# Apex Public School

## HOLIDAY HOMEWORK 2023-24

### Class XII

*"You cannot change your future, you can change your habits and surely your habits will change your future"*
                                                                    *- Dr. Abdul Kalam*

## CBSE ART INTEGRATED LEARNING PROJECT WORK

PROJECT- *Coconut farming in Lakshadweep, Andaman, and Nicobar Islands*

DATE OF SUBMISSION: All the students will submit AIL project on 3rd July 2023

<p align="center">ENGLISH</p>

### 1. PROJECT WORK

The Project can be inter-disciplinary in theme. The ideas/issues highlighted in the chapters/ poems/ drama given in the prescribed books can also be developed in the form of a project.

Students can also take up any relevant and age-appropriate theme.

**You may choose from the suggestions given below.**

a. Interview-Based research:

Students can choose a topic on which to do their research/ interview, e.g. a student can choose the topic :

*" Evolving food tastes in my neighbourhood" or "Corona pandemic and the fallout on families."*

Read the available literature.

The student then conducts interviews with a few neighbours on the topic. For an interview, with the help of the teacher, student will frame questions based on the preliminary research/background.

*The student will then write an essay/ write up / report etc. up to 1000 words on his/her research and submit it.*

 b. Listen to podcasts/ interviews/radio or TV documentary on a topic and prepare a report countering or agreeing with the speakers. Write an 800-1000 words report and submit.

c. Students create their own video/ Audio, after writing a script. Before you decide a format, the following elements can be taken into consideration:

● Theme/topic of the audio / video. You may pick a current issue or something artistic like theatre.

●  Elements that need to be part of the script

● Will the video/audio have an interview with one or more guests?

● What would be the duration?

● How would you present the script/report to the teacher, e.g. Can it be in the form of a narrative?

d. Write, direct and present a theatrical production, /One act play

This will be a project which will be done as a team. It will involve planning, preparation and presentation. In short, various language skills will be utilised. There will be researching, discussion, writing the script, auditioning and ultimately producing the play. The project will end with a presentation and subsequently a viva.

*The Project-Portfolio may include the following:*

● Cover page, with title of project, school details/details of students.

● Statement of purpose/objectives/goals

● Certificate of completion under the guidance of the teacher.

● Action plan for the completion of assigned tasks.

● Materials such as scripts for the theatre/role play, questionnaires for interview, written assignments, essays, survey-reports and other material evidence of learning progress and academic accomplishment.

● The 800-1000 words essay/Script/Report.

● Student/group reflections.

● If possible, Photographs that capture the positive learning experiences of the student(s).

● List of resources/bibliography.

2. Complete Notebook work.

# PHYSICS

**Make an investigatory project on any one of the following**

1. To study various factors on which the internal resistance/EMF of a cell depends.

2. To study the variations in current flowing in a circuit containing an LDR because of a variation in

(a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance).

(b) the distance of a incandescent lamp (of fixed power) used to 'illuminate' the LDR.

3. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, anequiconvex lens (made from a glass of known refractive index) and an adjustable object needle.

4. To investigate the relation between the ratio of (i) output and input voltage and (ii)number of turns in the secondary coil and primary coil of a self-designed transformer.

5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.

6. To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.

7. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.

8. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

# CHEMISTRY

1. Learn and write answers of NCERT questions of Organic chemistry chapters 1,2&3.
2. Complete your project.

# MATHEMATICS

Do the following exercises from **NCERT EXEMPLER :**

- Relations and Functions (Ex. 1.2 & 1.3)

- Inverse Trigonometric Functions (Ex. 2.3)

- Matrices (Ex. 3.3)

- Determinants (Ex. 4.3)

# BIOLOGY

1   Solve Assignment number 1,2&3 questions in a separate answer sheets.

2    Learn the answers of Assignment questions.

# ACCOUNTANCY

**1. Project File**

- Use the Financial statement of a Joint Stock Company for the financial year 2022-23.

- Make a detailed report of Financial analysis based on Ratio analysis and Cash Flow Statement.

- The analysis must contain

- ➡ Profitability ratio

- ➡Turnover Ratios

- ➡ Short term solvency Ratio

- ➡ Long-term Solvency Ratio

- Use Diagrammatic representation

- Prepare a report commenting on the financial position.

