ST. Thomas School, Indirapuram
Holiday Homework
Session:-2024-25
Class XII

Board Final PROJECT & Viva Voce 2024-25

Dear Children!! Select any one of the following themes for your **DIGITAL PROJECT**:

Theme 1. Chapter reference**: JOURNEY TO THE END OF THE EARTH**

THE GREATEST THREAT TO OUR PLANET IS THE BELIEF THAT SOMEONE ELSE WILL SAVE IT! We must love the world as our own self, then we can truly care for all things.

Theme 2. Chapter reference**: POETS & PANCAKES**

 CINEMA IS A MIRROR THAT CAN CHANGE THE WORLD!! We must acknowledge that movies touch our hearts, awaken our vision & transform the way we see things.

Thumb Rules:

- ✓ **THEME 1.** Keeping the concern for our Mother Earth prepare a **Digital Presentation** in a group of **FOUR** for a **SEMINAR** to be conducted at the time of **FINAL BOARD ASL.**

- ✓ **THEME 2.** Acknowledging the fact that the **World of Cinema** has evolved to a great extent in terms of Make-up, Green Rooms, projection, costumes, acting, out-door shooting, storyline, direction, screenplay, provision of Vanity Vans etc. Prepare a **Digital Presentation** in a group of **FOUR** for a **SEMINAR** to be conducted at the time of **FINAL BOARD ASL.**

WHAT TO INCLUDE:

1. **OPENING SLIDE**
2. **SELECTED THEME AND THE QUOTE**
3. **TEAM DETAILS (include headers like DESIGNED BY:, EDITED BY:, COMPILED BY:, DIGITAL SUPPORT BY:)** hence, delegate the work as per the potential of each team mate.

THEME 1. Chapter reference**: JOURNEY TO THE END OF THE EARTH**

- Relevant Images to support your POV.
- Threat to the world (Global warming, climate change, over use of non-renewable energy, vanishing habitats, extinct species, population explosion, loss of bio-diversity, deforestation etc.)
- Solutions to the presented problems by the group.
- Sustainable measures.
- Include apt **HEADINGS, QUOTES & DATA**
- **DATA** can be represented through **PIE CHART** or **BAR GRAPH**
- Attach a **Short video** (30 to 60 seconds) to support your POV.
- Follow a pattern of information e.g. PROBLEM & its SOLUTION   **OR**

ALL PROBLEMS & their SOLUTIONS

- Time Duration **8 Minutes**, each team mate is required to speak at least for **2 minutes.**
- **BE PREPARED FOR A VIVA VOCE on the presentation.**
- Get the presentation approved before uploading from your respective language teachers latest by
  28th August 2024.
- Save the final edited version in a virus free/ scanned pen drive and get it uploaded on the smart board. (Date will be informed later)

  Last two slides:
4. **BIBLIOGRAPHY**
5. **CREDENTIALS**

OR

THEME 2. Chapter reference**: POETS & PANCAKES**

WHAT TO INCLUDE:

1. **OPENING SLIDE**
2. **SELECTED THEME AND THE QUOTE**
3. **TEAM DETAILS (include headers like DESIGNED BY:, EDITED BY:, COMPILED BY:, DIGITAL SUPPORT BY:)** hence, delegate the work as per the potential of each team mate.
   - Relevant Images to support your POV.
   - Influence of Cinema.
   - 100 years of Cinema.
   - Cinema & its evolution in all its departments.
   - **Major studios** and their history. (**any TWO**) for e.g. RAMOJI FILM CITY, NOIDA FILM CITY, R.K. STUDIOS etc.)
   - Theatre to Cinema.
   - Include apt **HEADINGS, QUOTES & DATA**
   - **DATA** can be represented through **PIE CHART or BAR GRAPH**
   - Attach a **Short video** (30 to 60 seconds) to support your POV.
   - Follow a pattern of information.
   - Time Duration **8 Minutes**, each team mate is required to speak at least for **2 minutes**.
   - **BE PREPARED FOR A VIVA VOCE on the presentation.**
   - Get the presentation approved before uploading from your respective language teachers latest by **28th August 2024.**
   - Save the final edited version in a virus free/ scanned pen drive and get it uploaded on the smart board. (Date will be informed later)
   Last two slides:
4. **BIBLIOGRAPHY**
5. **CREDENTIALS**

PHYSICS

1. Project work as instructed

2. Written part of all the experiments

3. Worksheet (will be shared as edunext)

INVESTIGATORY PROJECT TOPICS

Designing and executing experiments, systematically analysing the collected results, and finally presenting the findings through a detailed report or a well-structured presentation are all part of the process of completing a CBSE class 12 chemistry investigatory project.

