

**I Year II Semester**  
**Code: 17CS204**

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## **ADVANCED UNIX PROGRAMMING**

### **UNIT-I**

Introduction to Unix-Brief History-What is Unix-Unix Components-Using Unix-Commands in Unix-Some Basic Commands-Command Substitution-Giving Multiple Commands.

### **UNIT-II**

The File system –The Basics of Files-What’s in a File-Directories and File Names-Permissions-I Nodes-The Directory Hierarchy, File Attributes and Permissions-The File Command knowing the File Type-The Chmod Command Changing File Permissions-The Chow Command Changing the Owner of a File-The Chgrp Command Changing the Group of a File.

### **UNIT-III**

Using the Shell-Command Line Structure-Metacharacters-Creating New Commands-Command Arguments and Parameters-Program Output as Arguments-Shell Variables- -More on I/O Redirection-Looping in Shell Programs.

### **UNIT-IV**

Filters-The Grep Family-Other Filters-The Stream Editor Sed-The AWK Pattern Scanning and processing Language-Good Files and Good Filters.

### **UNIT-V**

Shell Programming-Shell Variables-The Export Command-The Profile File a Script Run During Starting-The First Shell Script-The read Command-Positional parameters-The \$? Variable knowing the exit Status-More about the Set Command-The Exit Command-Branching Control Structures-Loop Control Structures-The Continue and Break Statement-The Expr Command: Performing Integer Arithmetic-Real Arithmetic in Shell Programs-The here Document(<<)-The Sleep Command-Debugging Scripts-The Script Command-The Eval Command-The Exec Command. The Process-The Meaning-Parent and Child Processes-Types of Processes-More about Fore ground and Background processes-Internal and External Commands-Process Creation-The Trap Command-The Stty Command-The Kill Command-Job Control.

### **TEXTBOOKS:**

1. The UNIX programming Environment by BrainW.Kernighan &RobPike, Pearson.
2. Introduction to Unix Shell Programming by M.G.Venkatesh murthy, Pearson.

### **REFERENCEBOOKS:**

1. Unix and shell programming by B.M. Harwani,OXFORD university press