   *2.* ***Complete all questions of Ratio analysis and Cash Flow statement in the assignment copy.***

**Project Work**

**One specific project** based on financial statement analysis of a company covering any two aspects from the following:

1. Comparative and common size financial statements
2. Accounting Ratios
3. Segment Reports
4. Cash Flow Statements

## ECONOMICS

1. **Prepare project file as per CBSE guidelines:**

| TOPICS | ROLL NUMBERS |
|---|---|
| Livestock – Backbone of Rural India | 1,6,11,16,21,26, 31,36,41,46 |
| Alternate fuel – types and importance | 2,7,12,17,22,27,32,37,42,47 |
| Sri Lanka's Economic Crisis | 3,8,13,18,23,28,33,38,43,48 |
| Government Budget & its Components | 4,9,14,19,24,29,34,39,44, XIIH |
| Organic Farming – Back to the Nature | 5,10,15,20,25,30,35,40,45, XIIH |

2. Do given assignment of Chapter Economic Reforms in India in fair note book

## BUSINESS STUDIES

Q1. Complete the questions of NCERT book of chapter 1 ,2 and 11 .

Q2. Prepare a project either on principle of management or on marketing as discussed in class .

Following essentials are required to be fulfilled for its preparation and submission.

1. The total length of the project will be of 25 to 30 pages.

2. The project should be handwritten.

3. The project should be presented in a neat folder.

   ❖ The project report should be developed in the following sequence-

- ❖ Cover page should include the title of the Project, student information, school and year.
- ❖ List of contents.
- ❖ Acknowledgements and preface (acknowledging the institution, the places visited and the persons who have helped).
- ❖ Introduction.Topic with suitable heading.
- ❖ Planning and activities done during the project, if any.
- ❖ Observations and findings of the visit.
- ❖ Conclusions (summarized suggestions or findings, future scope of study).
- ❖ Photographs (if any).
- ❖ Appendix
- ❖ Teacher's observation.
- ❖ Signatures of the teachers.

## Project 1 :Principles of Management

*The students are required to visit any one of the following:*

1. A departmental store.

2. An Industrial unit.

3. A fast food outlet.

You are required to observe the application of the Principles of management  advocated by Fayol.

Fayol's principles

| 1. Division of work. | 8. Equity. |
| --- | --- |
| 2. Unity of command. | 9. Discipline |
| 3. Unity of direction. | 10. Subordination of individual interest to general interest. |
| 4. Scalar chain | 11. Initiative. |
| 5. Espirit de corps | 12. Centralisation and decentralisation. |
| 6. Fair remuneration to all. | 13. Stability of tenure. |
| 7. Order. | 14. Authority and Responsibility |

**OR**

You may enquire into the application of scientific management techniques by F.W.

Taylor in the unit visited.  Scientific techniques of management.

1. Functional foremanship.

2. Standardisation and simplification of work.

3. Method study.

4. Motion Study.

5. Time Study.

6. Fatigue Study

7. Differential piece rate

## Project 2 : Marketing

*Make a project on the identified product/service keeping in mind the following:*

1. Why have they selected this product/service?

2. Find out '5' competitive brands that exist in the market.

3. What permission and licences would be required to make the product?

4. What are your competitors Unique Selling Proposition.[U.S.P.]?

5. Does your product have any range give details?

6. What is the name of your product?

7. Enlist its features.

8. Draw the 'Label' of your product.

9. Draw a logo for your product.

10. Draft a tag line.

11. What is the selling price of your competitor's product?

(i) Selling price to consumer (ii) Selling price to retailer (iii) Selling price to wholesaler

What is the profit margin in percentage to the

⬜Manufacturer.⬜Wholesaler.⬜Retailer.

12. How will your product be packaged?

13. Which channel of distribution are you going to use? Give reasons for selection?

14. Decisions related to warehousing, state reasons.

15. What is going to be your selling price?

(i) To consumer          (ii) To retailer (iii) To wholesaler

16. List 5 ways of promoting your product.

17. Any schemes for

(i) The wholesaler       (ii) The retailer          (iii) The consumer

18. What is going to be your 'U.S.P?

19. What means of transport you will use and why?

20. Draft a social message for your label.

21. What cost effective techniques will you follow for your product.

22. What cost effective techniques will you follow for your promotion plan.

At this stage the students will realise the importance of the concept of marketing mix and the necessary decision regarding the four P's of marketing.

