GIRLS' HIGH SCHOOL & COLLEGE, PRAYAGRAJ

SESSION - 2023-24

HOLIDAY HOMEWORK

CLASS: IX

SUBJECT: ENGLISH LANGUAGE

Instruction: Write the following questions in your Class Work Register.

Question 1: Write a letter to your cousin inviting him/her to spend the summer vacation with you.

Question 2: Write a composition (300-350 words) on the following topic:

Describe the day when you suddenly felt tremors in the earth and all that happened afterwards.

SUBJECT: ENGLISH LITERATURE

PROJECT

INSTRUCTIONS:

-The students should use an interleaf assignment notebook for writing the project

-The word limit for each question of the project is 300-400 words.

-The students need to write the Index.

-Then (on the next page) they should write the question on the left hand plain sheet at the top.

-They should begin writing the project on the ruled sheet on the other side.

-Each plain sheet should have a picture related to the poem or short story. The picture should be outlined with a black sketch pen. A relevant caption for the picture should be written under it.

BOOK: Treasure Chest: A Collection of ICSE Poems and Short Stories.

WORKBOOKS: Treasure Chest (Workbook) A Collection of ICSE Poems by Dr. K. S. Paul

Treasure Chest (Workbook) - A Collection of ICSE Short Stories by Dr. K. S. Paul.

SHORT STORY-The Model Millionaire

Question 1: Write the summary of the short story 'The Model Millionaire' by Oscar Wilde.

POEM- A Doctor's Journal Entry for August 6, 1945.

Question 2: Write the paraphrase of the poem 'A Doctor's Journal Entry for August 6,1945.' by Vikram Seth.

SUBJECT: MATHEMATICS

PROJECT

Instructions: 1. Project should be made in a thin register.

2. Each question should be done on a separate page.

Note: Points to be followed for writing the project

1. Acknowledgement

2. Solve the following questions:

(i) Simplify: $(x + \frac{1}{x})^2 - (x - \frac{1}{x})^2$

(ii) If a+b = 8 and ab = 12, find $a^2 + b^2$ and the difference between a and b.

(iii) Factorize: $a(a + b)^3 - 3a^2b(a+b)$.

(iv) Factorize: $64a^3 - b^3$.

(v) Simplify: $9^4 \div (27)^{-2/3}$

(vi) Rationalize the denominator and simplify: $\frac{4\sqrt{3}+5\sqrt{2}}{\sqrt{48}+\sqrt{18}}$

(vii) Find the sum of money which will amount to Rs. 9261 in 3 years at 5% per annum compound interest.

(viii) In how many years will Rs. 7000 amount to Rs. 9317 at 10% per annum compound interest?

(ix) Find x: $\log_{81} x = \frac{3}{2}$

(x) Simplify: $(81)^{3/4} - (\frac{1}{32})^{-\frac{2}{5}} + 8^{1/3}.(\frac{1}{2})^{-1}.2^0$

SUBJECT: HISTORY/ CIVICS

PROJECT

Pages	Details
1 st Page	Topic-Art and Architecture of the Mughals
2nd Page	Acknowledgement
3rd Page	Contents
4th& 5th Pages	Introduction of Mughal Art and Architecture
6th - 18th pages	Art and Architectural Features of the following monuments-: • Red Fort, Delhi • Jama Masjid, Delhi • TajMahal, Agra • QutubMinar, Delhi
19th page	Conclusion
20th Page	Bibliography

Note : Pictures to be pasted throughout the project..

SUBJECT: GEOGRAPHY

PROJECT

No.1

Topic: Landforms of the Earth

- Topic
- Acknowledgement
- Index
- Introduction
- Mountains- Definition
- Types of mountains
  Fold mountains
  Block mountains
  Residual mountains
- Plateaus-Definition
- Types of plateaus
  Intermontane plateaus
  Volcanic plateaus
- Plains- Definition
- Types of plains
  Structural plains
  Depositional plains
    - Alluvial plains
    - Piedmont plains
    - Bhabhar plains
    - Flood plains
- Conclusion
- Bibliography

No.2

Topic: Humidity

- Topic

- Index
- Humidity- Definition
- Difference between Relative and Absolute humidity
- Precipitation- Definition
- Conditions necessary for precipitation
- Forms of precipitation
    - Snow
    - Hail
    - Rain
- Types and causes of rainfall
    - Convectional rainfall-Characteristic features
    - Orographic rainfall- Characteristic features
    - Cyclonic or Frontal rainfall- Characteristic features
- Conclusion
- Bibliography

NOTE: Left hand side of the page should have pictorial representation and subheadings written underneath the pictures. Total number of pages for each assignment should be 15.

