# NEO CONVENT SR. SEC SCHOOL

## CLASS – 11 HOLIDAY HOME WORK (2024-25)

## ENGLISH

MAKE THE PROJECT GIVEN IN THE CLASS

DO THE ASSIGNMENT GIVEN

## Class – 11 (MATHS)

**Do all NCERT examples and questions of below mentioned chapters:**

**Chap 1 (Sets), Chap 2 (Relations and Functions),Chap 13 (Statistics) and Chap 5 (Linear Inequalities).**

**[Do in a separate register]**

## PHYSICS

HOLIDAY HOMEWORK

1. Make an investigatory project on physics.
2. Complete Assignment uploaded on portal.
3. Make ppt on physics behind monument in in Andaman and Delhi

## CHEMISTRY

HOLIDAY HOMEWORK

1. Practice ncert exercise of chapter 1,2 and 3.
2. Memorise Salt Analysis test for practical.
3. Complete Assignment uploaded on portal.
4. Make ppt on Soil Analysis of Andaman and Delhi.

## BIOLOGY

1. Make a **RESEARCH PROJECT** on the topic discussed in the class. The project should be handwritten and with proper pictures, diagrams and observations.
2. Make a portfolio of the diagrams of Text Book as discussed in the class.
3. Make a PowerPoint presentation/Record File regarding NEET EXAM PATTERN, SYLLABUS AND SELECTION CRITERIA.
4. Make PowerPoint presentations on the following topics
   a. **DIGESTION AND ABSORPTION**
   b. **MINERAL NUTRITION**
   c. **MORPHOLOGY AND ANATOMY OF FROG AND COCKROACH**

**5.** Make a PowerPoint presentation comparison between Flora and Fauna of Delhi and Lakshwadeep.

## ACCOUNTANCY

- ➢ Practice Additional Problems of 'Accounting Equation' and 'Recording of Transactions' based on Text Book – NCERT
- ➢ Prepare a 'ppt' based on any relevant topic of your choice, based on topics covered. (12-15 slides)

Remember:
Road has Speed Limit, Bank has Money Limit, Exam has Time Limit, Tower has Height Limit, But Thinking has No Limit...So Think Big and Achieve Big.

Wish You all Happy Holidays! God Bless all.

## BUSINESS STUDIES

Make Project in Business Studies on any of the topic suggested

**Suggestive List of Projects:**

**Project One: Field Visit**

1. Visit to a Handicraft unit.

2. Visit to an Industry.

3. Visit to a Whole sale market (vegetables, fruits, flowers, grains, garments, etc.)

4. Visit to a Departmental store.

5. Visit to a Mall.

**II. Project Two: Case Study on a Product**

**III. Project Three: Aids to Trade**

**IV. Project Four: Import /Export Procedure**

## ECONOMICS

Make Project in Economics on any of the topic suggested

Suggestive List of Projects:

- Effect on PPC due to various government policies

- Invisible Hand (Adam Smith)

- Opportunity Cost as an Economic Tool (taking real life situations)

- Effect of Price Change on a Substitute Good (taking prices from real life visiting local market)

- Effect on Equilibrium Prices in Local Market (taking real life situation or recent news)

- Effect of Price Change on a Complementary Good (taking prices from real life visiting local market)

- Solar Energy, a Cost-Effective Comparison with Conventional Energy Sources

- Bumper Production- Boon or Bane for the Farmer

- Any other newspaper article and its evaluation on basis of economic principles

- Any other topic

## CLASS 11-A (COMPUTER SCIENCE)

**Question 1: Leap Year Checker**
Write a Python program to check if a given year is a leap year. A leap year is divisible by 4, but not by 100 unless it is also divisible by 400. Your program should prompt the user to enter a year and print whether it is a leap year or not.

**Question 2: Even or Odd**
Write a Python program that takes an integer as input and prints whether it is even or odd.

**Question 3: Positive, Negative, or Zero**
Write a Python program that prompts the user to enter a number and prints whether it is positive, negative, or zero.

**Question 4: Largest of Three Numbers**
Write a Python program that takes three numbers as input and prints the largest among them.

**Question 5: Grading System**
Write a Python program for a grading system that takes a student's score as input and outputs their corresponding grade based on the following criteria:

- Score 90 or above: Grade A
- Score 80 to 89: Grade B
- Score 70 to 79: Grade C
- Score 60 to 69: Grade D

- Score below 60: Grade F

**Question 6: Triangle Type**
Write a Python program that takes three numbers as input, representing the sides of a triangle, and prints whether the triangle is equilateral, isosceles, or scalene.

**Question 7: Time Converter**
Write a Python program that converts time entered in 24-hour format (e.g., 17:30) into 12-hour format (e.g., 5:30 PM).

**Question 8: Age Classifier**
Write a Python program that prompts the user to enter their age and prints whether they are an infant, child, teenager, adult, or senior citizen.

**Question 9: Quadratic Equation Solver**
Write a Python program that solves a quadratic equation of the form $ax^2 + bx + c = 0$. Prompt the user to enter the values of a, b, and c, and output the solutions.

