Society for Promotion of Vocational & Technical Education [SOVTECH], A & N Islands DBRAIT Campus, Port Blair

VACANCY NOTICE

Advertisement No. SOV/2-17/Programmer/2014/35 Dated 24th May, 2022

Dateu II May, 2022

SOVTECH invites applications from eligible candidates for filling up of the following posts purely on contract basis.

| S N | Name of the Post | No of Post(s) | Consolidated Monthly Salary (INR) |
|--------|--|---------------|---|
| 1 | Programmer (e-District Project) | 04 | 31,500/- |
| 2 | Network Engineer - South Andaman | 01 | 31,500/- |
| 3 | Network Engineer – North & Middle Andaman | 01 | 31,500/- |
| 4 | Technical Analyst | 01 | 31,500/- |
| 5 | Network Security Expert (SDC) | 01 | 43,000/- |
| 6 | Database Administrator (SDC) | 01 | 35,000/- |
| 7 | Network Administrator (SDC) | 01 | 35,000/- |
| 8 | BMS Engineer (SDC) | 01 | 25,000/- |
| 9 | Helpdesk Executive (SDC) | 01 | 21,000/- |
| 10 | Server & EMS Administrator (SDC) | 01 | 43,000/- |
| | Total | 13 | |

The details of posts, Eligibility criteria viz., Essential qualification, Experience, Age, Roles and responsibility and terms and conditions are given below: -

| S.N | Resource-Role | Eligibility Criteria | |
|-----|-------------------------|--|--|
| 1 | Programmer(e-District) | Essential Qualification | |
| | | B.E/ B.Tech (Computer Science Engineer- ing/Information Technology) Or Master of Com- puter Application Or Diploma in (Computer Engineering/Information Technology) | |
| | | Or • B.Sc. (Computer Science/ Information Technology) Or | |
| | | Bachelor of Computer Applications | |
| | | Duties and responsibilities: | |
| | | • Responsible for analysis, design, development, testing, maintenance and documentation of applications. | |
| | | Development of web-based application as per re- quirement. | |
| 2 | Network Engineer (South | Essential Qualification and Experience: | |
| | Andaman) | B.E/B.Tech in CSE/ECE/IT/EEE | |
| | | Or | |
| | | B.Sc. (IT/Computer Science) | |
| | | Or | |
| | | • 3 years Diploma in CS/EC/IT/Electrical with 1 year experience in the field of networking. | |
| | | Duties and responsibilities: | |
| | | Monitoring and providing connectivity support to Government departments. | |
| | | LAN networking | |
| | | Setting up of VPN connectivity for CSCs. | |
| | | Monitoring of VSAT operations across A & N Is- lands. | |
| | | Monitoring of SWAN network across A & N Is- lands. | |
| | | Maintenance of Video Conferencing (VC) reg- ister. | |
| | | Maintenance of stock register. | |
| 3 | Network Engineer (N & | Essential Qualification and Experience: | |
| | M Andaman) | B.E/B.Tech in CSE/ECE/IT/EEE Or | |
| | | B.Sc. (IT/Computer Science) | |
| | | Or | |
| | | • 3 years Diploma in CS/EC/IT/Electrical with 1 year experience in the field of networking. | |
| | | | |

| S.N | Resource-Role | Eligibility Criteria |
|-----|-------------------------|---|
| | | Duties and responsibilities: |
| | | Monitoring and providing connectivity support to Government departments. LAN networking Setting up of VPN connectivity for CSCs. Monitoring of VSAT operations in N & M An- daman. Monitoring of SWAN network in N & M Anda- man. Maintenance of Video Conferencing (VC) reg- ister. Maintenance of stock register. |
| 4 | Technical Analyst | Essential Qualification and Experience: |
| 4 | reclinical Analysi | B.E/B.Tech in CSE/ECE/IT/EEE Or B.Sc. (IT/Computer Science) Or 3 years Diploma in CS/EC/IT/Electrical |
| | | Duties and responsibilities Procurement of all goods and services required by SOVTECH through GeM/e-Procurement. Settlement of invoices. |
| | | All correspondences pertaining to software development. Assist Project Managers in preparing proposals. Coordinating with security auditors. |
| 5 | Network Security Expert | Essential Qualifications: |
| | (SDC) | Qualification: B.E/B.Tech/B.Sc in Electron- ics/Computer Science/IT or MCA |
| | | Experience: |
| | | • 4+ years of experience in IT firm, out of which at least 3 years experience in relevant field. |
| | | Desirable:Relevant work experience in Data Centre |
| | | OEM certification (CCNA/CCNP-security/CEH etc) |
| | | Duties and responsibilities: |
| | | Overall responsibility of network and infor- mation security domain. |
| | | Monitor all security related logs generated by devices. Blocking of URL and web contents |
| | | Adding ACL Updating anti-virus definition, IOS and OS patches and firmware. |

