



**DELHI INTERNATIONAL SCHOOL EDGE**  
**HOLIDAY HOMEWORK 2024 - 2025**  
**CLASS XII B**



Dear Students,

As the summer holidays approach, we hope you're looking forward to a well-deserved break filled with relaxation, fun, and plenty of sunshine! Before you dive into your vacation plans, we wanted to share some holiday homework to keep your minds engaged and active during the break.

Attached to this message, you'll find a set of assignments carefully crafted to reinforce and extend your learning beyond the classroom. These activities are designed to be enjoyable yet stimulating, offering you the opportunity to explore new ideas, develop your skills, and enrich your knowledge in various subjects.

While we encourage you to make the most of your time off, we also believe that learning is a lifelong journey that doesn't stop when the school bell rings. Whether you're traveling to exotic destinations, spending time with family and friends, or simply relaxing at home, we encourage you to find moments to engage with your holiday homework.

Remember, learning can take many forms, and the summer holidays present the perfect opportunity to discover new interests, pursue personal passions, and embark on exciting adventures. So, whether you're solving math puzzles, reading captivating stories, conducting science experiments, or exploring the wonders of nature, we encourage you to approach your holiday homework with enthusiasm and curiosity.

As you tackle each assignment, take pride in your efforts and celebrate your achievements, no matter how big or small. And if you have any questions or need assistance along the way, don't hesitate to reach out to us – we're here to support you every step of the journey.

Wishing you a summer filled with joy, laughter, and endless opportunities for growth and discovery. Have a fantastic break, and we look forward to hearing all about your adventures when you return!

Enjoy Your Summer Break! 🌞📚

Warm regards,

Class Teacher

## ENGLISH

**Kindly follow the provided link and meticulously adhere to the specific instructions outlined therein while preparing your project. To be completed during the summer vacation period and submitted by July 15, 2024.**

[https://docs.google.com/document/d/1\\_fcvdxFw8Y1AU0i05TqvXVIKJDxEe68NfxWL\\_ekX1E/edit?usp=drivesdk](https://docs.google.com/document/d/1_fcvdxFw8Y1AU0i05TqvXVIKJDxEe68NfxWL_ekX1E/edit?usp=drivesdk)

## ACCOUNTANCY

The Board has introduced Project Work in Accounting for Class-XII in the Optional Part B : 'Financial Statement Analysis'. **It is expected that the Project Work will help the students in developing the skills to comprehend, analyse and interpret accounting data of the business firms and make it meaningful for taking business decisions.**

- **Project work –**

**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

Students will prepare a Project File to record their work related to the problems attempted by them in the following format :

1. **First page of the file** should describe the title of work, identity of student, school, and the teacher concerned.
2. **Index** to indicate columns for title of work, page no., date, teacher's remarks and signature.
3. The format for Project Work will be :  
Statement of the problem/Name of the Project  
Objectives  
Period of Study  
Source Material  
Tools of Analysis used  
Processing and Tabulation of data  
Diagrammatic/graphic presentation- pie-diagrammes, bar diagrams and graphs.  
Derivations, Interpretation and Conclusion.  
Assumptions (if any)

**Project File should be neatly handwritten and presentable with page numbers.** Each step of the solution needs to be highlighted. Conclusions drawn should be placed in boxes at the end.

## TOPIC GIVEN-

S.No.	STUDENT NAME	TOPIC
1	Kanishka	ASIAN PAINTS
2	Ryan	TATA CONSULTANCY SERVICES (TCS)
3	Mahatva	ITC LTD
4	Pranay	APPLE
5	Dhymanshu	SUN PHARMA
6	Dhawal	LARSEN & TOUBRO
7	Shubham	MICROSOFT
8	Vishal	META
9	Daanish	INFOSYS LTD
10	Charvik	BHARTI AIRTEL

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. Cash Flow Statements

For reference

<https://www.scribd.com/document/692088238/Accountancy-Project-File-Class-12th-for-2023-24-Session>

Things to be kept in mind while preparing project:

1. Use light colored one side ruled pastel sheets.
2. Don't use red, black and pink/orange/green pen for writing the project.
3. Printouts can be used **ONLY** for pasting of AUDIT REPORT.
4. Format of accounts should be clearly made.
5. While preparing pie charts use same color for same product in all pie charts, same to be done with graphs as well (don't use printouts for making pie charts/graphs)
6. Closing of accounts in ledger and journal entries to be done neatly.

