FUNCTION ASSIGNMENT OF PYTHON LANGUAGE CLASS: 12

General Question

- 1. Write a program to accept temperature in F^0 and change it in c^0 . Formula is c=5*(f-32)/9.
- 2. Write a program to accept temperature in c^0 and change it in F^0 . Formula is f=9*c/5+32.
- 3. Write a program to radius of a circle and print the area. Formula is area = πr^2
- 4. Receive purchase amount. Calculate discount @10% and discount price print it.
- 5. Receive principal amount, rate and time period. Calculate simple interest and print it. Formula: p*r*t/100.

Questions of if_else statement

- 6. Write a program to accept a year from user and print whether it is leap year or not.
- 7. Write a program with the help of nested if statement, which accept age and citizenship of a person and check that he/she is eligible for vote or not. Print the message accordingly, it means if age is less then print 'You are under age' and if he/she is not an Indian citizen then print the message 'You are not an Indian citizen'.
- 8. Write a program with the help of if_elif statement, which accept name, basic salary and designation of any person. Print the Grass Salary and Net Salary according to following table.

 Grass Salary = HRA+TA+DA+BasicSalary

NetSalary = GrassSalary-(PF+EF)

| Designation | HRA(%) | TA(%) | DA (%) | PF (%) | EF (%) |
|--------------------|---------------|--------------|---------------|---------------|---------------|
| Director | 20 | 60 | 10 | 12 | 8 |
| Manager | 15 | 50 | 8 | 10 | 7 |
| Accountant | 10 | 45 | 6 | 8 | 6 |
| Clerk | 5 | 40 | 4 | 6 | 5 |

Questions of Looping statement

- 9. Write a program to print your name 10 times.
- 10. Write a program to print 10 natural no.
- 11. Write a program to print the table of a no. given by the user.
- 12. Write a program to print the factorial of a no. given by the user.
- 13. Write a program which accept a no. and check it prime or not.
- 14. Wap to print all the even and odd no. between 1 to 50
- 15. Wap which accept two no. and print even no. between them.
- 16. Write a program to print the reverse of a given no.
- 17. Wap to check a no. that it is palindrome or not.
- 18. Wap to check a no. that it is ArmStrong or not.
- 19. Write a program to print the sum of the each digit of a given no.
- 20. Write a program to print all the prime no. between 1 to 100.
- 21. Wap which generate 10 term of Fibonacci series.

NESTED LOOP QUESTIONS

| WAP to print the following pattern:— | | | | | |
|---|--|--|--|--|--|
| * ** ** ** ** ** ** ** ** ** | * * * * * * * * * * * * * * | 1 12 123 1234 12345 | | | |
| 5 4 3 2 1 4 3 2 1 3 2 1 2 1 1 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | 5 4 3 2 1 4 3 2 1 3 2 1 2 1 1 | | | |
| 1 12 123 1234 12345 | * * * * * * * | * * * * * * | | | |
| 1 121 12321 1234321 123454321 | A AB ABC ABCD ABCDE | A BB CCC DDDD EEEEE | | | |
| A BC DEF GHIJ KLMNO | 1234554321 1234 4321 123 321 12 21 1 1 | ABCDEDCBA ABCD DCBA ABC CBA AB BA A A | | | |
| 0 10 010 1010 01010 | A ARV ARVI ARVIN ARVIND | STRING TRINGS RINGST INGSTR NGSTRI GSTRIN STRING | | | |