| S.N | Resource-Role | Eligibility Criteria |
|-----|------------------------|--|
| | | Coordinate with relevant security agencies. |
| | | Responsible for managing the Data Centre In- |
| | | formation Security Management System (ISMS) |
| | | and Information Technology Management Sys- |
| | | tem (ITMS). |
| | | Maintaining knowledge base of all patches |
| | | Vulnerabilities assessment and penetration |
| | | testing of all the IT devices and remediate the |
| | | risks. |
| | | Periodic review of all rights and privileges |
| | | Creating and maintaining various policy docu- ments. |
| | | |
| | | Detecting intrusions and unauthorized access to networks and servers |
| | | Updation of HIPS signature |
| | | Protecting firewalls from attacks and servers |
| | | from viruses. |
| | | Coordinate with respective OEMs |
| 6 | Database Administrator | Essential Qualification: |
| | (SDC) | • Qualification: B.E/B.Tech in CSE /IT OR |
| | | • Diploma in CS/IT with BCA OR |
| | | B.Sc. (Computer Science) OR |
| | | • MCA |
| | | Experience: |
| | | • 4+ years of experience in IT firm. Out of which |
| | | at least 3 years work experience in handling |
| | | Databases. |
| | | Desirable: OEM certification (OCP/MCDBA) |
| | | Duties and responsibilities: |
| | | Installation and configuration of Database |
| | | (MSSQL / MYSQL / ORACLE etc) in Windows/ |
| | | Linux/Unix Server environment. |
| | | • Creation of Database instances, creation of user |
| | | authentication |
| | | Deployment & configuration of applications in already installed DBs. |
| | | Management of database health and logs |
| | | Responsible for taking and managing database |
| | | backup & restoration. |
| | | Importing / exporting database data |
| | | Checking connection between application and |
| | | database server while hosting applications |
| | | Database performance tuning Desclaring EMC in sident assigned to them |
| | | Resolving EMS incident assigned to them |
| | | Coordinate with respective OEMs |
| | | |

| S.N | Resource-Role | Eligibility Criteria |
|-----|--------------------------------|--|
| | | |
| 7 | Network Administrator (SDC) | Essential Qualifications: Qualification: B.E/B.Tech in CSE /IT OR Diploma in CS/IT with BCA OR B.Sc. (IT/Computer Science) OR MCA Experience: 4+ years of experience in IT firm. Out of which at least 3 years work experience in networking. Desirable: OEM certification (CCNA/CCNP) |
| | | Duties and responsibilities: Installation and configuration of networking devices (Core Routers/ Core Switches) in A & N State Data Center Managing IPS/ Firewall including patch updation and creation of ACL Checking health of all Networking devices in Spectrum EMS server Monitoring utilization of Networking devices and internet bandwidth usage Logging call with vendor for any issues with devices Monitoring / Analysing device's log Creating and configuration of VLAN network Checking IPS signature and updation status Maintaining/ updating IP address list assigned to the devices Backup of configuration Resolving EMS incident assigned to them Coordinate with respective OEMs |
| 8 | BMS Engineer | Monitoring ISP availability. Essential Qualifications: |
| | (SDC) | B.E/B.Tech in any Discipline with 2+ years of relevant experience OR Diploma in Engineering in any Discipline with 3 + years of relevant experience |
| | | Duties and responsibilities: Overall responsibility of Physical security of the Data Center facility Monitoring and maintenance of temperature at desired level at all operations area including Farm Area. Check and response BMS alert and generating |