1. Common food adulterants in fat, butter, oil, turmeric powder, pepper, chilli powder, sugar, etc.
2. Amount of casein in different samples of milk.
3. Measure the amount of acetic acid in vinegar
4. Determination of contents in cold drinks
5. Presence of oxalate ions in Guava Fruits at different stages of ripening
6. To determine the contents of cold drink in different samples.
7. Sterilization of water using bleaching powder
8. Analysis of honey.
9. Study the effects of metal coupling on the rate of corrosion
10. To determine the rate of evaporation of different liquids
11. Study the effects of metal coupling on the rate of corrosion
12 Preparation of soya bean milk
13 Determining caffeine in tea samples
14 Digestion of starch by salivary amylase
15 Red Cabbage as an indicator.
16 The Neutralizing Ability of Antacid Tablets

MATHEMATICS

- **Revise the chapters and do the following questions in your assignment copy**

1. If R = {x,y): x + 2y = 8} is a relation on N, write the range of R
2. Let $f : R \rightarrow R$ be the Function defined by $f(x) = \frac{1}{2 - cosx,}$, $\forall x \in R$. Then, find the range of f.

3. Show that the relation S in the set A = {x € Z: 0 ≤ x ≤ 12} given by S = {(a,b) :a, b €
   Z, Ia-b I is divisible by 3} is an equivalence relation.
4. Let A={1,2,3……9} and R be the relation in A X A defined by (a,b) R (c,d) if a+d =
   b+c for (a,b), (c,d) in A X A . Prove that R is an equivalence relation and also obtain
   the equivalence class [(2,5)].
5. A relation R is defined on a set of real numbers R as R=[(x,y):x.y is an irrational
   number}
6. Consider $f: R-\left\{-\frac{4}{6}\right\} \to R - \left\{\frac{4}{3}\right\}$ given by $f(x) = \frac{4x+3}{3x+4}$. Show that f is bijective.
7. Find the value of $\sin\left[\frac{\pi}{2} - sin^{-1}\left(-\frac{1}{2}\right)\right]$.
8. Find the value of the expression $2sec^{-1}(2) + sin^{-1}\left(\frac{1}{2}\right)$.
9. Find the value of $cot\left[\frac{1}{2} sin^{-1}\frac{\sqrt{3}}{2}\right]$.
10. Write the principal value branch of cosec^{-1} x ?.
11. Evaluate: $3 \sin^{-1}\left(\frac{1}{\sqrt{2}}\right) + 2 cos^{-1}\left(\frac{\sqrt{3}}{2}\right) + cos^{-1}(0)$.
12. Evaluate: $\sin^{-1}\left(\frac{3\pi}{4}\right) + cos^{-1}\left(cos \frac{3\pi}{4}\right) + tan^{-1}(1)$.
13. Express $sin^{-1}\left(\frac{\sin x+\cos x}{\sqrt{2}}\right), where \frac{\pi}{2} < x < \frac{\pi}{4}$, in the simplest form.
14. Prove that: $cos^{-1}\left(\frac{4}{5}\right) + cos^{-1}\left(\frac{12}{13}\right) = cos^{-1}\left(\frac{33}{65}\right)$
15. Solve for x: $sin^{-1}(1 - x) - 2 sin^{-1}(x) = \frac{\pi}{2}$
16. Prove that: $tan\left(\frac{\pi}{4} + \frac{1}{2} cos^{-1}\frac{a}{b}\right) + tan\left(\frac{\pi}{4} - \frac{1}{2}cos^{-1}\frac{a}{b}\right) = \frac{2b}{a}$
17. If $\begin{bmatrix} 2a + b & a - 2b \\ 5c - d & 4c + 3d \end{bmatrix} = \begin{bmatrix} 4 & -3 \\ 11 & 24 \end{bmatrix}$, then find the value of a + b – c + 2d.
18. If $A = \begin{bmatrix} 3 & 4 \\ 5 & 2 \end{bmatrix}$ and 2A+B is a null matrix, then find matrix B
19. If A is square matrix such that A² = I, then find (A – I)³ + (A + I)³ - 7A.
20. If $A = \begin{bmatrix} 0 & 1 \\ -1 & 0 \end{bmatrix}$ and (3 I + 4A) (3 I – 4A) = x² I then find values of x.
21. Let $f(\alpha) = \begin{bmatrix} cos\alpha & -sin\alpha & 0 \\ sin\alpha & cos\alpha & 0 \\ 0 & 0 & 1 \end{bmatrix}$ prove that $f(\alpha).f(-\beta) = f(\alpha - \beta)$.
22. Express the matrix as the sum of a symmetric and skew symmetric matrix
    $\begin{bmatrix} 3 & -2 & -4 \\ 3 & -2 & -5 \\ -1 & 1 & 2 \end{bmatrix}$.
23. Show that A³ – 23 A – 40 I = 0, where A = $\begin{bmatrix} 1 & 2 & 3 \\ 3 & -2 & 1 \\ 4 & 2 & 1 \end{bmatrix}$.
24. If the matrices A = $\begin{bmatrix} 1 & 2 & 2 \\ 1 & 3 & 4 \\ 1 & -1 & 3 \end{bmatrix}$, B = adj A and C = 3A, then find the value of $\frac{|adj B|}{|C|}$
25. A shopkeeper has 3 varieties of pens A, B and C. Manu purchased 1 pen of each
    variety for a total of Rs. 21. Sonu purchased 4 pens of A variety, 3 pens of B variety
    and 2 pens of C variety for Rs. 60. While Ramu purchased 6 pens of A variety, 2 pens
    of B variety and 3 pens of C variety for Rs.70. Using matrix method, find cost of each
    variety of pen.
26. Solve the L P P graphically: Minimize: Z = 5x + 10 y
    Subject to constraints: x + 2 y ≤ 120, x + y ≥ 60, x – 2y ≥ 0, x, y ≥ 0.
27. Solve the L P P graphically: Minimize: Z = 10x + 4 y
    Subject to constraints: 4 x + y ≥ 80, 2x + y ≥ 60, x, y ≥ 0.
28. Let Z = ax + by has optimal value at two points, (2,3) and (5,7) then derive the
    relationship between a and b.