**Question 10: Vowel or Consonant**
Write a Python program that takes a character (i.e., a single letter) as input and prints whether it is a vowel or a consonant.

**Here are 5 questions on `for` loops and `while` loops in Python:**

**Question 1: Factorial Calculation using a For Loop**
Write a Python program to calculate the factorial of a non-negative integer entered by the user using a `for` loop. The factorial of a number n is the product of all positive integers less than or equal to n.

**Question 2: Sum of Numbers using a While Loop**
Write a Python program to calculate the sum of natural numbers up to a given number entered by the user using a `while` loop.

**Question 3: Multiplication Table Generator**
Write a Python program that takes an integer as input and generates its multiplication table up to 10 using a `for` loop.

**Question 4: Fibonacci Sequence using a While Loop**
Write a Python program to generate the Fibonacci sequence up to a specified number of terms entered by the user using a `while` loop. The Fibonacci sequence is a series of numbers where each number is the sum of the two preceding ones, starting with 0 and 1.

**Question 5: Prime Number Checker using a For Loop**
Write a Python program that takes a number as input and checks whether it is a prime number or not using a `for` loop. A prime number is a natural number greater than 1 that has no positive divisors other than 1 and itself.

**Q6. What will be the output of the following questions:**

| | |
|---|---|
| 1) ```WL="code of python".split()``` <br> ```for x in range(len(WL)):``` <br> ```    print(WL[x])``` | 2) my_list = [1, 2, 3] <br>     my_list.append(4) <br>     my_list.remove(2) <br>     print(my_list) |
| 3) num=20.5 <br>    z=3 <br>    result=2+z*z**3+num//z <br>    print(result) | 4) <br> L=["Computer","Is",["An","Electronic"],"Device"] <br> <br> How will you access the string "Electronic"? |
| 5) for i in range(1, 6): <br>       print(i) <br>       if i == 3: <br>         break <br>   else: <br>       print("Loop completed") | 6) x = 10 <br>     while x > 0: <br>       x -= 1 <br>       if x % 2 == 0: <br>         continue <br>       print(x) |

## Q7. Objective type questions:

**1. Which of the following data types in Python is used to store a collection of elements with different data types?**
   a) List
   b) String
   c) Tuple
   d) All of these

**2. identify the correct way to create an empty list in Python?**
   a) empty_list = []
   b) empty_list = ()
   c) empty_list = {}
   d) empty_list = (" ")

**3. What is the output of the following code snippet?**
*my_list = [10, 20, 30, 40, 50]*
*print(my_list[2:4])*
   a) [10, 20]
   b) [20, 30]
   c) [30, 40]
   d) [30,40,50]

**4. How can you add an element to a list's specific index?**
   a) Using the `add()` function
   b) Using the `append()` function
   c) Using the `insert()` function
   d) Using the `extend()` function

**5. Which of the following methods is used to remove the first occurrence of an element from a list?**
   a) `pop()`
   b) `remove()`
   c) `delete()`

d) `del()`

## 6. What is the result of the following code snippet?

*my_string = "Python Programming"*
*print(len(my_string))*

a) 6
b) 18
c) 19
d) 17

## 7. How can you convert a string to uppercase in Python?

a) Using the `to_upper()` method
b) Using the `upper()` method
c) Using the `uppercase()` method
d) Using the `toupper()` method

## 8. What is the output of the following code snippet?

*my_string = "Hello, world!"*
*print(my_string.split(","))*

a) ['Hello', 'world!']
b) ['Hello, world!']
c) ['Hello,', 'world!']
d) ['H','e','l','l','o','w','o','r','l','d','!']

## 9. Which method is used to check if a string starts with a specific substring?

a) `starts_with()`
b) `startswith()`
c) `start_with()`
d) `startwith()`

## 10. How can you concatenate two strings in Python?

a) Using the `concat()` function
b) Using the `join()` function
c) Using the `+` operator
d) All of these

## 11. Which of the following methods can be used to sort a list in ascending order?

a) `sort()`
b) `sorted()`
c) `order()`
d) All of these

## 12. What is the output of the following code snippet?

*my_list = [1, 2, 3]*
*my_list.append(4)*
*print(len(my_list))*

a) 1
b) 3
c) 4
d) 5

## 13. Which of the following is NOT a valid way to access the last element of a list in Python?

a) `my_list[-1]`

b) `my_list[len(my_list)-1]`
c) `my_list[last]`
d) None of these

**14. How can you check if a list is empty in Python?**
  a) Using the `is_empty()` method
  b) Using the `empty()` method
  c) Using the `len()` function
  d) Using the `len(empty)` function

**15. What is the output of the following code snippet?**
  *my_string = "Python"*
  *print(my_string[::-1])*
  a) Python
  b) nohtyP
  c) nhyPot
  d) nthoP

**16. Which of the following methods can be used to find the index of the first occurrence of a substring in a string?**
  a) `index()`
  b) `find()`
  c) `search()`
  d) `slicing()`