| S.N | Resource-Role | Eligibility Criteria |
|-----|---------------------------------------|--|
| | | reports CCTV monitoring and backing up of CCTV recording Maintaining access control cards Servicing of comfort AC, PAC, UPS, battery, etc Performing preventive maintenance of all Non- IT devices (UPS, DG, PAC, CCTV, Fire suppression system, VESDA, RRS, WLD, etc) Refilling diesel and maintaining consumption Report Coordinate with respective OEMs/Vendors for Carrying out AMC/ maintenance. |
| | Helpdesk Executive (SDC) | Resolving EMS, Civil incidents assigned Essential Qualifications: B.E/B.TECH/Diploma in Engineering/BCA Experience: 2+ years relevant experience |
| 10 | | Duties and responsibilities : Single point of contact for all incidents and service requests through phone or helpdesk email ID at the SDC. First level analysis of all incidents and assigning it to appropriate Engineers to resolve the problems Updating user departments and resolving manually raised calls Updating knowledge base for all known problems Continuous monitoring of all IT infrastructures via EMS console Referring escalation matrix to log call with Vendor Generating EMS incident reports Continuous monitoring of EMS Helpdesk interface to check any new incidents. |
| | Server & EMS Adminis- trator (SDC) | Essential Qualifications: Qualification: B.E/B.Tech in CSE /IT OR Diploma in CS/IT with BCA OR B.Sc. (IT/Computer Science) OR MCA Experience: 4+ years of experience in IT firm out of which at least 3 years of relevant work. |
| | | Desirable: OEM certification (MCP/MCSE/ RHCSA etc) |

| S.N | Resource-Role | Eligibility Criteria | |
|-----|----------------------|--|--|
| | | Duties and responsibilities: | |
| | | Overall responsibility of Server and EMS (En- terprise Management System) domain in A & N SDC. | |
| | | Installation of operating systems (Windows/ Linux) in Data Center Server Environment | |
| | | Hardening of servers (service pack & patch updation and firmware updates) | |
| | | Installation and configuration of IIS/DNS/DHCP/FTP/ADS service | |
| | | Configuration and managing of EMS tools. | |
| | | Installation of Backup and anti-virus client | |
| | | Installation and configuration of EMS Agent | |
| | | Vulnerability assessment of servers and fixing it | |
| | | Maintaining license details of servers | |
| | | Performing routine maintenance activities | |
| | | Updation of planned & preventive maintenance registers | |
| | | • Logging call with vendor for faulty component replacement | |
| | | Resolving EMS incident assigned to them | |
| | | Monitoring of server logs and performance tun- ing. | |
| | | Checking health of all devices in Spectrum EMS server | |
| | | Coordinate with respective OEMs | |

METHOD OF SELECTION:

- The Selection test will be held for the eligible candidates from 28th 30th June, 2022 as follows:
 - Trade Test for Programmer (e-District): 9AM to 1PM on 28th June, 2022 100 Marks
 - Written Test for Network Engineer, Technical Analyst, Network Security Expert (SDC), Database Administrator (SDC), Network Administrator (SDC), BMS Engineer (SDC), Helpdesk Executive (SDC), Server & EMS Administrator (SDC): 2:30 PM to 5:30 PM on 28th June, 2022 30 Marks
 - Skill Test for Network Engineer, Technical Analyst, Network Security Expert (SDC), Database Administrator (SDC), Network Administrator (SDC), BMS Engineer (SDC), Helpdesk Executive (SDC), Server & EMS Administrator (SDC): 9AM to 5:30 PM on 29th – 30th June, 2022 – 70 Marks

TENURE OF CONTRACT:

The period of contract shall be for Five Years renewable on yearly basis based on performance.