29. Find the maximum value of Z = 3x + 2y where corner points of feasible region are (0,0),(0,8), (2,7), (5,4) and (6,0).
30. Maximize Z = 6x + 16 y subject to constraints x + y ≥ 2, x, y ≥ 0.

- **Mathematics Lab Activities:**
    1. Relations and Functions(ACTIVITY-3)
    2. Inverse Trigonometric Functions ((ACTIVITY-4)
    3. Matrices (ACTIVITY-6)
    4. Continuity and Differentiability(ACTIVITY-7)
    5. Applications of Derivatives (ACTIVITY-12)

BIOLOGY

 1.Write the answers of given questions- chapter -Principles of inheritance in the notebook.

2.-Write the Experiments 1 to 10 in Practical file.

3.Complete the investigatory project.

COMPUTER SCIENCE

1. **Complete the Worksheet uploaded on Edunext**
2. **Complete the practical file programs uploaded on Edunext. Strictly follow the instructions provided in the document.**

ECONOMICS AND BUSINESS STUDIES

	BUSINESS STUDIES
1.	Project work as per CBSE guidelines and instructions provided by subject teacher in class. CBSE guidelines will be shared through whatsapp group also.
2.	Do the revision of all the chapters done in class. There will be surprise test of B.st. in first week of July.
	ECONOMICS
1.	Project work 1. Select your topic. 2. Do the research work from internet, news media, governmental policies, RBI bulletin, Economic survey, NITI Aayog reports, IMF/World bank reports etc. Students can use any reliable source for collecting information. 3. Prepare a rough draft (make a list of content, you are going to write in project) of your project after reading the study material, which is collected after research. 4. Discuss with concern teacher. 5. After approval from teacher, start preparing your project. 6. As per the requirement collect data, organize the data, present data in different forms like: tabular presentation, bar, pie chart, line graph etc. Collect relevant pics., newspaper cuttings etc. to support your research work.
2.	Complete work in fair notebooks.
3.	Do revise all the chapters. There will be surprise test of Economics in first week of July.
4.	CBSE Guidelines regarding preparation of project, are given below.

" WISHING YOU ALL PEACE AND JOY THESE HOLIDAYS."

