**Sunrise Academy**

**Home Assignments**

**Class 12th**

**English**

**Physics**

**Chemistry**

**Biology**

**Economics**

**Commerce**

**Accounts**

**Computer Science**

**Physical Education**

**NOTE:**

* **All the work is to be done in previous class subject notebook. Whole work has to be faired out in project files after the lockdown gets over.**
* **Class 12 project files should be covered with white chart. All the files should be covered with cellophane sheets and the label should be printed and pasted papers (Except computer, computer Science’s project will be printed and should be in spiral binding).**

**English**

Q.1 Write the topics in the form of essays (400-450words)

(a) Describe a bicycle trip which you undertook with your friend through a mountainous region.

(b) The present working hours of the government officers should be increased by an hour for better productivity. Express your views for or against the statement.

(c) Contentment

(d) The glory of tomorrow lies in the drudgery of today. Comment.

Q.2 Write down Act wise summary of the first three act of the tempest.

Q.3 Write down the detailed summary of all the stories and poems that were included in class 11th.

**Physics**

**Project work**

Make a project on any one of the following topics:

1. Transformer

2. Self inductance of a coil

3. Wireless energy: The Future of electricity

4. The Magnetic field lines around current carrying solenoid

5. Cold Nuclear fusion

6. A.C Transformer

7. Logic Gate

**Chemistry**

Topics for class 12 chemistry project.

Chemicals in medicine- antiseptics, antibiotics, antacids etc and their uses.

OR

Natural polymers any five- structure characteristics and uses. Synthetic polymers- any five- methods of preparation, characteristics and uses.

**Biology**

Choose any one topic from given topics for project work

1-Bio-piracy

2-Cancer

3-AIDS/Hepatitis

4-Drug addiction and community

5- Role of micro-organism

6- Human populations

FORMAT OF PROJECT

1-Content

2-Introduction

3-Presentation (tables ,pictures, graph, cuttings etc)

4-Conclusion/ summary

5- Bibliography

Project should handwritten

Project should not exceed 15- 20 pages

**Economics**

1) Compare the contribution made by different sectors of the economy towards GDP growth during the planning period

2) Unemployment

3) Tourism

4) Make a comparative study of the allocation financial resources of the central government budget on agriculture, defence and education in last ten years.

 \*Any two\*

**Commerce**

1. Consumer protection
2. Commercial bank and how to open a savings account?
3. Marketing and marketing mix
4. Principles of management
5. Business environment

**Accounts**

1. Schedule 6 balance sheet
2. Cash flow statement
3. Any topic from partnership
4. Issue of shares
5. Comparative and common size statement

Any two topics to be prepared from the above mentioned topics

For class 12th both commerce and accounts two projects are to be prepared from the above mentioned topics in one file only

**Computer Science**

1. A disarium number is a number in which the sum of the digits to the power of their respective position is equal to the number itself.

Example: 135 = 11 + 32 + 53

Hence, 135 is a disarium number.

1. Design a class Merger to input and concatenates two positive integers that are greater than 0 and produces a new merged integer.

Example: If the first number is 23 and the second number is 764, then the concatenated number will be 23764.

1. A class mixer has been defined to merge two sorted integer arrays in ascending order.
2. Accept a number and check whether it is an Emirp number of not. An emirp number is a number which is prime backwards and forwards.

Example: 13 and 31 are both prime numbers. Thus, 13 is an emirp number.

1. Design a class VowelWord to accept a sentence and calculate the frequency of words that begins with a vowel. The words in the input string are separated by a single blank space and terminated by a full stop.
2. Write a Program in Java to fill a square matrix of size ‘n\*n” in a spiral fashion (from the inside) with natural numbers from 1 to n\*n, taking ‘n’ as input.

For example: if n = 5, then n\*n = 25, hence the array will be filled as given below.



1. Write a program which first input two integers, the first between 1 to 12 and second between 0 to 59 and print out the time they represent, in words.

Example: Input: 3, 0

 Output: 3:00 Three O’clock

1. Write a program to input two dates from the user and count the number of days between two dates.
2. Write a program to input an array of integers and sort it using Bubble Sorting Algorithm.
3. Write a program to check the number is unique or not. A unique digit integer is a positive integer (without leading zeros) with no duplicate digits. For example 7, 135, 214 are all unique integers whereas 22,3121, 300 are not.

**Physical Education**

Health Education & Health Problems

(a) Meaning of ‘Health Education’.

(b) Principles and importance of Health Education.

(c) Health problems.

(d) Role of Health Education in solving them.

Explain any one game.

1. Cricket
2. Badminton
3. Football