- **REVISE THE CHAPTERS DONE IN CLASS.**
- **Do the Additional Questions Of Back Exercises of each Chapter from D.K.Goel.**

## ECONOMICS

### I. PROJECT WORK

#### Presentation and Submission of Project File

At the end of the summer break, each student will submit his/her project file. Following essentials are required to be fulfilled for its preparation and submission.

- ❖ The total length of the project will be **25 to 30 pages**.
- ❖ The project should be **handwritten**.
- ❖ It should be an **independent**, self-directed piece of study.
- ❖ The project should be presented in a **folder covered with black color chart paper** with title of the project, pictures related to the same, school logo and name.

- ❖ The project report should be developed in the following **sequence**-
  - \* Introduction page should include the student information and session.
  - \* Acknowledgements and preface (acknowledging the institution, and the persons who have helped).
  - \* Certificate
  - \* List of contents/ Index
  - \* Content
  - \* Conclusions
  - \* Bibliography

### 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

### TOPIC GIVEN-

STUDENT NAME	TOPIC
Kanishka & Daanish	Employment
Ryan	Balance of Payments
Mahatva	Government Budget & its Components
Pranay	Foreign Exchange Rate
Dhymanshu	Human Capital formation in India
Dhawal & Charvik	Rural development
Shubham	Banking
Vishal	Sustainable Development

### II. REVISE THE CHAPTERS DONE IN THE CLASS.

### III. WORKSHEET

[https://docs.google.com/document/d/1Ynx5uCW6tScQYaswNO4wIB9HKx5NHzLNz6LCT7KnwtU/edit?usp=drive\\_link](https://docs.google.com/document/d/1Ynx5uCW6tScQYaswNO4wIB9HKx5NHzLNz6LCT7KnwtU/edit?usp=drive_link)

## BUSINESS STUDIES

Business is a dynamic process that brings together technology, natural resources and human initiative in a constantly changing global environment. With the purpose to help them understand the framework within

which a business operates, and its interaction with the social, economic, technological and legal environment, the CBSE has introduced Project Work in the Business Studies Syllabus for Classes XI and XII.

The projects have been designed to allow students to appreciate that business is an integral component of society and help them develop an understanding of the social and ethical issues concerning them.

● **Project work –**

**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

**TOPIC GIVEN-**

S.No.	STUDENT NAME	TOPIC
1	Kanishka	<b>Marketing</b>
2	Ryan	<b>Principles of Management</b>
3	Mahatva	<b>Marketing</b>
4	Pranay	<b>Marketing</b>
5	Dhymanshu	<b>Stock Exchange</b>
6	Dhawal	<b>Principles of Management</b>
7	Shubham	<b>Stock Exchange</b>
8	Vishal	<b>Elements of Business Environment</b>
9	Daanish	<b>Marketing</b>
10	Charvik	<b>Principles of Management</b>

**I. Project One: Elements of Business Environment**

The teachers should help the students in selecting any one element of the following:

- Changes witnessed over the last few years on mode of packaging and its economic impact. The teacher may guide the students to identify the following changes: a) The changes in transportation of fruits and vegetables such as cardboard crates being used in place of wooden crates, etc. Reasons for above changes. b) Milk being supplied in glass bottles, later in plastic bags and now in tetra-pack and through vending

machines. c) Plastic furniture [doors and stools] gaining preference over wooden furniture. d) The origin of cardboard and the various stages of changes and growth. e) Brown paper bags packing to recycled paper bags to plastic bags and cloth bags. f) Re use of packaging [bottles, jars and tins] to attract customers for their products. g) The concept of pyramid packaging for milk. h) Cost being borne by the consumer/manufacturer. i) Packaging used as means of advertisements.