CLASS:- IX
SUBJECT:- PHYSICS

Instructions:

1. Students have to write all the experiments in Physics Practical Work-Book.
2. Each experiment should start from a new page.
3. Well labelled diagrams to be drawn on the left page only.

EXPERIMENT NO. 1

AIM:-To determine the length of the given wooden block with the help of Vernier Calliper.

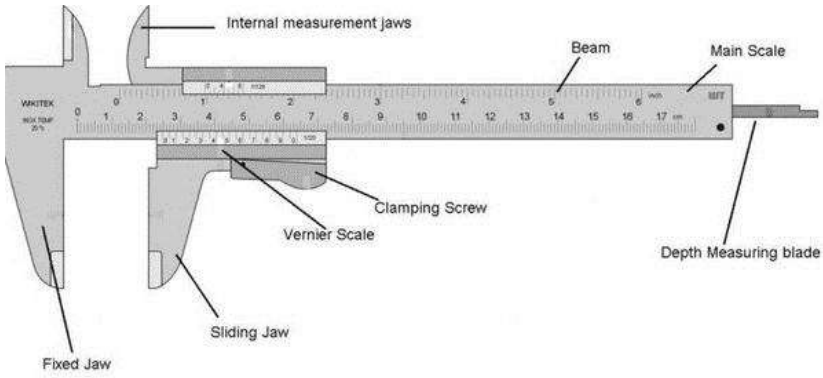
APPARATUS REQUIRED:-Vernier Calliper and wooden block.

PRINCIPLE:- n divisions of Vernier Calliper is equal to (n-1) divisions of Main Scale. The least count of Vernier is equal to the difference between the values of one main scale division and one vernier scale division. It is also called **Vernier Constant**.

$$\textbf{Least Count} = \left(1 - \frac{(n-1)}{n}\right) x = \frac{x}{n}$$

where, x = the value of one small division of main scale

n = no. of divisions on vernier scale



OBSERVATION:-

Total number of divisions on vernier scale (n) =____

Value of one main scale division (x) =_____cm

Least Count = $\frac{x}{n}$ = _____cm

Zero error (with sign) = _____cm

S. No.	Main Scale Reading (in cm)	Vernier Scale Reading (in number)	Vernier Scale Reading × least count (in cm)	Main Scale Reading + (Vernier Scale Reading ×least count) (in cm)
1.				
2.				
3.				
4				
			Mean Reading=	

Correct Reading = Mean Reading – Zero Error (with sign)

=____−____= ___cm

RESULT:-The length of the given wooden block is _____cm.

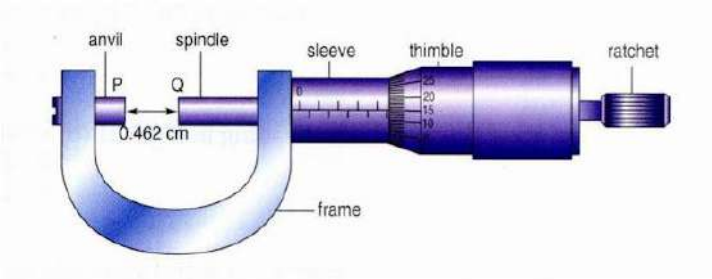
EXPERIMENT NO. 2

AIM:-To determine the diameter of the given common pin with the help of Screw Gauge.

APPARATUS REQUIRED:-Screw Gauge and common pin.