Guidelines for Project Work in Economics (Class XI and XII)

The **objectives** of the project work are to enable learners to:

☐ probe deeper into theoretical concepts learnt in classes XI and XII

☐ analyse and evaluate real world economic scenarios using theoretical constructs and arguments

☐ demonstrate the learning of economic theory

☐ follow up aspects of economics in which learners have interest

☐ develop the communication skills to argue logically

The **expectations** of the project work are that:

☐ learners will complete only **ONE** project in each academic session

☐ project should be of 3,500-4,000 words (excluding diagrams & graphs), preferably hand-written

☐ it will be an independent, self-directed piece of study

Role of the teacher:

The teacher plays a critical role in developing thinking skills of the learners. A teacher should:

☐ help each learner select the topic based on recently published extracts from the news media, government policies, RBI bulletin, NITI Aayog reports, IMF/World Bank reports etc., after detailed discussions and deliberations of the topic

☐ play the role of a facilitator and supervisor to monitor the project work of the learner through periodic discussions

☐ guide the research work in terms of sources for the relevant data

☐ educate learner about plagiarism and the importance of quoting the source of the information to ensure authenticity of research work

☐ prepare the learner for the presentation of the project work

☐ arrange a presentation of the project file

Scope of the project:

Learners may work upon the following lines as a suggested flow chart:

Choose a title/topic

Collection of the research material/data

Organization of material/data

Present material/data

Analysing the material/data for conclusion

Draw the relevant conclusion

Presentation of the Project Work11

Expected Checklist:

☐ Introduction of topic/title

☐ Identifying the causes, consequences and/or remedies

☐ Various stakeholders and effect on each of them

☐ Advantages and disadvantages of situations or issues identified

☐ Short-term and long-term implications of economic strategies suggested in the course of

research

☐ Validity, reliability, appropriateness and relevance of data used for research work and

for presentation in the project file

☐ Presentation and writing that is succinct and coherent in project file

☐ *Citation of the materials referred to, in the file in footnotes, resources section,*

bibliography etc.

Mode of presentation/submission of the Project:

At the end of the stipulated term, each learner will present the research work in the Project File

to the External and Internal examiner. **The questions should be asked from the Research**

Work/ Project File of the learner. The Internal Examiner should ensure that the study

submitted by the learner is his/her own original work. In case of any doubt, authenticity

should be checked and verified.

Marking Scheme:
Marks are suggested to be given as –

S. No.	Heading	Marks Allotted
1.	Relevance of the topic	3
2.	Knowledge Content/Research Work	6
3.	Presentation Technique	3
4.	Viva-voce	8
	Total	20 Marks

Class XII	
• Micro and Small Scale Industries	• Food Supply Channel in India
• Contemporary Employment situation in India	• Disinvestment policy of the government
• Goods and Services Tax Act and its Impact on GDP	• Health Expenditure (of any state)
• Human Development Index	• Inclusive Growth Strategy
• Self-help group	• Trends in Credit availability in India
• Monetary Policy Committee and its functions	• Role of RBI in Control of Credit
• Government Budget & its Components	• Trends in budgetary condition of India
• Exchange Rate determination – Methods and Techniques	• Currency War – reasons and repercussions
• Livestock – Backbone of Rural India	• Alternate fuel – types and importance
• Sarva Shiksha Abhiyan – Cost Ratio Benefits	• Golden Quadrilateral- Cost ratio benefit
• Minimum Support Prices	• Relation between Stock Price Index and Economic Health of a Nation
• Waste Management in India – Need of the hour	• Minimum Wage Rate – Approach and Application
• Digital India- Step towards the future	• Rain Water Harvesting – A solution to water crisis
• Vertical Farming – An alternate way	• Silk Route- Revival of the past
• Make in India – The way ahead	• Bumper Production- Boon or Bane for the farmer
• Rise of Concrete Jungle- Trend Analysis	• Organic Farming – Back to the Nature
• *Aatmanirbhar* Bharat	• e-Rupee (e- ₹)
• Sri Lanka's Economic Crisis	• Sustainable Development Goals (SDG's)

• Sri Lanka's Economic Crisis	• Sustainable Development Goals (SDG's)
• Environmental Crisis	• Comparative Study of Economies (Maximum three economies)
• New Education Policy (NEP) 2020: A Promise for a New Education System	• G-20: Inclusive and Action Oriented
• Amrit Kaal: Empowered and Inclusive Economy	• Cashless Economy
• Any other newspaper article and its evaluation on basis of economic principles	• **Any other topic**

ACCOUNTANCY

Class- XII Students must complete the project work as discussed with them as per CBSE guidelines.