**17. What is the result of the following code snippet?**
  *my_list = [1, 2, 3]*
  *new_list = my_list.copy()*
  *new_list[0] = 10*
  *print(my_list[0])*
  a) 1
  b) 2
  c) 10
  d) 8

**18. How can you remove all occurrences of a specific element from a list?**
  a) Using the `remove()` method
  b) Using the `delete()` method
  c) Using a loop and conditional statements
  d) Using a pop() statements

**19. Which of the following is an immutable data type in Python?**
  a) List
  b) String
  c) Dictionary
  d) Both List and String

**20. What is the output of the following code snippet?**
  *my_string = "Hello, world!"*
  *print(my_string.replace("o", ""))*
  a) Hell, wrld!
  b) Hello, world!
  c) Hell, wrl!
  d) None of these

## CLASS 11-C (INFORMATICS PRACTICES)

Q1. Write a Python program to input cost of goods (cgos), revenue generated, operating costs (oc) and prints Gross Profit, net profit and net profit percentage. [Hint: net profit = revenue – cgos – oc]

Q2. Write a program in Python to input temperatures of 7 days (Monday, Tuesday, …. Sunday) and print the average temperature of the week.

Q3. Write a program that reads the number of seconds and prints it in the form hours minutes seconds. For example, if the number of seconds are 3940, then the output should be 1 hour 5 minutes 40 seconds.

Q4. Find the output produced by the following:

a. a,b,c = 2,8,9
   print(a,b,c)
   c,b,a = a,b,c
   print(a,b,c)
b. x=40
   y=x+1
   x=20,y+x
   print(x,y)
c. a,b=12,13
   c,b=a*2,a/2
   print(a,b,c)
d. a,b,c=10,20,30
   p,q,r=c-5,a+3,b-4
   print('a,b,c:', a, b, c, end=' ')
   print('p,q r:', p, q, r)

What will be the output of the following?
a)
```
x=True
y=False
z=False
print(x or y and z)
```
b)
```
a=3
b=4
c=5
print(a+b/2**2*c)
```

Write the data type of the following literals:
```
3.5, 'Student', "1052", True, ```False'''
```

Write the names of the following operators:
- a) %
- b) //
- c) **
- d) in
- e) is not
- f) and

Give two examples of each of mutable and immutable data types.

Write a program in Python to input three numbers and find their average.

**Question 1:**

What is the purpose of using conditional statements in programming?

A) To control the flow of execution based on certain conditions
B) To declare variables and assign values to them
C) To perform mathematical calculations
D) To print output to the console

**Question 2:**

Which of the following statements is used to check multiple conditions in Python?

A) `if`
B) `else`
C) `elif`
D) `for`

**Question 3:**

What is the output of the following Python code snippet?

```python
x = 5
if x > 10:
    print("Greater than 10")
elif x > 7:
    print("Greater than 7")
else:
    print("Less than or equal to 7")
```

A) Greater than 10
B) Greater than 7
C) Less than or equal to 7
D) SyntaxError

**Question 4:**

In Python, what is the purpose of the `else` statement in a conditional structure?

A) To define the condition to be checked
B) To execute a block of code when the condition is true
C) To execute a block of code when none of the preceding conditions are true
D) To terminate the program

**Question 5:**

Which loop in Python is used when the number of iterations is known?

A) `for` loop
B) `while` loop
C) `do-while` loop
D) None of the above

**Question 6:**

What is the output of the following Python code snippet?

```python
i = 0
while i < 5:
    print(i)
    i += 1
```

A) 0 1 2 3 4
B) 1 2 3 4 5
C) 5 4 3 2 1
D) Infinite loop

**Question 7:**

What does the `break` statement do in a loop?

A) Terminates the loop and transfers control to the next iteration
B) Skips the current iteration and continues with the next iteration
C) Repeats the current iteration
D) Terminates the loop completely

**Question 8:**

What is the purpose of the `continue` statement in a loop?

A) Terminates the loop
B) Skips the rest of the code in the loop and moves to the next iteration
C) Repeats the current iteration
D) Restarts the loop

**Question 9:**

Which loop in Python is executed at least once?

A) `for` loop
B) `while` loop
C) `do-while` loop
D) None of the above

**Question 10:**

What is the output of the following Python code snippet?

```python
for i in range(5):
    if i == 3:
        break
    print(i)
```

A) 0 1 2 3
B) 0 1 2
C) 0 1 2 3 4
D) 1 2

Q5. Write a program to check a year whether it is leap year or not.

Q6. Write a program to find the positive difference between two numbers accepting from user.

Q7. Write program check whether a number is even or odd.
Q8. WAP to accept a number from the user (between 1 to 7) and display the name of the day like "Monday" for 1,"Tuesday" for 2 ………."Sunday" for 7.
Q9. WAP a program to accept three numbers from the user and display the largest number.
Q10. WAP a program to check whether a number positive, negative, or zero.

***********