PRINCIPLE:- Screw Gauge works on a principle of screw and nut. On rotating the thimble the screw moves forward through the nut such that "the linear motion is directly proportional to the rotational motion". On giving one complete rotation to the circular scale the screw covers the distance between two successive threads on the screw. This is known as the **pitch** of the screw gauge. The linear distance ,i.e., the pitch is read on the main scale which is marked on the sleeve of screw gauge.

$$\textbf{Least Count} = \frac{\textbf{Pitch}}{\textbf{no.of divisions on circular scale}}$$



OBSERVATION:-

Total number of divisions on Circular Scale (n) =____

Pitch (x) =_____cm

Least Count = $\frac{x}{n}$ = ____cm

Zero error (with sign) = _____cm

S. No.	Main Scale Reading (in cm)	Circular Scale Reading (in number)	Circular Scale Reading × least count (in cm)	Main Scale Reading + (Circular Scale Reading ×least count) (in cm)
1.				
2.				
3.				
4				
			Mean Reading=	

Correct Reading = Mean Reading – Zero Error (with sign)

=____–____= ___cm

RESULT:-The diameter of the given common pin is _____cm.

EXPERIMENT NO. 3

AIM:-To find the acceleration due to gravity with the help of a simple pendulum.

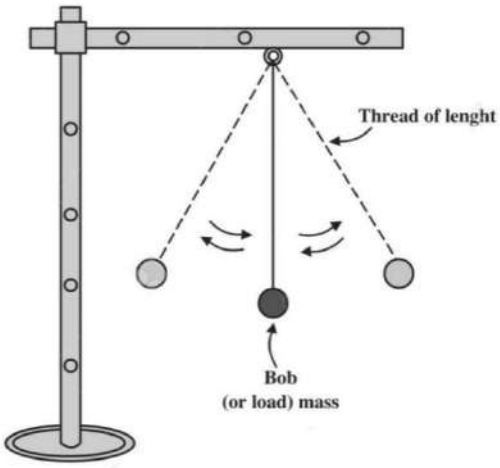
APPARATUS REQUIRED:-A bob, metallic stand with clamp, thread and stop clock.

THEORY:-The time taken by the pendulum to complete one oscillation is called **time period.**

Relation between the time period (T) and the effective length (l) of the pendulum

$$T=2\pi\sqrt{\frac{l}{g}}$$ or

$$g = \frac{4\pi^2}{l/T^2}$$



OBSERVATIONS:-
Least count of the stop clock = ___sec
Diameter of the bob (d) = ___cm
Radius of the bob (r) = ___ cm

S. No.	Length of thread L (in cm)	Effective length of thread (L + r) =l (in cm)	Time taken for 20 oscillations t (in sec)	Time period T = t/20 (sec)	l/T^2 (cm/sec^2)
1.					
2.					
3.					
4.					
				Mean Reading (S)=	

The acceleration due to gravity (g) $=4\pi^2 S$=____cm/sec^2=____m/sec^2
RESULT :-The acceleration due to gravity = ____m/sec^2

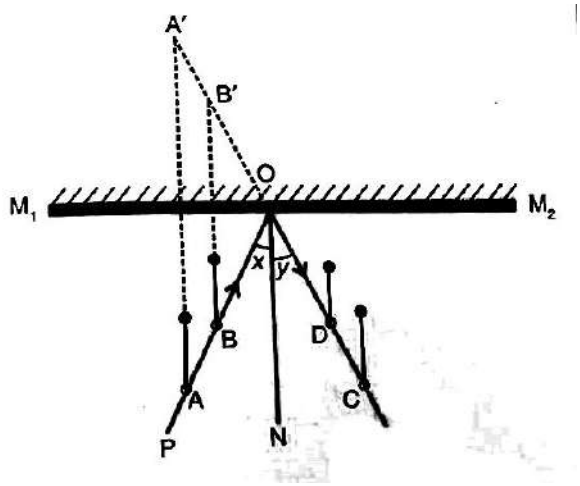
EXPERIMENT NO.4

AIM:-To verify the laws of reflection of light.

APPARATUS REQUIRED:- A drawing board, a plane mirror with a support, a white sheet of paper, drawing pins, common pins, pencil and protractor.

LAWS OF REFLECTION:-

1. The angle of incidence is equal to the angle of reflection.
2. The incident ray, the reflected ray and the normal at the point of incidence, lie in the same plane.