GENERAL CONDITIONS:

- A Candidate may apply for more than one post.
- The candidate who can join immediately after selection will be given preference.
- The candidates needs to apply online by visiting the url https://erecruitment.andaman.gov.in or may also apply through eDweep Kendra (CSC) by paying usual charges for scanning and uploading the documents. The online application will be active from 26th May, 2022
- All relevant documents in support to the essential qualification, desirable qualification like Educational Certificate, Mark Sheets, Age Proof and Experience Certificate should be uploaded along with the applications.
- The last date of submission of application (online) is 8th June, 2022 by 4:30 PM
- Applications received after the due date and time shall not be considered.
- The syllabus for written test and skill test is enclosed as **Annexure A**.
- Society for Promotion Vocational & Technical Education (SOVTECH) reserves the right in all respect regarding filling up the post and the decision. Its decision will be final and binding.
- In case it is detected at any stage of recruitment that a candidate does not fulfil the eligibility norms and/or that he/she has furnished any incorrect/false information, his/her candidature will stand rejected.
- The candidates are advised to go through the requirements of educational qualification, age etc. carefully and satisfy themselves that you are eligible before appearing for the interview.
- The decision of SOVTECH in all aspects pertaining to the application, its acceptance or rejection, conduct of interview and at all consequent stages culminating in selection or otherwise of any candidate shall be final and binding on all concerned. SOVTECH reserves its right to alter/modify any condition laid down in this vacancy notice or any backend process for conduct of selection during its various stages as warranted by an unforeseen circumstances arising during the course of this process or as deemed necessary by SOVTECH at any stage.
- Applicants should note that some of the above posts may involve work of arduous nature and in shifts.

ACTION AGAINST MISCONDUCT:

- i) Candidates are advised in their own interest that they should not furnish any documents/information that are false, tampered, fabricated, having overwriting, having correction marks and they should not suppress any material information while filling up application.
- ii) At any stage of recruitment or later, if a candidate is or has been found guilty of any misconduct during the selection process, in addition to rendering himself/herself liable to legal/criminal prosecution, will also become liable to be:
- a) Disqualified from the selection process and/or
- b) Debarred either permanently or for a specified period from any examination/recruitment and/or
- c) Discharged/removed/dismissed from service, if the act of misconduct comes to notice after his/her appointment to the roll of SOVTECH.

<u>SYLLABUS FOR WRITTEN AND SKILL TEST FOR SELECTION OF</u> <u>OPERATIONS STAFF OF A & N STATE DATA CENTRE</u>

Name of the post: Programmer (e-District Project)

Syllabus for skill test: 100 marks (4 hours)

- Development of a web Application on (PHP/ASP.NET/JAVA).

Name of the post: Network Engineer

Written test: Time allowed: 30 min (30 marks)

Syllabus:

- Networking-Network Devices, IP Addressing and Subnetting, Switching and VLANs, Routing (Static and Dynamic), Access Control Lists, DHCP
- SWAN- Overview, Design and Architecture
- Proxy Servers and Virtual Private Network
- Fibre Optic Networks

Skill test: Time allowed: 90 min (70 marks)

- Configuration of Routers.
- Optical Fibre Cable Splicing and ensuring end-to-end connectivity between two PCs in a fibre network.
- LAN Networking.
- Configuration of Leased Line Network.

Name of the post: Technical Analyst

Written test: Time allowed: 30 min (30 marks)

Syllabus:

- Basic Networking Concepts
- GeM (Govt. e-Marketplace)
- Procurement modes of products and services in GeM and CPPP.

Skill test: Time allowed: 90 min (70 marks)

- Bid creation in GeM portal
- Proposal for procurement of a) Goods and b) Services through GeM.
- RFP for procurement through e-procurement.
- Bid creation in CPPP.

Name of the post: Network Security Expert (SDC)

Syllabus for written and skill test

- Monitor all security related logs for suspicious behaviour.
- Configuring and supporting security tools such as firewalls, IPS
- Performing vulnerability and penetration tests, identifying and defending against threats, and developing disaster recovery plans.
- Adding/Removing ACL, PAT, Log analysis, VPN.
- Maintaining knowledge base of all patches
- Maintaining ISO Related Documents.

