

GIRLS' HIGH SCHOOL AND COLLEGE, PRAYAGRAJ

PHYSICS PROJECT

Class: 12 A & B

SESSION 2021-2022

NOTE : Please read each and every instruction carefully

The students are required to prepare a technical report , provide some theoretical discussion, discuss experimental set-ups, constructions, workings (if any) observations with tables of data collected, graph/chart, circuit diagrams, ray diagrams (if any), provide analysis and discussion of results, deductions or conclusions on any one of the topics given below.

TOPICS:

- 1) Transformers
- 2) AC & DC Motors
- 3) AC Generator
- 4) Heat Engine and Refrigerator and their efficiencies
- 5) Different types of Microscopes and their Applications
- 6) Different types of Telescopes and their Applications
- 7) Spectroscopy
- 8) Gravitation and Gravity
- 9) Moving Coil Galvanometer
- 10) Communication Systems

NOTE 1: It is expected that all circuit or ray diagrams and experimental set-ups are made by the student herself. Apart from that good relevant pictures will help improve the standard of your project.

NOTE 2: No extra marks will be allotted for any type written or decorative work. You can use pens of only **blue or black colour.** You can underline text or highlight it using a highlighter. The project should have a minimum of

20 - 30 pages.

NOTE 3: As you have already done a project based on any of the above topics in class 11th, so now you will just repeat your previous project with some additional matter. Please keep your work very neat and tidy as it will be later corrected by external examiners.

Description of the Project

- 1) Topic in big bold(1st sheet)
- 2) Acknowledgement
- 3) Introduction
- 4) Description (includes circuit or ray diagrams, constructions, experimental set-ups, graphs/charts and other necessary informations)
- 5) Conclusion
- 6) Bibliography (names of books/sites referred)

in the same order.

Students will collect data for the project from different sources available to them and compile them in a file neatly covered with a brown cover and a plastic cover over it. On the file name etc will be written as shown below. Suppose the file belongs to Arpita Mishra of 12 A then it should look like

PHYSICS PROJECT (in the centre of file)

SESSION 2021 - 2022

(down right corner)

Arpita Mishra

12 A

Keep your work neat and clean.

CLASS XII
CHEMISTRY PROJECT
TOPICS

Select any one topic for the project.

1. Amino acids: Peptides, structure and classification, proteins structure and their role in the growth of living beings.
2. Nucleic Acid: DNA and RNA – their structure. Unique nature. Importance in evolution and their characteristic features.
3. Carbohydrates and their metabolism, Blood - haemoglobin and respiration.
4. Vitamins and hormones
5. Simple idea of chemical evolution.
6. Natural polymers (any five) - structure, characteristics, uses. Synthetic polymers (any five) - method of preparation, structure, characteristics and uses.
7. Types of Dyes - methods of preparation, characteristics and uses.
8. Chemicals in medicines: antiseptics, antibiotics, antacids, etc. and their uses.
9. Chemicals and chemical processes in forensic studies.
10. Insecticides, pesticides and chemical fertilisers.
11. Ancient Indian medicines and medicinal plants.
12. Organic Chemistry in Nutrition, Food Science and Biotechnology.
13. Effect of Green House Gases.
14. How Plastics have changed the world, both socially and economically.

Project to be written in the given format below:

1. Introduction / purpose
2. Contents
3. Analysis/ material aid (graph, data, structure, pie charts, histograms, diagrams, etc.)
4. Presentation
5. Conclusion
6. Bibliography

Note:

1. To be written on interleaved paper.
2. Project should be of 30-35 pages.

GIRLS' HIGH SCHOOL AND COLLEGE, PRAYAGRAJ

PROJECT WORK

SESSION 2021-2022

CLASS 12 B

SUBJECT: COMPUTER SCIENCE

Reference Book: COMPUTER SCIENCE with Java Class 12 By Sumita Arora (Dhanpat Rai & Company)

INSTRUCTIONS: The students are expected to write 30 programs in java. The sequence of the programs will be as follows:

1. 4 programs on Strings (display strings vertically, sorting the words of sentence, etc.)
2. 4 programs on numbers (magic composite, goldbach, isbn number, unique number etc.).
3. 4 programs on recursion (Fibonacci series, factorial, binary search, anagrams, etc.).
4. 4 programs on operations on files (reading and writing on text files, reading and writing on binary files).
5. 4 programs on data structures (stack as an array, stack as linked list, queue as an array, queue as linked list).
6. 4 programs on inheritance
7. 4 programs on 2-D array (spiral matrix, boundary elements, non boundary elements, sorting rows of matrix, sorting columns of matrix)
8. 2 miscellaneous programs (date programs)

Instructions for writing the project

- The students are expected to execute the above programs on the computer system on BlueJ.
- The project is to be made on **MS Word**.
- The student should type the algorithm and variable description on MS Word.
- The sequence for each program should be **algorithm, program and variable description**.
- Format of Variable Description:

<u>Name of the variable</u>	<u>Data type</u>	<u>Purpose/Description</u>

- The font size should be **12**.
- The project is to be preceded by acknowledgement and index.
- The format of index is :

S. No.	Program	Page No.	Remark

- No bibliography is required.

