**PSG COLLEGE OF TECHNOLOGY, COIMBATORE 641004**

**DEPARTMENT OF APPLIED MATHEMATICS AND COMPUTATIONAL SCIENCES**

**Operating Systems Lab**

**List of Unix Commands, Shell concepts**

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| --- | --- | --- | --- | --- | --- | --- |
| **Essential Commands** | **General Pur. Utilities** | | **Simple Filters** | **Regular**  **Expressions** | **Process Cmds** | **Advanced Filters** |
| man  more  mkdir -m -p  cd  rmdir  ls -a, -r, -F,  ls -R, -x  cat ><file>  echo ‘‘ ><file>  cat -n  mv  rm  cp  ls –l –i | Pwd  date  passwd  wc  who  file  script  cal  calendar  tty  uname  tput  banner  df  du  chmod  chgrp | chown  find  cmp  comm.  diff  spell  umask  basename  split  finger  stty  sleep  history  alias  unalias  bc  join | head  tail  cut  paste  expr  sort  tr  pr  nl  uniq | introd  grep –v –w grep –c –n  grep –l –i  egrep –e -f  fgrep -f  expr  sed =  {intro,  Syntax,  addr,  print, insert,  append,  delete,  write,  subs.,  REM. patt,  REP patt,  BRE, TRE} | ps -u -e -f  nohup  at  batch  nice  kill  jobs -l  fg  bg | awk =  {intro,  syntax,  line filter,  RE filter,  Field split,  Format o/p,  Operators: logical, real, RE,  Numeric processing,  Variables: built-in, user defn.  -f –v options,  Functions: built-in, user defn.,  Interface: |, <, >  If, case,Loops,  BEGIN,END,  Positionl params,  getline,} |
| **Communication Commands** | **Shell variables** | | **Backup Commands** | **Shell Prog.** | **Adv. Shell Prog.** |  |
| ifconfig,  netstat,  ftp,  route,  whois  tracepath  ip  ping | shell vars: SHELL, TERM, MAIL, PS1, PS2, USER, LOGNAME  set –, -x, +x,  set no clobber,  set ` `  setenv,  unset,  merging streams,  wait,  . profile  vacation,  .plan,  .project | | compress  uncompress  gzip  gunzip  tar | { }, ( ), <<,  export, read  $0, …….$9  $\*, $#, $@, $?, $!, !!  arrays  if - fi  case-esac  for  while  until  break, continue,  functions,  trap | eval,  exec,  getopts,  conditional var.subs,  time,  $()  $(())  [[ ]] |  |