

तर्व्याः मुव्यः तद्देवः गर्द्धवाः वयाः र्श्वेवः स्रो

SAMTSE COLLEGE OF EDUCATION



Annexure 5A/6.1.2.1

ROYAL UNIVERSITY OF BHUTAN **POSITION PROFILE**

1. JOB IDENTIFICATION

1.1 **Position Title** Sr. ICT/ICT/Assistant ICT Officer

1.2 Position Level

1.3 **Occupational Group Administrative & Technical** 1.4 College/OVC **Samtse College of Education**

2. MAIN PURPOSE OF THE POSITION:

- 2.1 Provide efficient and effective support on a day to day basis to users of the network systems.
- 2.2 Resolve software and hardware support personally.
- 2.3 Support the network infrastructure to ensure that it provides a secure, stable environment for educational applications.

3. GENERAL ROLES AND RESPONSIBILITIES:

- 1. Plan, design, develop and launch effective information systems and operation systems in support of core organizational functions;
- 2. Analyze program requirements for a specified task and develop the methods to provide the
- 3. appropriate solutions:
- 4. Consult with division representatives on objectives, requirements and effectiveness of proposed and existing computer systems.
- 5. Secure system by developing system access, monitoring control, evaluation and establish and test disaster recovery policies and procedures; complete back-ups;
- 6. Analyze and resolve end user software program connectivity issues in a timely and accurate fashion and provide end user training where required;
- 7. Upgrade system by developing, testing, evaluating, and installing enhancements and new software:
- 8. Designing and maintaining physical network architecture and infrastructure;
- 9. Ensure the stable operation of the in-house computer network. This includes planning, developing, installing, configuring, maintaining, supporting and optimizing all network hardware, software and communication links;
- 10. Developing and implementing network system and user security requirements;
- 11. Analysing network workload, monitoring performance and diagnosing problems;
- 12. Evaluating the productivity implications of upgraded servers and analyse the computer and information needs of the organization;
- 13. Create models for new database development and/or changes to existing ones;



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- 14. Monitor database system details within the database, including stored procedures and execution time, and implement efficiency improvements;
- 15. Designing and implementing redundant systems, policies, and procedures for disaster recovery and data archiving to ensure effective protection and integrity of data assets;
- 16. Develop, implement, and maintain change control and testing processes for modifications to databases:
- 17. Conduct research and make recommendations on database products, services, protocols, and standards in support of procurement and development efforts;
- 18. Planning, designing, developing and launching Learning Management Systems (LMS);
- 19. Analyze output products and debug source code to isolate and correct errors in program logic, syntax, and data entry, and data entry, and to ensure accuracy and efficiency.
- 20. Conduct code reviews and unit-level testing. Develop and maintain unit-level test plans;
- 21. Modify existing programs to correct program errors or modify existing functionality or interface;
- 22. Implement security techniques designed to preclude unauthorized access to computer data and to reduce computing resource misuse;
- 23. Design, develop, maintain, and execute test plans for formal qualification testing, system integration testing, regression testing and verification, validation and acceptance testing;
- 24. Build the operations end of the organization's website and keep them functioning smoothly;
- 25. Design, build and implement new web pages and sites;
- 26. Apply fundamental concepts, practices, procedures and existing policies and guidelines in specialised areas of information technology;
- 27. Implement activities related to development of infrastructure and facilities for ICT based networking:
- 28. Ensure LAN and Internet connectivity always;
- 29. Ensure that the security of the data and systems are not compromised;
- 30. Manage and maintain all network components of an agency, since network needs 24/7 uptime;
- 31. Maintain detailed documentation of all work performed, sufficient to allow independent generation of the same process and the results.
- 32. Assist in setting and coordinating priorities for allocation of budget for ICT based on the requirements of the organisation;
- 33. Assist in identifying and arranging appropriate skills for ICT personnel in the organisation;
- 34. Assist in establishing long and short-term goals and sets priorities in the area of information technology:
- 35. Participate in negotiations for software purchases with vendors; oversees the maintenance of licenses resulting from such purchases:
- 36. Maintain detailed documentation of all work performed, sufficient to allow independent generation of the same process and the results;
- 37. Assist in the writing of research papers, briefs and reports, discussion materials; and
- 38. Carry out any other task that may be assigned from time to time.



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4. SPECIFIC ROLES AND RESPONSIBILITIES:

- 4.1 Practical knowledge of computer operations and experience in supporting Microsoft operating systems and office applications, telecommunications equipment and another ICT hardware.
- 4.2 Knowledge, experience and understanding of a networking including wireless configuration.
- 4.3 Knowledge of server configuration using Linux.
- 4.4 Install and configure servers
- 4.5 Operation and management of servers
- 4.6 Operation and management of ICT services
- 4.7 Operation and management of cloud server technology (Proxmox)
- 4.8 Install, configure and manage KOHA library system
- 4.9 Install, configure and manage Moodle VLE system
- 4.10 Install, configure and manage DNS server
- 4.11 Install, configure and manage web server (Word Press)
- 4.12 Install, configure and manage file server
- 4.13 Install, configure and manage database server
- 4.14 Install, configure and manage PF sense security system
- 4.15 Install, configure and manage UniFi Pro WiFi system
- 4.16 Design and implement network for both LAN and WLAN
- 4.17 Revise and document IT policies and procedures for the college
- 4.18 Provide on-the-job training and guidance for the ICT staff
- 4.19 Plan and roadmap day-to-day operations for ICT staff

4.1 Other Responsibility

Undertake other responsibilities as deemed appropriate by ICT Section and the College management.

5. KNOWLEDGE, SKILLS & ABILITIES (KSA) REQUIREMENTS:

5.1. Education: MTech IT/CS, MEng IT/CS, MSc IT/CS, BEng IT/CS, BSc IT/CS, BTech



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5.2. Experience: Experienced in networking and System Administration

5.3. Knowledge Skills and Abilities:

- 5.3.1 Ability to lead and advise the College Management on the long-term visioning and planning of ICT infrastructure and ICT services development in the College to facilitate in achieving the vision of developing a technology-enabled and technology-enhanced teacher education and other courses the College offers as a higher education institution;
- 5.3.2 Conversant in the area of responsibilities both in terms of technical knowledge and changing environment.
- 5.3.2 Good communication skills both in terms of written and spoken.
- 5.3.3 Sound analytical skills with knowledge in planning, management and execution of projects and activities.
- 5.3.4 Ability to keep up-to-date information in the area of responsibilities and provide timely information for informed decision making.
- 5.3.5 Ability to work in teams and ready to work beyond working hours.
- 5.3.6 Capable of coping with pressures of the job and meeting deadlines and competing demands.
- 5.3.7 Ability to understand, troubleshoot and resolve software issues.