Name of the Post: Database Administrator

Syllabus for Written Examination - Time allowed: 30 min (30 marks)

- Introduction of MS SQL SERVER Architecture
 - Components of MS SQL Server
 - SQL DB Files
 - Transaction Isolation Levels
 - System Databases
- SQL SERVER Installation
 - System Requirements for MS SQL 2017
 - SQL server upgrade and Patching
- SQL Server Backup & Restore:
 - Recovery Models
 - Types of Backups including Copy only
 - o Types of Database Restore
 - o Data Import & Export
- Security Concepts in SQL
 - o SQL Server Authentication vs Windows Authentication
 - Logins & Users of SQL Server
 - Understanding SQL Server fixed database roles
- Performance Tuning
 - Understanding Database indexes
 - o Understanding SQL Server Profiler
- Basic of Advanced SQL Server Technology
 - Log Shipping
 - Database Mirroring
 - Clustering
- Introduction to MySQL
 - \circ Basic SQL
 - Managing Users and Privileges
 - Backing Up and Restoring MySQL Databases

<u>MS SQL</u>

- 1. Install and configure Default instance of SQL Server (Duration 45 min)
- 2. Restore Database DB1 backup file (Duration 5 Mins)
- 3. Add another Database DB2 mdf file (Duration 5 Mins)
- 4. Create a Login to connect and perform DML operation on DB1 (Duration 10Mins)
- 5. Create Maintenance Plan to automate backup process to take Full (daily once), Differential (daily twice) and Log backup (every 2 hours) for Database DB1 (Duration 20 mins)

<u>My SQL</u>

- 1. Install and configure MySql DBMS (Duration 30 min)
- 2. Create a database DB1 and restore data from a dump backup file. (Duration 10 Mins)
- 3. Create a user to connect to DB1 and grant permission to perform DML operation (Duration 10 mins)
- 4. Take the backup of DB1 (Duration 10 mins)
- 5. Write a script and schedule to automate the backup process to take daily backup (Duration 20 mins)

Name of the post: Network Administrator

Syllabus for written test - Time allowed: 30 min (30 marks)

- 1. Virtual Local Area Network (VLAN)
 - Creating VLAN
 - > VLAN ACL
 - > VTP
 - > Trunking
- 2. OSI Layer
- 3. IP Addressing and Subnetting
- 4. Network Devices and its functions
- 5. Routing Protocols
 - > Static Route
 - > OSPF
 - ≻ EIGRP
- 6. Access Control List (ACL)
 - > Types of ACL and its application
- 7. Network Address Translation(NAT)
 - Static NAT
 - > Dynamic NAT
 - > PAT
- 8. Spanning Tree Protocol(STP)

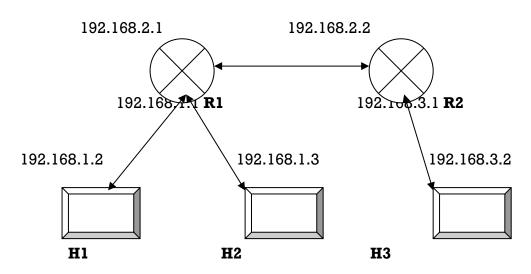
- > BPDU
- > RSTP
- > MSTP

Specification of existing Devices

- HP Router MSR5040
- HP App Switch 5500
- HP Core switch 7500
- Firewall Secpath 1000E
- Radware IPS DefencePro

Syllabus for Skill Test - Time allowed: 90 min (70 marks)

- 1. Crimping of Ethernet cable (Straight and cross cable). (Duration 20 min)
- Configure 2 Routers (MSR 2010) R1 and R2. Connect R1 to with 2 hosts H1 and H2 and connect R2 to host H3. Allow ping access of H3 to H2 with ping restriction to H1. (Duration 45 min)



.....

