## Mathematics

## Assignments:

1) Conduct a survey of a group of students and represent it graphically, height, weight, number of family members and pocket money etc.
2) Planning a delivery routes for a postman/milkman.
3) Running a tuck shop/canteen.
4) Study ways of raising a loan to buy a car or house e. g. bank loan or purchase a refrigerator or a television set through hire purchase.
5) Cutting a circle into equal sections of a small Central angle to find the area of the circle by using the formula $A=\pi r^{2}$.
6) To use flat cutout to form cube, cuboid and pyramid to obtain formulae for volume and total surface area.
7) Draw a circle of radius $r$ on $1 / 2$ an graph paper and then on a 2 mm graph paper. Estimate the area enclosed in each case by actually counters the squares. Now try out with circles of different radius. Establish the pattern if any, between the two observed values and the theoretical value. (area $=\pi r^{2}$ ) ang modifications?

Kindly Note:
Select any two assignments, Total number of pages not more than 20(count both sides). Use drawing file with white single line pages,Cover the file with white sheet only.

Last day to submit the Mathematics Project is 15 July 2023.

## ENGLISH PROJECT FOR CLASS IX

All work should be done in a proper file.
File should be properly covered and neatly decorated.
The work should be done in proper sequence given below :-

- Acknowledgement
- Index
- English Literature

Summary of all the scenes of Act I of the drama 'Julius Caesar'.

- English Language

Write any one informal letter and one notice.

- Bibliography

NOTE :- Matter should be supported by the pictures from the internet.

## COMMERCIAL APPLICATIONS 2023-24

TOPIC 1- Brief report on Partnership or Sole Proprietorship

1. Acknowledgement
2. Index
3. Introduction to Partnership/Sole Proprietorship
4. Introduction of Chosen business
5. Merits \& Demerits
6. Financial Analysis (profit/loss, capital invested, salary etc.)
7. Conclusion- SWOT Analysis

TOPIC 2- Brief report on Communication System of a bank

1. Index
2. Introduction to Bank
3. Introduction to Communication System
4. Methods of Communication
5. Process/Elements for Communication Barriers to Communication
6. Methods of Communication used in a Banking Sector
7. Advantages of Communication
8. Conclusion
9. Bibliography

## INSTRUCTIONS:

1. Use only white interleave sheets
2. Use only BLACK/BLUE pen in the project
3. Page limit $15-20$
4. Pictures, graphs, etc can also be used
5. Date of submission: $1^{\text {st }}$ July 2023

ECONOMICS PROJECT 2023-24
TOPIC - NATIONAL EDUCATION POLICY 2020

1. Acknowledgement
2. Index
3. Introduction to National Education Policy 2020
4. Features of National Education Policy 2020
5. Benefits of National Educational Policy 2020
6. Education index in India
7. Short comings of previous education policy
8. Comparison between policies of 1986, 1992 and 2020
9. Conclusion
10. Bibliography

INSTRUCTIONS:-

1. Use only white interleave sheets
2. Use only BLACK/BLUE pen in the project
3. Page limit: $10-15$
4. Pictures, graphs, etc. can also be used
5. Date of submission: $1^{\text {st }}$ July 2023

## Physics Holiday H.W

1. Derive the three equations of motion for a uniformly accelerated body.
2. Solve the numericals of Exercise- 2 © .

NOTE : Do this work in Physics fair register.

## HISTORY/CIVICS

HOLIDAY HOME WORK
Project Work
Prepare a Project File of 25 pages on any one topic:

1. Harappan Civilization
2. Jainism and Buddhism

## Biology

Write Five experiments in Biology practical file according to the instructions given by the teachers regarding the same.

1. An experiment to study the structure of a plant cell.
2. An experiment to study the structure of an animal cell.
3. An experiment to study the structure of a bisexual flower.
4. An experiment to study the structure of a bean seed.
5. An experiment to study the structure of a maize grain.

## Computer Applications

Holiday H.W (2023-24)
Write the following programs in Computer Practical file. On the Left side(blank side) of your file write the question. With black Pen, and on the right side of your file write the programs with blue Pen

Q1. Write a program to find the gross salary of an employee for the following allowances and deductions. Use meaningful variables with the class name Employee and Basic Pay as input.

Dearness Allowance $25 \%$ of Basic Pay<br>House Rent Allowance $15 \%$ of Basic Pay<br>Provident Fund 8.33\% of Basic Pay<br>Net Pay Basic Pay + Dearness Allowance + House Rent Allowance<br>Gross Pay Net Pay - Provident Fund

Q2. Write a program to accept three sides of a triangle and check whether it can form a triangle or not. If it forms a triangle, check whether it is an acute-angled, Obtuse- angled or right-handed triangle.
(Hint To form a triangle , each side should be less than the sum of other two sides.

To form an acute-angled triangle the square of every side should be less than the sum of the squares of the other two sides.

To form an obtuse-angled triangle the square of any side should be greater than the sum of the squares of the other two sides

To form an right-angled triangle the square of any side should be equal to the sum of the squares of the other two sides.)

Q 3. Write a Program to input any date in the format (dd-mm-yyyy). Check and print whether it is an valid date or not (Using switch case statement).

## CHEMISTRY

## Write the following question in your Chemistry notebook

*Explain the different types of chemical reactions with atleast one example of each.
*Learn the valancies and formulas of acidic and basic radicals.