2. The reasons behind changes in the following: Coca – Cola and Fanta in the seventies to Thums up and Campa Cola in the eighties to Pepsi and Coke in the nineties. The teacher may guide the students to the times when India sold Coca Cola and Fanta which were being manufactured in India by the foreign companies. The students may be asked to enquire about a) Reasons of stopping the manufacturing of the above mentioned drinks in India THEN. b) The introduction of Thums up and Campa cola range. c) Re-entry of Coke and introduction of Pepsi in the Indian market. d) Factors responsible for the change. e) Other linkages with the above. f) Leading brands and the company having the highest market share. g) Different local brands venturing in the Indian market. h) The rating of the above brands in the market. i) The survival and reasons of failure in competition with the international brands. j) Other observations made by the students The teacher may develop the following on the above lines

3. Changing role of the women in the past 25 years relating to joint families, nuclear families, women as bread earners of the family, changes in the requirement trend of mixers, washing machines, microwave and standard of living.

4. The changes in the pattern of import and export of different Products.

5. The trend in the changing interest rates and their effect on savings.

6. A study on child labour laws, its implementation and consequences.

7. The state of ‘anti plastic campaign,’ the law, its effects and implementation.

8. The laws of mining /setting up of industries, rules and regulations, licenses required for running that business.

9. Social factors affecting acceptance and rejection of an identified product. (Dish washer, Atta maker, etc)

10. What has the effect of change in the environment on the types of goods and services? The students can take examples like: a) Washing machines, microwaves, mixers and grinder. b) Need for crèche, day care center for young and old. c) Ready to eat food, eating food outside, and tiffin centres.

11. Change in the man-machine ratio with technological advances resulting in change of cost structure. 12. Effect of changes in technological environment on the behaviour of employees.

**II. Project Two: 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. 4. Any other organisation approved by the teacher. They are required to observe the application of the general Principles of management advocated by Fayol. Fayol’s principles 1. Division of work. 2. Unity of command. 3. Unity of direction. 4. Scalar chain 5. Espirit de corps 6. Fair remuneration to all. 7. Order. 8. Equity. 9. Discipline 10. Subordination of individual interest to general interest. 11. Initiative. 12. Centralisation and decentralisation. 13. Stability of tenure. 14. Authority and Responsibility

**III. Project Three: Stock Exchange** The purpose of this project is to teach school students the values of investing and utilising the stock market. This project also teaches important lessons about the economy, mathematics and financial responsibility. The basis of this project is to learn about the stock market while investing a specified amount of fake money in certain stocks. Students then study the results and buy and sell as they see fit. This project will also guide the students and provide them with the supplies necessary to successfully monitor stock market trends and will teach students how to calculate profit and loss on stock. The project work will enable the students to: understand the topics like sources of business finance and capital market, understand the concepts used in stock exchange, inculcate the habit of watching business channels, reading business journals/newspapers and seeking information from their elders. The students are expected to: a) Develop a brief report on History of Stock Exchanges in India. (your country) b) Prepare a list of at least 25 companies listed on a Stock Exchange. c) To make an imaginary portfolio totalling a sum of Rs. 50,000 equally in any of the 5 companies of their choice listed above over a period of twenty working days. The students may be required to report the prices of the stocks on a daily basis and present it

diagrammatically on the graph paper. They will understand the weekly holidays and the holidays under the Negotiable Instruments Act. They will also come across terms like closing prices, opening prices, etc. During this period of recording students are supposed to distinctively record the daily and starting and closing prices of the week other days under the negotiable instrument act so that they acquire knowledge about closing and opening prices. The students may conclude by identifying the causes in the fluctuations of prices. Normally it would be related to the front page news of a business journal, for example, Change of seasons. Festivals. Spread of epidemic. Strikes and accidents Natural and human disasters. Political environment. Lack of faith in the government policies. Impact of changes in government policies for specific industries. International events. Contract and treaties at the international scene. Relations with the neighboring countries. Crisis in developed countries, etc. The students are expected to find the value of their investments and accordingly rearrange their portfolio.

