical communication products and handling of Optical Components
- Good theoretical and practical knowledge of optical devices used in Optical Communication and Quantum Communications
- Good Board design skills and proficiency in tools used for the same
- Strong analog design concepts and proficiency in tools used for the same
- Strong documentation and presentation skills. Must be proficient in relevant software tools used in the same

Minimum Qualifications:

- Min 65% in (10th, 12th, B.E/B.Tech in ECE or equivalent from a recognized college/university
- M.E/ M.Tech. or equivalent in Electronics & Communication, Electrical, Instrumentation, Opto-electronics or Optical Communication will be given preference..

Eliqibility Criteria:

□ 0-3 years of professional work experience post qualification.

Project Name: MIS Support

Post code: 48

No. of Post(s): 03

Location: New Delhi / Bengaluru(01)

Roles and Responsibilities:

- Providing Support for Management Information System (MIS) and ERP activities.
- Automation of internal processes.
- Development of new software packages for MIS and ERP
- Development of web portals and Mobile Applications.

Skills and Abilities:

- Hands on experienced in software design, development, testing and debugging ofweb applications.
- Working Knowledge of JAVA technologies Net/Java, ASP/JSP/PHP, SQL, PL-SQL, HTML, Java Script,
- Working Knowledge of databases Oracle / Sql Server / MySql
- Working experience in Operating systems Windows/Linux.
- Working Knowledge of Mobile APP development.
- Working Knowledge of Oracle ERP

Minimum Qualifications:

• Min 65% in (10th, 12th, B.E/B.Tech in Computer Science & Engineering or equivalentdegree from a recognized college/university)

Eliqibility Criteria:

• 0-3 years of professional work experience post qualification.

Project Name: PM-WANI Service Delivery

Post code: 63

No. of Post(s): 03

Location: New Delhi

Roles and Responsibilities:

Software Installation/Configuration of Access Point and Field Work for PM-WANI

- Software Release installation (GUI and CLI based)
- Network configuration with respect to TSP/ISP/as per site requirement, Testing and Acceptance Testing as per the customer requirement.
- Provide support after installation.
- Mobile App testing
- Training for operation and maintenance to customer.
- Require extensive traveling for field deployment.
- To provide extensive support to PDOAs and APP providersin day-to-day operation and maintenance.

Skills and Abilities:

- Knowledge of IT and Linux based server, Bash script/AWS/Azure GCC
- Knowledge of fundamental of IP/LAN/WAN/CCNA certification /Wi-Fitechnology.
- Knowledge of Linux based system/remote installation and support to customer

Minimum Qualifications:

• Min 65% in (10th, 12th ,B.E/B.Tech in ECE/CSE/EEE/IT or equivalent degree from arecognized college/university).

Eliqibility Criteria:

• 0-3 years of professional work experience post qualification. Experience in SoftwareInstallation/telecom Solution/IT service sector will be given preference.

Project Name: PM-WANI Central Registry Maintenance

Post code: 64

No. of Post(s): 02

Location: New Delhi

Roles and Responsibilities:

PM-WANI Central Registry Related Activity

Operations and Maintenance of Cloud based server

- Management of filed and customer issues.
- Provide support to clients.
- Training for operation and maintenance of network.
- Coordination with DOT HQ and State LSA for PM-WANIProliferation and training to field staff.
- Deployment of PM-WANI for Tourism sites, ASI, SmartCity, Hospitals etc.

Call Centre and Certification Related Activity:

- To provide extensive support to PDOAs and APP providersin day-to-day operation and maintenance.
- 24x7 Call-Centre support through mobile operator
- Full-fledged Control Room / Helpdesk between 9 AM to 8PM.
- Certification of PDOA stack and APP along with the preparation of reports.

Skills and Abilities:

- Knowledge of IT and Linux based server/Bash script/html/AWS/Azure GCCand fundamental of IP/LAN/WAN/CCNA certification /Wi-Fi technology.
- Knowledge of Linux based system/remote installation and support to customer

Minimum Qualifications:

• Min 65% in (10th, 12th ,B.E/B.Tech in ECE/CSE/EEE/IT or equivalent degree from arecognized college/university).

Eliqibility Criteria:

• 0-3 years of professional work experience post qualification. Experience in SoftwareInstallation/telecom Solution/IT service sector will be given preference.