☐ Product        ☐ Place                ☐ Price                ☐ Promotion

**On the basis of the work done by the students the project report should include the following:**

1. Type of product /service identified and the (consumer/industries) process involve there in.

2. Brand name and the product.

3. Range of the product.

4. Identification mark or logo.

5. Tagline.

6. Labeling and packaging.

7. Price of the product and basis of price fixation.

8. Selected channels of distribution and reasons thereof.

9. Decisions related to transportation and warehousing. State reasons.

10. Promotional techniques used and starting reasons for deciding the particular technique.

11. Grading and standardization.


# SOCIOLOGY ( 039 )

*The function of sociology, as of every science, is to reveal that which is hidden.*
*– Pierre Bourdieu*

✦ **Prepare and complete your sociology project according to your individual topic.**
Following instructions need to be followed while making the Project;
1. Write the project in your own handwriting.
2. Add pictures, photographs, press release wherever necessary.
3. Numbering should be done on each page.
4. The following sequence must be followed:
   ❖ *Title page- Topic of the Project, Subject, Student's name and Class.*
   ❖ *Acknowledgement.*
   ❖ *Index*
   ❖ *Statement of purpose.*
   ❖ *Hypothesis*
   ❖ *Choice of technique*
   ❖ *Collection and Analysis of data*
   ❖ *Limitation*
   ❖ *Conclusion*
   ❖ *Bibliography.*

**(Make sure you start each heading from a fresh page and maintain the same sequence as shared here.)**

- ❖ It should be in your handwriting
- ❖ Add your creativity to project
- ❖ Include pictures and handwork ,where needed

*(YOU MAY REFER CHAPTER NO. 7 BOOK 1ˢᵗ FOR ASSISTANCE IN YOUR PROJECT WORK)*

*Note: No need to do the binding now. Final binding will be done after verification by the subject teacher after the summer break.*

- ✦ **Complete your Sociology notebook.**

# POLITICAL SCIENCE

**Prepare a project according to the CBSE guidelines.**

- ❖ Ring file to be used.
- ❖ Use white or light coloured interleaf sheets.

**Suggested topics.**

*1.The end of Bipolarity.*

*2.Newcentres of power (ASEAN, EUROPEAN UNION,SAARC)*

*3.Newcentres of power (China, Japan, India)*

*4.Contemporary South Asia (Pakistan, Bangladesh,Nepal, Srilanka)*

*5. United Nations.*

*6.Globalisation*

*7.Challenges of Nation building*

Any other topic from the syllabus.

Revise chapter – 1,2,3 .

# HISTORY

1. Complete the given questions on Theme 2 in your notebook.

2. Revise Theme 1 and 2.

3. **Make a project as per the guidelines and topics given in the syllabus. A few suggestive topics for class XII projects are:-**

- ❖ The Indus Valley Civilization-Archaeological Excavations and New Perspectives
- ❖ The History and Legacy of Mauryan Empire
- ❖ "Mahabharat"- The Great Epic of India
- ❖ The History and Culture of the Vedic period
- ❖ Buddha Charita
- ❖ A Comprehensive History of Jainism
- ❖ Bhakti Movement- Multiple interpretations and commentaries.
- ❖ Global legacy of Gandhian ideas
- ❖ Life of women in the Mughal rural society
- ❖ The Revolt of 1857- Causes; Planning & Coordination; Leadership, Vision of Unity
- ❖ The Philosophy of Guru Nanak Dev
- ❖ An insight into the Indian Constitution
- ❖ Comparative study of Mughal and Vijayanagar architecture

# PSYCHOLOGY

1. Make your project on any disorder from chapter Number 4.
2. Complete your practical file.
3. Complete Assignment Questions of chapter Number 1.

# LEGAL STUDIES

Students have to write a case from their book in their file. Any one case can be done.

# GEOGRAPHY

*1. Map work(World)*

*a. The largest country in each continents in terms of area*

*b. Areas of subsistence gathering*

*c. Major areas of nomadic herding of the world*

*d. Major areas of commercial livestock rearing*

*e. Major areas of extensive commercial grain farming*

*f. Major areas of mixed farming*

*g. Ruhr region, Silicon Valley, Appalachian region, Great lakes region*

*h. Terminal stations of Trans Siberian Railway, Trans Canadian Railway, Trans – Australian Railway*

*i. Major Sea Ports: North Cape, London, Hamburg, Vancouver, San Francisco, New Orleans, Rio-De-Janeiro, Colon, Valparaiso, Suez, Cape town, Yokohama, Sanghai, Hong Kong, Aden, Karachi, Kolkata, Perth, Sydney, Melbourne, Suez Canal, Panama Canal, Rhine Waterway, St. Lawrence Seaway*

*j. Major Airports: Tokyo, Beijing, Mumbai, Jeddah, Johannesburg, Nairobi, Moscow, Paris, Berlin, Rome, Chicago, New Orleans, Mexico City, Buenos Aires, Santiago, Darwin, Wellington, Sao Paulo*