Project work – One Specific Project based on Financial Statement Analysis of a Company covering any two aspects from the following:-

1. **Accounting Ratios**
2. **Cash flow statement**
3. **Segment Analysis**
4. **Comparative and Common Size financial statements.**
   It is advisable to prepare project on Accounting Ratios and Cash Flow Statement

   Revise the syllabus taught till now and complete your notebook.

General Instructions:
(i) This H.H.W. is divided in three parts.
(ii) Part I- Project
(iii) Part II- Assignment
(iv) Part III- Make a formula booklet of all topics covered.

PART-I
PROJECT-
Use Logarithms for financial calculations such as interest, present value, future value, sinking fund,EMI,CAGR etc. with large values.

<u>**Note:**</u> **It will be added in your internal assessment.**

PART-II

ASSIGNMENT-2

1. If A= $\begin{bmatrix} 2 & -1 & 3 \\ 4 & 5 & -6 \end{bmatrix}$ and B= $\begin{bmatrix} 1 & 2 \\ 3 & 4 \\ 5 & -6 \end{bmatrix}$ then

a) Only AB is defined   b) Only BA is defined
c) AB and BA both defined   d) AB and BA both not defined

2. If A= $\begin{bmatrix} 1 & 2 \\ 2 & 3 \end{bmatrix}$ and $A^2 - x A = I_2$ then the value of x is

  a) 4   b) 2   c) -4   d) -2

3. If A is a square matrix of order 3 and $|A| = 5$ then the value of $|2A'|$ is

  a) -10   b) 10   c) -40   d) 40

4. A vehicle costing ₹125000 has scrap value ₹25000.If annual depreciation charge is ₹12500 then useful life of the vehicle is

  a)4years   b) 6years   c) 8years   d) 10years

5.The effective rate of return, which is equivalent to a declared rate of 12% compounded semi annually is

a)11.86%   b) 12.86%   c)12.36%   d) 11.98%

6. What sum of money is needed to invest now ,so as to get ₹5000 at the

beginning of every month forever, if the money is worth 6% per annum

compounded monthly?

7.A machine costing ₹ 30,000 is expected to have a useful life of 4 years

and a final scrap value of ₹ 4000. Then find annual depreciation .

8. At what rate of interest will the present value of perpetuity of

1500 payable at the end of every 6 months be 20,000?

9. Cost of two toys A and B are 50 and 75. On a particular Sunday shopkeeper P sells 7 toys of type A and 10 toys of type B whereas shopkeeper Q sells 8 toys of type A and 6 toys of type B. Find income of both shopkeepers using matrix Algebra.

10. An investment of ₹ 10,000 becomes ₹ 60,000 in 4 years, then find the CAGR

(compound annual growth rate).

11. Mr Surya borrowed a sum of 5,00,000 with total interest to be paid

2,00,000(flat) and he is paying an EMI of 12,500. Calculate loan tenure

12. Three shopkeepers A, B and C are using polythene bags, handmade bags and newspaper bags. A uses 20, 30 and 40 number of bags of respective type. B uses 30, 40 and 20 of each respective kind while C uses 40, 20 and 30 of each type. Each shopkeeper spent Rs 250, Rs 220 and Rs 200 on the bags. Find the cost of each carry bag using matrix method.

13.Using determinant find the value of k, if (2,-3),(k,-1),(0,4) are collinear.

14. 10 years ago, Mr Mehra set up a sinking fund to save for his daughter's

higher studies. At the end of 10 years, he has received an amount of

₹ 10,21,760.What amount did he put in the sinking fund at the end of

every 6 months for the tenure, which paid him 5% p.a. compounded

semi-annually? [Use $(1.025)^{20}= 1.6386$]

15. Find value of $2a + 3b - c$, if A $= \begin{bmatrix} 0 & -1 & 28 \\ a-8 & 0 & 3b \\ -c+2 & 2 & 0 \end{bmatrix}$ is a skew symmetric

matrix.

16. There are two real value(s) of x , for which the value of the determinant $\Delta=$
$\begin{vmatrix} 1 & -2 & 5 \\ 2 & x & -1 \\ 0 & 4 & 2x \end{vmatrix}$ is 86. Find the value(s) of x.