Name of the post: BMS Engineer

Syllabus for written test - Time allowed: 30 min (30 marks)

- 1. Working principle, Fault analysis & Troubleshooting technique of Electrical devices
 - > Uninterrupted Power Supply (UPS)
 - Diesel Generator (DG)
 - Precision Air Conditioner (PAC)
- 2. Working principle, Fault analysis & Troubleshooting technique of Security Systems
 - Fire suppression system

- > Addressable fire panel
- Very Early Smoke Detection Apparatus (VESDA)
- Close Circuit Television (CCTV)
- Rodent Repellent system (RRS)
- > Water level detection system (WLD)
- Access control system (ACS)
- 3. Monitoring parameters of electrical devices such as Uninterrupted Power Supply (UPS), Diesel Generator (DG), Precision Air Conditioner (PAC) & Comfort Air Conditioner (CAC)
- 4. Monitoring parameters of Data Centre zones like server room, electrical room, UPS room etc.
- 5. Smart racks

Specification of existing Devices

- Uninterrupted Power Supply (UPS):60 & 20 KVA, Emerson, model-7400M.
- Diesel Generator (DG): 82.5 KVA Cummins, Engine Model 6BT-5.9-G1.
- Precision Air Conditioner (PAC): 8.5 Ton Emerson, Model- PEX 130 ECWITH ICOM
- *Fire suppression system: Model-Ravel RE 120GR*
- > Addressable fire panel: Model EST Quick Start
- Very Early Smoke Detection Apparatus (VESDA): Model Siemens/XTRALIS, VLF-250-02
- > Close Circuit Television (CCTV): Model HIKVISION
- > Rodent Repellent system (RRS): Model- Jayfire
- > Water level detection system (WLD): Model Jayfire
- Access control system (ACS): Model Johnson control (JCI) P2000 V3.10 Express

Syllabus for Skill Test - Time allowed: 90 min (70 marks)

- 1. Fault analysis of 82.5 KVA Diesel Generator (DG), Engine Model No: 6BT-5.9-G1, Make: CUMMINS. (Duration- 20 Min)
- 2. Fault analysis of 8.5 ton Precision Air Conditioner (PAC), Model-PEX 130EC with ICOM), Emersion make. (Duration-15 Min)
- 3. Providing access rights to new visitor card and disabling access through Johnson control (JCI)P2000 V3.10 Express. (Duration-10 Min)
- 4. Providing access to new visitor for specific location for defined time through Johnson control (JCI)P2000 V3.10 Express. (Duration- 10 Min)
- Providing biometric access through Johnson control (JCI)P2000 V3.10 Express. (Duration-10 Min)
- 6. Door control enabling and disabling process through Johnson control (JCI)P2000 V3.10 Express. (Duration-10 Min)

- Access Report generation through Johnson control (JCI)P2000 V3.10 Express. (Duration-15 Min)
- 8. Calibration of electrical device parameters through Johnson control (JCI) Metasys V5.2.0.5400 monitoring systems. (Duration-15 Min)
- 9. Troubleshooting of EST(quick start) addressable fire panel, Water level detection system.(**Duration- 20 Min**)

10. Troubleshooting of S321-IP door controller. (Duration- 20 Min)

Name of the post: Helpdesk Executive

Syllabus for written test - Time allowed: 30 min (30 marks)

- Basic ITIL Concepts: Incident, ticket, service request, change request, problem request
- > CA EMS tool: Availability, threshold, CPU utilization, memory utilization
- Basic Data Centre concepts: What is a server (blade and rack), router, Precision Air Conditioner, UPS, Diesel Generator, IPS, ISP, VESDA, FM200, Parameters for temperature and humidity in farm area

Syllabus for skill test 70 marks

1. Generate availability and e-health reports from CA Spectrum EMS

tool (Duration 30 min)

- 2. Raise an incident ticket for parameters that have crossed the threshold limit on the EMS Monitoring tool. (**Duration 20 min**)
- 3. First level troubleshooting over phone for non-accessibility of application by a user. **(Duration 20 min)**

......

Name of the post: Server & EMS Administrator (SDC)

Syllabus for written test - Time allowed: 30 min (30 marks)

- Windows Server Operating Systems
- > EMS tools
- > SNMB Agents
- Administration of Active Directory Server
- > FTP
- > Update Management in Windows servers
- Server Hardening
- Administration of Netbackup
- Administration of Antivirus

Syllabus for Skill test - Time allowed: 90 min (70 marks)

- 1. Install and Configure Windows Server (Duration 45 min)
- 2. Configure IIS in Windows server Operating System and host one demo

Application (Duration 60 min)

- 3. Enable iSCSI Storage (Duration 30 min)
- 4. Enable Hyper-V (Duration 30 min)