**The project work should cover the following aspects; 1. Graphical presentation of the share prices of different companies on different dates. 2. Change in market value of shares due to change of seasons, festivals, natural and human disasters. 3. Change in market value of shares due to change in political environment/ policies of various countries/crisis in developed countries or any other reasons 4. Identify the top ten companies out of the 25 selected on the basis of their market value of shares. It does not matter if they have made profits or losses.**

### **Project Title: Marketing**

Identify one product/service from the list of products given by CBSE which the students may like to manufacture/provide [pre-assumption].

Now the students are required to 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 licenses would be required to make the product?
4. What are your competitors' Unique Selling Propositions [U.S.P.]?
5. Does your product have any range of 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 tagline.
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 will you 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 realize 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:

- Type of product /service identified and the (consumer/industries) process involved therein.
- Brand name and the product.
- Range of the product.
- Identification mark or logo.

- Tagline.
- Labeling and packaging.
- Price of the product and basis of price fixation.
- Selected channels of distribution and reasons thereof.
- Decisions related to transportation and warehousing. State reasons.
- Promotional techniques used and starting reasons for deciding the particular technique. 1
- Grading and standardization.

### Presentation and Submission of Project Report

At the end of the summer break, each student will prepare and submit his/her project report. Following essentials are required to be fulfilled for its preparation and submission.

- ❖ The total length of the project will be 25 to 30 pages.
- ❖ The project should be handwritten.
- ❖ 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.

## MATHEMATICS

Case-1. Let  $x = f(t)$  and  $y = g(t)$  be the parametric forms with  $t$  as a parameter, then

$$\frac{dy}{dx} = \frac{dy}{dt} \cdot \frac{dt}{dx} = \frac{g'(t)}{f'(t)} \text{ where } f'(t) \neq 0.$$

On the basis of the above information answer the following questions

- If  $y = \sin pt$  and  $x = \sin t$ , then find the value of  $\frac{dx}{dy}$  at  $x=0$
- If  $y = \sqrt{\tan \sqrt{\sec x}}$  differentiate  $y$  wrt  $\sec x$ .
- $y = x^{\frac{1}{x}}$ , find the derivative of  $y$  w.r.t  $x^x$ .
- $y = e^{\sqrt{3t}}$  and  $x = \frac{1}{\sqrt{t}}$  find  $\frac{d^2y}{dx^2}$ .
- Velocity of a car is represented by  $V = 3x^2/5$ , whereas distance  $x = 2t+5$ . find acceleration if  $a = \frac{dV}{dt}$ .

2. If  $[1 \ x \ 1] \begin{bmatrix} 1 & 3 & 2 \\ 0 & 5 & 1 \\ 0 & 3 & 2 \end{bmatrix} \begin{bmatrix} x \\ 1 \\ -2 \end{bmatrix} = 0$ , then What is the value of  $x$ ?

3. For what value of  $\lambda$ , the matrix  $A$  is a singular matrix where

$$A = \begin{bmatrix} 1 & 3 & \lambda + 2 \\ 2 & 4 & 8 \\ 3 & 5 & 10 \end{bmatrix}$$

4. If  $A = \begin{bmatrix} a & b \\ b & a \end{bmatrix}$  and  $A^2 = \begin{bmatrix} \alpha & \beta \\ \beta & \alpha \end{bmatrix}$ , then find the value of  $\alpha$  and  $\beta$ .