17. If A $= \begin{bmatrix} 1 & 2 & 3 \\ 3 & 2 & 2 \\ 2 & 3 & 2 \end{bmatrix}$ Find (i) A+A'(ii) $A^2 + 2A + I$ (iii) A^{-1}

18. Solve the following equations by using Cramer's rule

(i) $2x + 3y = 7; 3x + 5y = 9$ (ii) $2x + y - z = 3, x + y + z = 1, x - 2 y - 3z = 4$

19. CASE STUDY:

 Two schools P and Q decided to award their selected students for the values of discipline and honesty in the form of prizes at the rate of Rs. x and Rs. y respectively. School P decided to award respectively 2, 3 students a total prize money of Rs. 2300 and school Q decided to award respectively 3, 5 students a total prize money of Rs. 3700.

Based on the above information, answer the following questions:

(a) Give the matrix equation representing the above situation.

(b) Find the value of the determinant of coefficients of x and y.

(c) If A is the matrix representing the coefficients of x and y, then find adj A.

(d) Evaluate the inverse of matrix A.

20. **CASE STUDY:**

   Understanding Perpetuity: An annuity is a stream of cash flows. A perpetuity is a type of annuity that lasts forever, into perpetuity. The stream of cash flows continues for an infinite amount of time. In finance, a person uses the perpetuity calculation in valuation

methodologies to find the present value of a company's cash flows when discounted back at a certain rate.

(a) Find the present value of a perpetuity of ₹ 900 payables at the end of each

year, if money is worth 5% per annum.

(b) Find the present value of a perpetuity of ₹ 300 payables at the beginning of

every 6 months, if money is worth 6% per annum.

PART-III
Write the formulae and Mind Map for following topics:

  1- *MATRICES*
  2- *DETERMINANTS*:
  3- *FINANCIAL MATHEMATICS*:
    Perpetuity,Sinking funds,EMI(flat rate, reducing balance method),ROI,Rate of return, nominal rate,effective rate,CAGR,Linear method of depreciation.

NOTE: Do part II in Mathematics Register and part -III in separate booklet

HISTORY

To complete the project work discussed in class.

PSYCHOLOGY

To Complete work of project file discussed in class

GEOGRAPHY

Complete the practical work as discussed in class

POLTICAL SCIENCE

❖ **PROJECT WORK (20 marks)**
         Every student has to compulsorily undertake one project on the topics from the
         syllabus of session 2024-25.
   GENERAL INSTRUCTONS:
 1. The Project Report should be *handwritten* by the students themselves on A3/4 size
    sheets.
 2. Students must use at least one primary evidence/ source **(immediate firsthand account
    of a topic from people who had direct connection with it)** to prepare the project.
    Speeches/newspaper cuttings/Interviews/survey etc.
 3. If possible, *different forms of Art* may be integrated in the project work.
 4. Use eco-friendly products without incurring too much expenditure.
 5. Project content must not be less than 10 pages or exceed 15 pages.
 6. All pages will be numbered, with a broad left margin.
 7. Use only one face (Odd # page) to write content material. Even # pages will be utilized
    only to illustrate pictures, fact/figure & statistics (Whatever applicable/relevant to written
    content on the following page).
 8. Wherever required prepare FOOTNOTES/`DID YOU KNOW?' fact card with lesser
    known but interesting facts associated with content.

PATTERN OF THE PROJECT FILE:

1. **Cover page** - School name, Project title, Session, Subject. At the bottom of the title page - write your Name (in CAPITAL) and Class (in two separate rows/Right align) followed by Roll No in the next line. **Roll No (NOT TO BE FILLED IN)**
2. **First page** - Project Title, subject, session, name of the student, class/ section
3. **Certificate of Authenticity**
4. **Acknowledgment**
5. **Index** - With page numbers
6. **Introduction** of the Topic / Purpose and aim of the project
7. **Content**:
- Identifying causes, events, consequences and/or remedies.
- Various stakeholders and effect on each of them.
- Short-term and long-term implications of strategies suggested in the course of research.
- Check list include validity, reliability, appropriateness and relevance of data used for research work.
- Present material/ data/ statistics with related pictures, pie charts, bar graphs, cartoons,slogans, maps etc. **on the left side of the file (even # pages)** to make a quality project.
- Report on primary source (with evidence)
- **Conclusion**- Draw a relevant conclusion by mentioning the learning outcome and suggestions (if any).
8. **Bibliography**- Mention name of the book, newspaper, magazine, website, author, publisher

- ❖ **REVISE all the chapters completed.**
- ❖ **Read the newspaper daily and collect news updates on India's relations with China, Russia, Pakistan, Sri Lanka, Bangladesh, Bhutan and Nepal.**

PHYSICAL EDUCATION

Prepare the project file as suggested by your subject teacher in A 4 size ruled paper sheets or in the physical education project file in the following practical topics

* Fitness Test Administration. (SAI Khelo India Test)

* Practical-2: Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.