OBSERVATIONS:-

S.No.	Angle of incidence X (degrees)	Angle of reflection Y (degrees)
1.		
4.		
3.		
4.		

RESULT :-

1. The angle of incident is almost equal to the angle of reflection, hence the first law of reflection of light is verified.
2. By inspection the incident ray, reflected ray and normal lie on the same plane at the point of incidence which verifies the second law of reflection of light.

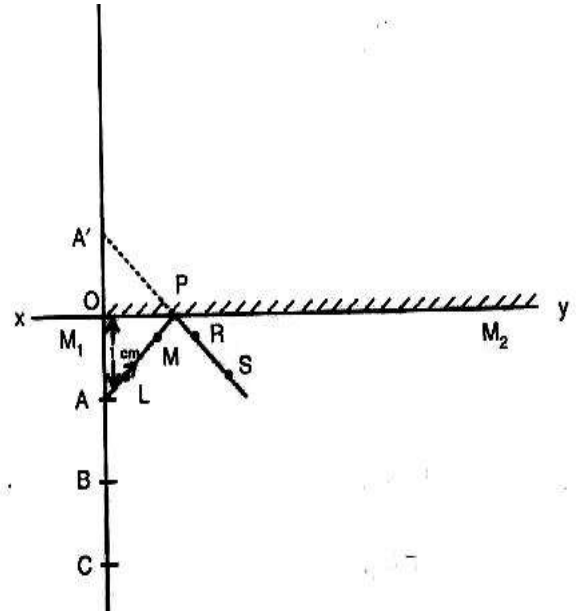
EXPERIMENT NO.5

AIM:- To verify that the image formed is as far behind the mirror as the object is in front of a plane mirror.

APPARATUS REQUIRED:- A drawing board, a plane mirror with a support, a white sheet of paper, drawing pins, common pins, pencil and ruler.

LAWS OF REFLECTION:-

1. The angle of incidence is equal to the angle of reflection.
2. The incident ray, the reflected ray and the normal at the point of incidence, lie in the same plane.



OBSERVATIONS:-

S. No.	Distance of object from mirror X (in cm)	Distance of image from mirror Y (in cm)
1.		
2.		
3.		
4.		

RESULT :-Since distances of the object and image from mirror in all the cases are equal; the image formed is as far behind as the object is in front of the plane mirror.

SUBJECT: CHEMISTRY

INSTRUCTIONS: Students are advised to write the following Chemistry Practicals (Expt. No.1 to 6) in Chemistry Practical File. These experiments are to be written neatly. The same pattern of writing is to be followed as given. Every experiment has to be started from a fresh page.

EXPERIMENT NO 1

Object:-

To perform dry heating of the given salt. Take a small amount of the salt in a hard glass test tube and heat it. Observe any characteristic changes that take place on heating.

Observations:-

(i) Light green amorphous powder turns to black, on strong heating.
(ii) A colourless, odourless gas is evolved that extinguishes a burning wooden splinter.
(iii) The gas evolved when passed through lime water turns it milky. The milkiness disappears on passing excess of gas.
(iv) The gas evolved has no effect on acidified $K_2Cr_2O_7$or acidified $KMnO_4$.

Inference:-

(i) The black residue is copper oxide.
(ii) The gas evolved is carbon dioxide.
(iii) Light green powder is Copper carbonate ($CuCO_3$)

EXPERIMENT NO 2

Object:-

To perform dry heating of the given salt. Take a small amount of the salt in a hard glass test tube and heat it. Observe any characteristic changes that take place on heating.

Observations:-

(i) On strong heating, the light amorphous white solid, changes to pale yellow.
(ii) A colourless, odourless gas is evolved that extinguishes a burning wooden splinter.
(iii) The gas evolved when passed through lime water turns it milky. The milkiness disappears on passing excess of gas.
(iv) The gas evolved has no effect on acidified $K_2Cr_2O_7$ or acidified $KMnO_4$.
(v) The residue, on cooling, changes to a white colouri.e residue is yellow when hot and white when cold.

