



## Level 4 Certificate in Unix Networking (188) 119 Credits



<b>Unit:</b> Introduction to SCO Unix	<b>Guided Learning Hours:</b> 240
<b>Exam Paper No.:</b> 2	<b>Number of Credits:</b> 24
<b>Prerequisites:</b> Knowledge in Windows operating system.	<b>Corequisites:</b> A pass or higher in Certificate in Networking or equivalence.
<p><b>Aim:</b> This unit is designed to teach SCO Unix operating system with emphasis on using the command line utility commands, working with files and directories, using the shell; creating and reading simple shell scripts. Learners will learn important SCO Unix operating system concepts to prepare them for follow-up administration, networking, and security units in the Diploma level. Learners accomplish basic tasks such as creating, organising, and removing files; using text editors; printing; and monitoring their processes. All tasks are completed through a command line interface.</p> <p>On completion of the unit, learners will be able to: access a SCO UNIX System in a safe and secure manner; use the features of the SCO UNIX Korn shell to enter system commands; access the online manual pages to look up command syntax and option lists; access files and directories; organise home directories by creating and removing sub-directories, and copying and moving files; maintain the security of files and directories by setting permissions; create and modify text files; use the print spooler to print text files; Use shell metacharacters to control command input and output, and combine commands using pipes and tees; monitor processes and kill processes that do not terminate properly; modify and configure login environments to accommodate their needs and preferences.</p>	
<b>Required Materials:</b> Recommended Learning Resources.	<b>Supplementary Materials:</b> Lecture notes and tutor extra reading recommendations.
<b>Special Requirements:</b> The unit requires a combination of lectures, demonstrations, discussions, and hands-on labs.	
<p><b>Intended Learning Outcomes:</b></p> <ol style="list-style-type: none"> <li>The SCO operating system, dependable operating system platforms, features and functionality.</li> <li>The system boot at serial terminals or virtual terminals and the logging in process and how to log out.</li> <li>SCO files and directories system structured; the directory structure and how files are organised into a hierarchy of folders.</li> <li>How user rights are specific access permissions that can be assigned to customisable groups.</li> <li>The <i>vi</i> editor powerful features and how they aid programmers.</li> </ol>	<p><b>Assessment Criteria:</b></p> <ol style="list-style-type: none"> <li>Define Unix kernel</li> <li>Describe Unix shell</li> <li>Describe SCO file system</li> <li>Explain shell user interface</li> <li>Identify SCO utilities</li> <li>Describe the login process</li> <li>Analyse and identify structure of SCO commands</li> <li>Demonstrate how to execute SCO commands</li> <li>Identify <b>man</b> command syntax</li> <li>Explain different Unix file types</li> <li>Describe SCO file system structure</li> <li>Demonstrate how to create, delete list files and directories</li> <li>Demonstrate how to work with SCO files</li> <li>Explain how Unix file permissions work</li> <li>Demonstrate how to change permissions</li> <li>Describe Unix file ownership and permissions</li> <li>Analyse the Unix file permission <b>chmod</b> numeric notation</li> <li>Demonstrate how to create and edit files</li> <li>Identify how to manipulate text</li> <li>Demonstrate how to execute command-</li> </ol>

	line editing
6. How Unix uses shells to accept commands given by the user and the different shells available.	6.1 Describe functions of the shell 6.2 Explain wildcards and metacharacters 6.3 Outline <b>redirection, pipe</b> and <b>filter</b> commands 6.4 Demonstrate how to use shell variables 6.5 Describe login profile 6.6 Demonstrate how to customise user environment
7. How on UNIX systems, each system and end-user tasks are contained within a process.	7.1 Define a process 7.2 Analyse and describe the process environment 7.3 Describe shell scripting 7.4 Demonstrate how to monitor processes 7.5 Identify process signals
8. How UNIX utilities are used to program, maintain, update, and regenerate groups of programs.	8.1 Demonstrate using <b>find, grep, head/tail</b> and <b>sort</b> commands 8.2 Demonstrate how to use PC DOS environment files 8.3 Demonstrate how to use advanced utilities commands
9. The overview of the X Window System's architecture and how it provide users with a powerful graphical user interface.	9.1 Describe advantages of X Windows environment 9.2 Describe X Windows client/server model 9.3 Demonstrate how to start X Windows and initiate X clients 9.4 Demonstrate how to display remote clients 9.5 Identify X Windows startup files 9.6 Describe Common Desktop Environment (CDE) components 9.7 Demonstrate how to customise the desktop environment
<p><b>Methods of Evaluation:</b> A 2-hour written examination paper with Section A and Section B. Section A has 40 multiple choice questions. Section B has three essay questions, each carrying 20 marks. Candidates are required to answer all questions. Candidates also undertake project/coursework in Introduction to SCO Unix with a weighting of 100%.</p>	

**Recommended Learning Resources: Introduction to SCO Unix**

<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Unix on Command: SCO Unix System V386, SCO Unix 286 and 386 by Riders ISBN-10: 1562050273</li> <li>• Using SCO Unix by Geoffrey Leblond ISBN-10: 0078816416</li> <li>• SCO Unix Operating System Tutorial by Santa Cruz Operations ISBN-10: 0130121703</li> <li>• A. B. C.'s of SCO Unix by Tom Cuthbertson ISBN-10: 0895887150</li> </ul>
<b>Study Manuals</b> 	BCE produced study packs
<b>CD ROM</b> 	Power-point slides
<b>Software</b> 	SCO Unix