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Girls' High School & College, Prayagraj

Session: 2021-2022

Class: 12th C

Subject: Commerce

Project

Note: *Parents are expected to ensure that the student should go through all the instructions given below before making the project.*

INSTRUCTIONS:

1. There will be **two separate Projects** as per the topics given below.

2. ***Order of each project :***

- **Acknowledgement** should be short and simple. Write your name, class, section and roll no. at the end. (one page)
- **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. It should not be more than 10 to 12 pages.)
- **Conclusion** (one page)
- **Bibliography** (write the name of related websites and books consulted for the making of the project. One page.)
- Each project should not be more than 18 pages including all the points mentioned above. Don't use vulgar or objectionable pictures.

3. Relevant pictures should be pasted neatly and must be **bordered in black along with labelling or heading**. Use only black and blue pens for writing.

4. Sample projects are given at the end of the course book. These can be read to understand the topic but don't copy the matter from here.

5. Keep both the projects in **one file**. Cover the file with pink chart paper. Write **Commerce Project 2020-21 in the middle and Name, Class, Section, Roll no., Admission no. should be written at the bottom right corner**. Then cover it with cellophane sheet and at the top right corner, paste a white slip (2cm by 6cm, bordered in black) using **fevicol** and leave it blank.

6. Course book, reference books and relevant websites can be used to find the subject matter of the project.

Course Book –

ISC Commerce Volume – II For Class XII by Dr. C.B. Gupta.

Topics for the Project:

1. Compare marketing strategies adopted by two different companies of the same industry (FMCG/ Telecommunication/ Media/ Education industry etc.) keeping in mind the following:
 - Product Mix
 - Price Mix
 - Place Mix
 - Promotion Mix
2. Select any business undertaking. Study the selected business in terms of ownership capital and profitability. Make a SWOT analysis and present it in a tabular form.

GIRLS' HIGH SCHOOL AND COLLEGE, PRAYAGRAJ.

CLASS: 12 C&D

Economics Project

2021-2022

Note: Parents kindly ensure that the students must refer to the internet sites for the completion of their projects. The project must be of at least 25 pages.

Topic – 1

Prepare a report on the -competition in the aviation sector in India with reference to:

- (a) Performance of the public sector and private sector Airlines,
- (b) Operational strategies adopted by budget/ low cost carriers.

Websites:

- 1. www.investindia.gov.in
- 2. www.wikipedia.org
- 3. www.indianmirror.com

Format of the project :

- 1) Topic
- 2) Acknowledgement
- 3) Index
- 4) Introduction

Description (using the following sub headings):

- (a) Aviation in India
 - (b) History
 - (c) Market size
 - (d) Management and regulation
 - (e) Infrastructure
 - (f) National civil aviation policy 2016
 - (g) Comparative study of private and public Airlines
 - (h) Ministry of Civil Aviation
 - (i) UDAN scheme
 - (j) Vision 2040--The future of aviation in India.
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Topic – 2

Prepare a trend analysis of growth and productivity of any one industry such as Textile / Automobile / Electronic and Tele-communication etc. in India for the past five years.

Description (using the following sub headings):

- (a) Introduction of Industry.
- (b) Origin and Development of Industry.
- (c) Industrial assistance and Export Promotion
- (d) Structure of Industry / the Industry profile
- (e) Production trend and growth
- (f) Sales analysis of Industry.
- (g) Investment
- (h) Government initiatives
- (i) Road Ahead

Findings and conclusion

Bibliography

(Names of reference books and internet sites to be mentioned)

End

GIRLS' HIGH SCHOOL & COLLEGE, PRAYAGRAJ
POLITICAL SCIENCE DISSERTATION- 2021- 22
CLASS-12-D

TOPIC –Judicial Activism in India (Human Rights Violation / Environmental Protection)

TITLE PAGE- Judicial Activism in India (Human Rights Violation / Environmental Protection)

Acknowledgement

Table of Contents

Chapter-1- Introduction, Hypothesis- Judicial Activism in India, Methodology.

Chapter-2- (heading of the chapter) Meaning and Brief History in India.

Chapter-3- Case study

Case-1

Case-2

Chapter-4- Conclusion.