Inference:-

(i) The residue is zinc oxide.
(ii) The gas evolved is carbon dioxide.
(iii) White powder is Zinc carbonate ($ZnCO_3$)

EXPERIMENT NO 3

Object:-

To identify the gas evolved when dil. HCℓ is added to Na_2S and the mixture is warmed in a clean dry test tube. Then moist blue litmus paper is held into the gas. Also a piece of filter paper soaked in lead acetate solution is held into the gas.

Observations:-

(i) A colourless gas is evolved with the smell of rotten eggs.
(ii) The litmus paper turns red.
(iii) Filter paper turns silvery black due to the precipitation of lead sulphide.

Inference:-

(i) Hydrogen sulphide (H_2S) gas is present.
(ii) Hydrogen sulphide (H_2S) gas is acidic in nature.
(iii) Hydrogen sulphide (H_2S) gas is confirmed.

EXPERIMENT NO 4

Object:-

To identify the gas evolved when few drops of dil. HCℓ is added to a small amount of Na_2SO_3 taken in a clean dry test tube. Then moist blue litmus paper is held into the gas. Also a piece of filter paper soaked in acidified potassium dichromate solution is held into the gas.

Observations:-

(i) Colourless gas is evolved with the smell of burning sulphur.
(ii) The litmus paper turns red.
(iii) Filter paper turns from orange to green.

Inference:-

(i) Sulphur dioxide (SO_2) gas is present.
(ii) Sulphur dioxide (SO_2) gas is acidic in nature.
(iii) Sulphur dioxide (SO_2) gas is confirmed.

EXPERIMENT NO 5

Object:-

To identify the gas evolved when conc. HNO_3 is added to a few pieces of copper turnings taken in a dry test tube and the mixture is heated. Then moist blue litmus paper is held into the gas. Also a piece of filter paper soaked in KI solution is held into the gas.

Observations:-

(i) Reddish brown gas is evolved with pungent smell.
(ii) The litmus paper turns red.
(iii) Filter paper turns blue black.

Inference:-

(i) Nitrogen dioxide (NO_2) gas is present.
(ii) Nitrogen dioxide (NO_2) gas is acidic in nature.
(iii) Nitrogen dioxide (NO_2) gas is confirmed

EXPERIMENT NO 6

Object:-

To identify the given cation by flame test.

Procedure:-

A thin platinum wire is first thoroughly cleaned by dipping it in concentrated hydrochloric acid. It is then heated in the non-luminous flame of the burner. The processis repeated. When the wire imparts no colour to the flame, it is ready for use.

Now, the wire is first dipped in concentrated hydrochloric acid and then into a small amount of the substance being investigated, so that a little of the substance may stick to it. It is then introduced into the non-luminous part of the flame, and the colour imparted to the flame is observed.

Observation :-

Golden yellow flame is seen.

Inference:-

Sodium ion (Na^+) is present.

SUBJECT- BIOLOGY

EXPERIMENT NO. -1

AIM - To observe an onion peel under the microscope.

REQUIREMENTS - Microscope, onion bulb, glass-slide, coverslip, watch glass, brush, blade, safranine stain, glycerine.

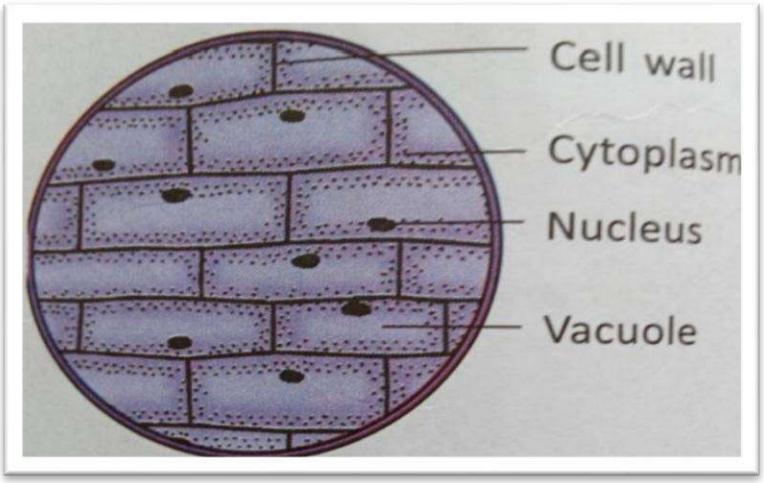
PROCEDURE -

a) Take a piece of onion and with the help of a forcep gently pull out a thin, transparent peel from the underside.
b) Keep this peel in water in a watch glass.
c) Add a few drops of safranine stain in the watch glass.
d) Cut a portion of the peel to a proper rectangular shape with the help of a blade. Place this piece in a drop of water on a glass slide.
e) Remove excess of water or stain.
f) Add a drop of glycerine on the slide over the peel and put the coverslip gently.
g) Examine the slide under the microscope.