*2. Map work(India) :*

*a. State with highest level of urbanisation and lowest level of urbanistion*

*b. One state with highest level of HDI& One lowest level of HDI*

*c. State with higher level of population density& one state with lowest level of population density(2011)*

*d. City with more than 10 million population - Greater Mumbai, Delhi, Kolkata, Chennai, Bengaluru*

*3. Leading producing states of the following crops:*

*a. Rice, b. Wheat, c. Cotton, d. Jute, e. Sugarcane, f. Tea, g. Coffee*

*b. Iron –ore mines: Mayurbhanj, Bailadila, Ratnagiri, Bellary*

*c. Manganese mines: Balaghat, Shimoga*

*d. Copper mines: Hazaribagh, Singhbhum, Khetri*

*e. Bauxite mines: Katnai, Bilaspur, Koraput*

*f. Coal mines: Jharia, Bokaro, Barauni*

*g. Oil Refineries: Mathura, Jamnagar*

*h. Iron & steel Plants: Bhadravati, Bhilai, Durgapur, Raurkela, Jamshedpur*

*i. Cotton Textile: Surat, Varanasi, Murshidabad, Sholapur, Coimbatore*

*j. Software technology Park: Gandhinagar, Srinagar, Mohali, Noida, Indore, Hyderabad,*

*k. Major Industrial Regions*

*l. Important nodes on North – South, east – West Corridor & Golden Quadrilateral.*

*m. Major Sea Ports: Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia*

*n. International Air ports: Ahmedabad, Kolkata, Guwahati, Delhi, Amritsar, Thiruvanathapuram*

## PAINTING

1. *Complete chapter Number 1.*
   *"The Rajasthani School Of Miniature Painting".*
2. *2 Paintings*
   *Nature and Object Study.*
   *1.Size A3,*
   *2.Size Half Imperial.*
3. *2 Composition  Painting*
   *1.Size A3,*
   *2.Size Half Imperial.*

# COMPUTER SCIENCE (083)

**1. Execute the following program in system ,save soft copy, take print out of these program with output and write in class notebook with output.**

a. Write a function called Circle() that accepts radius of a circle as a argument and return area of a circle as an output.

b. Write a function that accepts marks in five subjects as argument and return average marks as output.

c. Write a function Find() to pass a number entered by user as argument and return if the number is armstrong or pallindrom or none of them as output.

d. Traffic accident occur due to various reasons. While problem with road or inadequate safety facilities lead to some accidents, majority of the accidents are caused by drivers carelessness and their failure to abide by the traffic rules.

ITS Roadwork is a company that deals with manufacturing and installation of traffic light so as to minimize the risk of accidents. Keeping in view the requirements, traffic simulation is to be done. Write a program in python that simulates a traffic light. The program should perform the following :

i. A user defined function trafficLight() that accept input from user, display an error message if the user enters anything other RED,YELLOW and GREEN. Function light() is called and the following is displayed depending upon return value from light():

•       "STOP, Life is more important than speed" if the value entered by light() is 0.

•       "PLEASE GO SLOW." If the value entered by user is 1

•       "YOU MAY GO SLOW" if the value entered by user is 2

Ii.A user- defined function light() that accepts a string as input and returns 0 when the input is RED,1 when input is YELLOW, and 2 when the input is GREEN. The input should be passed as an argument

iii. Display "BETTER LATE THAN NEVER" after the function trafficLight() is executed

2. Do all the assignment work in notebook which will be sent in group during holidays.

3. Do practice of all the question that was taught in class.

# Computer Science and Informatics Practices

## WORKSHEET-1

1. Create a Database name 'School'.

2. Show the list of databases.

3. Open a Database 'School'.

4. Create a table 'Student'.

5. Describe the structure of table 'Student'.

6. WAC to add a column 'Mobile No'.

7. WAC to add a Primary Key.

8. WAC to add a constraint NOT NULL with column 'Name'.

9. WAC to change/replace the column Mobile No as 'Contact No'.

10. WAC to remove a column Contact No.

11. WAC to remove a table Teacher.

## WORKSHEET-2

1. WAC to insert the rows/records in a table.

2. WAC to insert data by specifying all the column names and associated values in a table.

3. WAC to insert the records of Roll No, Name and Marks in a table student.

4. WAC to insert null values in a table Student.

5. WAC to change the marks of 'Deep Singh' as 59.

6. WAC to increase the marks of all girls by 2%.

7. WAC to decrease the marks by 3 whose marks more than 95.

8. WAC to change the value of marks field to 90 for the student whose Roll No is 3.

9. WAC to change the values for both the fields Marks and DOB to 70 and '1998-08-11' respectively for the student whose name is 'Deep Singh'.