* Practical-3: Anyone one IOA recognized Sport/Game of choice excluding Badminton ,Table tennis and those games studied in class 11

1. Labelled diagram of Field &

   Equipment.

2. Mention its Rules

3. Terminologies

4. Skills

Practical topics 1 & 2nd to be done in practical lab manual

Practical 3rd to be done in light in coloured A4 sheets or all the three practical in coloured A4 sheet paper

HINDI

क्लास 12 - छात्र ग्रीष्म अवकाश के दौरान अपनी परियोजना कार्य पूर्ण करेंगे

परियोजना - कार्य करते समय निम्नलिखित बिन्दुओं को अपनाया जा सकता है-

1. प्रमाण पत्र
2. आभार ज्ञापन
3. विषय-सूची
4. उद्देश्य
5. परियोजना समस्या
6. परिकल्पना
7. प्रक्रिया (साक्ष्य संग्रह, साक्ष्य का विश्लेषण)
8. प्रस्तुतीकरण (विषय का विस्तार)
9. अध्ययन का परिणाम
10. अध्ययन की सीमाएँ
11. स्रोत
12. अध्यापक टिप्पणी

परियोजना -

1. कार्य में शोध के दौरान सम्मिलित किए गए चित्रों और संदर्भों के विषय में उचित जानकारी दी जानी चाहिए। उनके स्त्रोत को अवश्य अंकित करना चाहिए।
2. चित्र, रेखाचित्र, विज्ञापन, ग्राफ, विषय से संबंधित आँकड़े, विषय से संबंधित समाचार की कतरने एकत्रित के जानी चाहिए।
3. प्रमाणस्वरूप सम्मिलित किए गए आँकड़े, चित्र, विज्ञापन आदि के स्त्रोत अंकित करने के
4. साथ-साथ समाचार-पत्र, पत्रिकाओं के नाम एवं दिनांक भी लिखने चाहिए।
5. साहित्यकोश, संदर्भ-ग्रंथ, शब्दकोश की मदद लेनी चाहिए।
6. परियोजना-कार्य में शिक्षार्थियों के लिए अनेक संभावनाएँ हैं । उनके व्यक्तिगत विचार तथा उनकी कल्पना के विस्तृत संसार को अवश्य सम्मिलित किया जाए।

निम्नलिखित विषयों पर परियोजना कार्य तैयार किया जा सकता है

(1) हिंदी कविता में प्रकृति चित्रण (पाठ - जयशंकर प्रसाद)
(2) भारतीय ग्रामीण का जीवन (पाठ - सूरदास की झोपड़ी)
(3) समकालीन, सांस्कृतिक एवं साहित्यिक विषयों से संबंधित
(4) सूर्य कान्त त्रिपाठी "निराला" का जीवन एवं उनकी रचना सरोज स्मृति की समीक्षा
(5). भक्तिकाल के कवियों का योगदान विशेष संदर्भ तुलसीदास
(6) सोशल मीडिया का युवा पीढ़ी पर प्रभाव
(7) सिंधु सभ्यता हमारा गौरव जय शंकर की कविता कार्नेलिया का गीत के संदर्भ में
(8) भारत में प्रदूषण की समस्या जहां कोई वापसी नहीं अथवा अपना मालवा खाऊ उजाड़ू सभ्यता पाठ के संदर्भ
(9) ममता कालिया का जीवन परिचय और उनकी रचना प्रेम की समीक्षा

(10) हिन्दी पत्रकारिता एक परिचय

(11). वर्तमान समाज में स्त्रियों की स्थिति एवं उनका जीवन संघर्ष

(12) हिन्दी के प्रसार में फिल्मों का योगदान

(13) हिन्दी के विकास में समाचार पत्रों का योगदान

(14). अज्ञेय का जीवन परिचय व मैने देखा एक बूँद कविता का मूल भाव अभिव्यक्त कीजिए ।

(15). तुलसीदास का व्यक्तित्व, कृतित्व एवं कवितावली में समाज का यथार्थ चित्रण

(किसी एक विषय का चयन कर परियोजना कार्य करें)

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