OBSERVATIONS:

a) There are a large number of cells lying side by side with distinct cell walls.
b) A distinct red stained nucleus is present in the side of the cell.
c) Vacuoles are present in the cell cytoplasm.
d) Intercellular spaces are absent.
e) Cells are polygonal in shape and compactly arranged.

CONCLUSION: It is a plant cell.



EXPERIMENT NO. - 2

AIM - To examine a human cheek cell under the microscope.

REQUIREMENTS - Microscope, glass slide, coverslip, toothpick, brush, watchglass, methylene blue stain.

PROCEDURE -

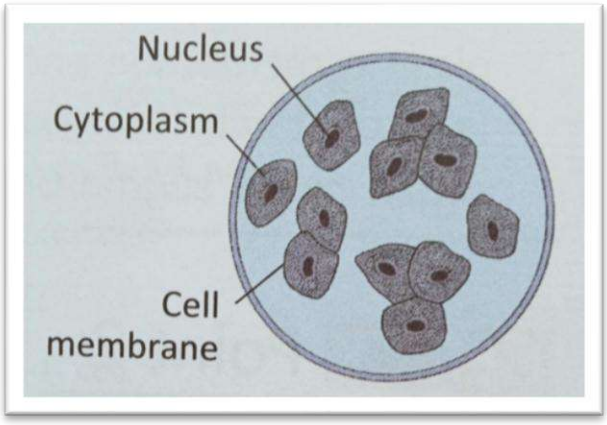
a) Wash off food particles from your mouth with clean water.
b) With the help of a clean tooth pick gently scrap the inner lining of your cheek to get some epithelial cells.
c) Put the scrapings on a clean slide and spread it with a needle.
   Add a drop of saline water and a drop of methylene blue.
d) After two minutes,remove the stain and add a drop of glycerine on the slide.
e) Put the coverslip gently .
f) Examine the slide under the microscope.

OBSERVATIONS-

a) Large number of polygonal and irregular-shaped cells can be seen .
b) A prominent blue coloured nucleus is present in the centre of each cell.It is stained dark blue.
c) Cytoplasm gives a granular appearance.
d) Absence of cell wall,central vacuole and chloroplasts characteristic of plant cells.

CONCLUSION-

It is an animal cell.



CLASS: IX (C,D,E,F,G)

SUBJECT: COMPUTER APPLICATIONS

PROJECT NO.1

INSTRUCTIONS:

Students are expected to read and understand the programs from the book and write each program along with question from new page in computer project interleaf assignment file.

1: Fill Index (Index page is already in Project file).

2: First page- Computer Assignment (Heading at center of the page.)

3: Second page- Write Acknowledgement.

4: Third page- Write first program from given list of the programs along with output.

5: Write a program on ruled page and output on opposite blank page.

6: Cover your computer project with brown paper.

7: Write with blue & black gel pen only. Write the following programs along with output:

BOOK :LOGIX-CLASS 9 (Kips Publications)

PROGRAMS

1. Write a program to print the perimeter and area of a square.
2. Write a program to calculate the circumference of a circle for a given value of radius.
3. Write a program that uses initialization to calculate the area and perimeter of a rectangle.
4. Write a program that uses parameters as the form of input to convert minutes into hours.
5. Write a program to display the current date and time using the Date class of the java.util package.
6. Write a program in java to input three integers and compute their average.
7. Write a program using the next() method of the Scanner class, to read a token from the user input.
8. Write a program in java to input two numbers using the Scanner class. Also, swap these two numbers without using a third variable.
9. Write a program in java, using the Scanner method, to read and display the following details:
   Name: as a String data type
   Roll Number: as an integer datatype

Marks Percentage: as a float data type

10. Write a program in java to read the input as a single line “Abc19.45 17 Rohit G”(delimited by one or more spaces)via the Scanner class and display the individual values(tokens).