5. Matrix  $A = \begin{bmatrix} 0 & 2a & -2 \\ 3 & 1 & 3 \\ 3b & 3 & -1 \end{bmatrix}$  is given to be symmetric, find the value of a and b.
6. If A and B are skew symmetric matrices of the same order prove that  $AB + BA$  is symmetric matrix.
7. If  $A = \begin{bmatrix} 5 & 3 \\ 12 & 7 \end{bmatrix}$ , show that  $A^2 - 12A - I = 0$ . Hence find  $A^{-1}$ .
8. If  $A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix}$ , verify that  $A^2 - 4A - 5I = 0$ .  
And then find  $A^{-1}$ .
9. Using matrix method, solve the system of linear equations  
 $x - 2y = 10, 2x - y - z = 8$  and  $-2y + z = 7$
10. Determine the product  $\begin{bmatrix} -4 & 4 & 4 \\ -7 & 1 & 3 \\ 5 & -3 & -1 \end{bmatrix} \begin{bmatrix} 1 & -1 & 1 \\ 1 & -2 & -2 \\ 2 & 1 & 3 \end{bmatrix}$   
and use it to solve the system of equations:  
 $x - y + z = 4, x - 2y - 2z = 9, 2x + y + 3z = 1$
11. Prove that the relation R in the set  $A = \{5, 6, 7, 8, 9\}$ , given by  $R = \{(a, b) : |a - b| \text{ is divisible by } 2\}$  is an equivalence relation. Find all elements related to element 6.
12. Let  $A = \{0, 1, 2, 3\}$  and define a relation R on A as follows:  
 $R = \{(0, 0), (0, 1), (0, 3), (1, 0), (1, 1), (2, 2), (3, 0), (3, 3)\}$ , Is R reflexive?  
Symmetric? transitive?

## PHYSICAL EDUCATION

### RECORD PRACTICAL FILE

1. SAI KHELO INDIA TEST
2. BODY MASS INDEX (calculation of BMI)
3. FLAMINGO BALANCE TEST
4. COORDINATION TEST
5. PARTIAL CURL- UP
6. PUSH UPS FOR BOYS
7. MODIFIED PUSH UPS FOR GIRLS
8. 50m DASH OR 50m STANDING START
9. 600m RUN / WALK

10. SIT AND REACH FOR FLEXIBILITY

11. HARVARD STEP TEST

12. PROFICIENCY IN GAME AND SPORTS ( skill of any one IOA recognised sports/ game of choice)

13. ASANAS FOR EACH LIFESTYLE DISEASE

- Obesity- Procedure,Benefits & contraindications of Tadasana,katichakrasana,Pawanmuktasana (any one yoga)
- Diabetes- Procedure,Benefits & contraindications of Dhanurasana,Supta-vajarasana,Paschimottanasana (any one yoga)
- Asthma- Procedure,Benefits & contraindications of KapalbhathiBhujangasana,Vakrasana (any one yoga)
- Hypertension- Procedure,Benefits & contraindications of Ardha Halasana,Uttanpadasana,sitali pranayam (any one yoga)
- Back Pain and Arthritis- Procedure,Benefits & contraindications of Gomukhasana,Makarasana,Nadi-Shodhana (any one yoga)

## INFORMATICS PRACTICES

### Project Work:

#### Guidelines:

Project Work The aim of the class project is to create tangible and useful IT applications.

The learner may identify a real-world problem by exploring the environment. e.g. Students can visit shops/business places, communities or other organizations in their localities and enquire about the functioning of the organization, and how data are generated, stored, and managed. The learner can take data stored in csv or database file and analyze using Python libraries and generate appropriate charts to visualize.

Learners can use Python libraries of their choice to develop software for their school or any other social good.

Learners should be sensitized to avoid plagiarism and violation of copyright issues while working on projects.

Any resources (data, image etc.) used in the project must be suitably referenced.

Suggested topics for Project:

- Chatbot Song
- Recommender System
- YouTube Transcript summarizer
- House Price Prediction
- Visualising and forecasting stocks using Dash
- Resume Builder Web Application
- Student Result Management System
- Hospital Management System
- Weather Forecasting APP
- News Feed App
- Optical Character Recognition System (OCR)
- Library Management System
- Virtual Private Network
- e-Authentication System
- Real-time web search engine
- Task Management Application
- Chat App
- Face Detection
- Online Auction System
- Evaluation of Academic Performance
- Crime Rate Prediction
- Android Battery Saver System
- Online eBook Maker

- Mobile Wallet with Merchant Payment
- Restaurant Booking Website

- SMS Spam Filtering
- Twitter Sentiment Analysis
- Election Analysis

**Students May choose any other topics from the latest trends as well.**