10. WAC to change the value of the field Mars to NULL for the Student whose Roll No is more than 5.

11. WAC to increment the value of Marks by 10 for all the records with Roll No=5 or 10.

12. WAC to decrease the marks of all students by 5%.

13. WAC to increase the Marks of all the boys by 2%.

14. WAC to delete the record of student whose Roll No is 5.

15. WAC to delete the record of student whose Marks is NULL.

## WORKSHEET-3

1. WAC to show/display all the data/records of table Student.

2. WAC to display all the data of table Student.

3. WAC to display Roll No, Name & Marks of Student whose Marks more than 70.

4. WAC to display Name, Marks of those Students whose Marks less than, equals to 80 and born in year 1999.

5. WAC to display all the records of Student in Ascending order of their marks.

6. WAC to display Roll No, Name & Marks of Students in Descending order of their Name.

7. WAC to display all the records of Student whose Marks less than 70 in Ascending order of their DOB.

8. WAC to display the Roll No, Name along with Marks of those Students whose Marks lie in the range of 80 and 100.

9. WAC to display Name, Marks and DOB of Student whose Roll No's in the range 5 to 8.

10. WAC to display all those records whose Marks is either 75,80 or 85.

11. WAC to display all the records of Student.

12. WAC to display Name, Marks of Student whose Marks in the range of 70-80.

13. WAC to display Roll No, Name, Marks & DOB of Student whose Roll No is 1, 3, 5 or 7.

14. WAC to display all the records of Student in Ascending Order of their Name.

15. WAC to display Roll No, Name & DOB in descending order of DOB.

16. WAC to display all the records of Student in Ascending Order of their Name and Descending Order of their Marks.

17. WAC to display Roll No, Name, Gender & Marks of Student whose Name starts with 'R'.

18. WAC to display all the records of Student whose Name is having 'Singh'.

19. WAC to display all the records of Student whose Name ends with 'A'.

20. WAC to display the record of Student whose year of birth is '2000'.

21. WAC to display Unique Gender of a Student.

22. WAC to display Name, DOB & Day of Birth of all the Students.

23. WAC to display all the records of Student whose Marks more than 80 and born in the month of November.

24. WAC to display Name of Student along with 40% marks of boys.

25. WAC to display the Name & Marks of all the Students whose Marks NOT IN 76 or 80.

## WORKSHEET-4

1. WAC to create a Database name 'XII_A'.

2. WAC to open a Database 'XII_A'.

3. WAC to create a table 'Loans'.

4. WAC to show the structure of table 'Loans'.

5. WAC to insert records in a table 'Loans'.

6. WAC to display all the records of table 'Loans'.

7. Display the sum of all Loan Amounts whose Interest rate is greater than 10.

8. Display the Maximum Interest from Loans table.

9. Display the count of all loan holders whose name ends with 'Kanwar'.

10. Display the count of all loan holders whose Interest Rate is NULL.

11. Display the Interest-wise details of Loan Account Holders.

12. Display the Interest-wise details of Loan Account Holders with at least 40 installments remaining.

13. Display details of all the Loans whose Rate of Interest is NOT NULL.

14. Display details of all the loans whose rate of interest is NOT NULL.

15. Display amounts of various loans from the table Loans. And loan amount should appear only once.

16. Display the no of installment of various Loans from the table Loans. A installment should appear only once.

17. Display the Customer Name and Loan Amount for all the loans which do not have a no of installment 36.

## WORKSHEET-5

1. WAC to show the list of databases.

2. WAC to open a Database 'Apex'.

3. WAC to show the list of tables.

4. WAC to display all the data of table Fees.

5. WAC to display all the data of table Student.

6. WAC to display Cartesian Product of Student and Fees.

7. WAC to display RollNo of Student along with Name & Fee from table Student & Fees.

8. WAC to display details of Student along with Fee Amount by using Inner-Join or Intersection.

9. WAC to display details of Students with Fee Amount by using right outer join in descending order of Fee Amount.

10. WAC to display details of Student and Fees by using left outer join.

11. WAC to display all the records of Student and Fees by using Natural Join.

12. WAC to display Student RollNo, Name, Marks, Class & Sec, Fees Amount whose stream is science.