CLASS – IX B
SUBJECT – COMMERCIAL APPLICATIONS
PROJECT

INSTRUCTIONS:

1. There will be four separate assignments (Project) as per the topics given. Keep all four Assignments in one file. Cover the file with pink chart paper. Write Commercial Applications Project 2023-24 in the middle, Roll No. at the top right corner and Name, Class, Section, Admission no. should be written at the bottom right corner.
2. **Acknowledgement**
   Order of each Assignment:
   - Name of the topic (one page)
   - **Index** (only serial no., content and page no., should be of one page)
   - Subject Matter of the topic (Describe the topic with introduction, relevant headings and sub headings, supported with pictures/diagrams/graphs/tables, as per the requirement. Should not be more than 4 to 5 pages).
   - **Conclusion** (one page)
   - **Bibliography** (One page- Write the name of related websites and books consulted for the making of the assignment).
   - Note: same order will be followed for each topic.
3. Each assignment should not be more than 8 to 10 pages including all the points mentioned above.
4. Relevant pictures should be pasted neatly and must be bordered in black along with labelling or heading.
   Refer Course Book- Commercial Applications Part I by Dr. C. B. Gupta.

Topics for the Assignments (Project):

1. Study the working of Fast Moving Consumer Goods (FMCG) Industry in India- Take any 4 firms of the industry and group them according to their objectives (Profit/non profit making).
2. Make a comparative study of different core industries in India—Take any 5 industries (such as Cement, Steel, Paints, Paper, Infrastructure) and group them according to various factors such as- growth, profit potential, etc.
3. Critically evaluate the ways (verbal and non-verbal) of business communication in a Commercial Organisation. Write the factors which make one or the other method appropriate based on your understanding of Commercial Organisations.

Critically evaluate the tools (letters, e-mail, video-conference, memo, phone) of business communication in a commercial organisation. Visit any commercial organisation to understand the working and importance of each of these tools.

CLASS: IX (A,C)

SUBJECT: ART

PAPER III - Original Imaginative Composition in Colour –

1. Draw and paint a ‘Zoo Scene’.
2. Draw and paint ‘Any Festival’.

PAPER IV – Applied Art –

1. Anniversary Card.
2. Teachers Day Card.

SUBJECT - HINDI

हिन्दी परियोजना कार्य (Hindi Assignment)

नोट-: अभिभावकों से अपेक्षा की जाती है कि वे यह सुनिश्चित करें कि छात्रा प्रपत्र में दिए गए निर्देशानुसार ही हिन्दी परियोजना कार्य पूर्ण करें।

1. आभार
2. विषय सूची (index)

क्रम संख्या। पृष्ठ संख्या। विषय वस्तु। दिनांक। हस्ताक्षर

3. विषय वस्तु

प्रश्न 1. "सूरदास जी का जीवन परिचय एवं साहित्यिक परिचय लिखिए |"

(i) प्रस्तावना (ii) जीवन परिचय (iii) साहित्यिक विशेषताएँ-1) रचनाएँ

2) पुरस्कार एवं उपाधियाँ (iv) काव्यगत विशेषताएँ -1) भाषा शैली 2) रस, छन्द, अलंकार

(v) निष्कर्ष

प्रश्न2.निम्नलिखित उक्ति को आधार बनाकर एक मौलिक कहानी लिखिए जिसकी शब्द सीमा 400 से 450 शब्दों में हो।

" जाको राखे साइयाँ मार सके न कोय।"

4. संदर्भित ग्रंथ

नोट-1. अधिन्यास से संबंधित कार्य को पूर्ण करने हेतु छात्रा के लिए विज्ञान की प्रयोगात्मक कॉपी (loosepaper of science practical file) के पेजों का उपयोग करना अनिवार्य है।

2. कृपया फ़ाइल पर गुलाबी रंग का कवर चढ़ा कर उस पर अपना नाम, कक्षावर्ग एवं रोल / नंबर अवश्य लिखें।