

# **J.H. P.G. Govt. College, Betul (MP)**

## **B.sc. III Year (Major) Computer Science Practical List**

### **I Linux:**

- **Linux Directory Commands :** pwd, mkdir, rm -rf, ls, cd, cd/, cd~
- **Linux File Commands:** touch, cat, cat>, cat>>, rm cp, mv, rename
- **Linux Permission Commands:** su, id, useradd, passwd, groupadd, chmod  
Groupdel, chown, chgrp
- **Linux File Content & Filter Commands:** head, tail, tac, more, less, grep, comm, sed, tee, tr, uniq, wc, od, sort, diff.
- **Linux Utility Commands:** find, bc, locate, date, cal, sleep, time, df, mount, exit, clear, gzip, gunzip.
- **Linux Networking Commands:** ip, ssh, mail, ping, host
- **Edit Crontab file:** to wall message on system on particular time automatically.
- **Vi editor:** Create file, edit, save, and quit. Highlighting the searched term within a file, cut, yank, undo.

### **II Shell Scripting**

- Write a shell script to print a message.
- Write a shell script to access arguments passed on command line
- Write a shell script to create files with the name passed on command line.
- Write a shell script to input number from user and display its factorial.
- Write a shell script to input file name and create multiple directories individually for the name in the file given.
- Write a shell script to input number from user and display whether it is prime number or not.

**B.sc. III Year (Minor)**  
**Computer Science Practical List**

1. Find all numbers which are multiple of 17, but not the multiple of 5, between 2000 and 2500
2. Print the first 2 and last 3 characters in a given string. Use the string slicing.
3. Write a program that eliminates duplicates in a list.
4. Implement shallow copy and deep copy of a list.
5. Find the largest of n numbers, using a user define function largest()
6. Write a function that capitalizes all vowels in a string.
7. Read a line containing digits and letters. Write a program to give the count of digits and letters.
8. Write a function myReverse() which receives a string as input and returns the reverse of the string.
9. Use the list comprehension methodology in python, to generate the squares of all odd numbers in a given list.
10. Generate a dictionary and print the same. The keys of the dictionary should be integers between 1 and 10 (both inclusive). The values should be the cubes of the corresponding keys.
11. Create a nested dictionary. The roll number of a student map to a dictionary, this inner dictionary will have name, age and place as keys. Read details of at least three students.
12. Enter a word. Create a dictionary with the letter of this word as keys and the corresponding ASCII values as values.
13. Create a database table in sqlite and show the table data in python.
14. Implement DML commands in SQLite from python interface.
15. Implement tkinter methods in a python script.