Bibliography/ Webliography.

INSTRUCTIONS- (a) The format of the dissertation is same as Class 11. (b) Word limit- 2000. (c) Pictures are to be pasted on each page from Introduction to Conclusion.

Sample Cover Page of the Dissertation:-

POLITICAL SCIENCE DISSERTATION



NAME-
CLASS& SEC.-
SESSION-
UID NO.-

GIRLS' HIGH SCHOOL AND COLLEGE, PRAYAGRAJ

SESSION :2021- 2022

CLASS: 12TH D

SUBJECT: SOCIOLOGY PROJECT

Note: Parents are expected to ensure that the student should go through all the instructions given below before making the project.

Instructions:

1. There will be **two separate Studies** on the given topics in the Project. The pattern will be same as done in class 11.
2. Order of the Project will be as follows: (word limit -2000)
 - a. **Acknowledgement**: (should be on 1 page only): Include the names of both the studies; write your name, class and section at the end on the right-hand side.
 - b. **Table of Contents**: (should not exceed 2 pages): There should be only 3 columns – Serial No., Content and Page No.
 - c. **Title Pages**: Title Pages of both the studies will include – STUDY 1- (Name of the Study) and STUDY 2 (Name of the Study)
 - d. **Subject Matter**: Describe the topics as per the headings given, supported by relevant pictures. Pictures (coloured / black & white) should be collected and pasted systematically, they will be bordered in black along with labeling or heading. Use Black ink for headings and labelling everywhere.
 - e. **Conclusion**: Only 1page - (separate for each study)
 - f. **Bibliography** (New pg): Names of Books & Writers – (separate for both the studies)
 - g. **Webliography** (New pg): Names of Websites / links (Do not write www.google.com) – (separate for both the studies)
3. **The following books or other relevant books and websites can be used to find the subject matter for the topic - BOOKS**: (a) ISC Sociology for Class XII- Manjir Ghosh- Kalyani Publishers (Course Book); (b) Sociology: Principles of Sociology with an Introduction to Sociological Thought - C N Shankar Rao- S. Chand (Ref. Bk); (c) Sociology of Indian Society – C N Shankar Rao – S Chand (Ref. Bk); (d) An Introduction to Sociology- Vidya Bhushan & D.R. Sachdeva- Kitab Mahal (Ref. Bk); (e) Full Marks – 12 CBSE- SOCIOLOGY- A K Bhatnagar- Full Marks Pvt. Ltd.

STUDY -1 - WOMEN LEADERS

1. Can take up specific areas where women participate. Eg. In economy, education, public arena, etc.
Take up the life of **an Indian Woman Leader** from any time frame and present a biographical sketch telling - How education has changed their lives
 - How their lives have changed socially and economically
 - How their status has changed
 - What they see as symbols of this change
2. Summary of the Government legislations/ bills on women – (to analyze how successful the Government's efforts have been at emancipating women)
3. Conclusion of the study
4. Study should be supported by photographs.

STUDY -2 – INTERNET AS A SUBSTITUTE FOR THE FAMILY AND SCHOOL IN THE PRESENT TIMES

A. Introduction-

- i. Define and explain Mass Media
- ii. Explain different forms of Mass Media (explain the 3 points briefly)
 - Print
 - Electronic
 - Audio-Visual

B. Role of Mass Media in Independent India (in general)

C. Role of Internet as a substitute for Family in the present times

D. Role of Internet as a substitute for School in the present times

E. CASE STUDIES – (2 case studies)

- ✓ (CASE STUDY -1) Internet as a substitute for Family in the present times
- ✓ (CASE STUDY -2) Internet as a substitute for School in the present times

F. Positive Aspects of Mass Media (in general)

G. Negative Aspects of Mass Media (in general)

H. Importance of Mass Media in our lives

I. Conclusion: Mass Media and Sociology

J. Study should be supported by photographs.

-THE END-

GIRLS' HIGH SCHOOL & COLLEGE, PRAYAGRAJ

SESSION 2021-2022

CLASS 12 – D

SUBJECT – LEGAL STUDIES

LEGAL PROJECT

NOTE – Parents please ensure that must refer to the prescribed books and relevant websites to write the project.

1. Students are expected to undertake the following given project topics.
2. Following books and websites can be referred.

STUDY-1: Explain the role of National Legal Services Authorities Act 1987.

REFERENCE BOOK –

1. Legal studies by Vaneeta Patnaik.
2. Legal studies by Praveen Tripathi & Vibhaa S. Kumar.

Website:

1. www.legalserviceindia.com

Study should include –

1. Table of content , Acknowledgment, Introduction of the study topic, Body of the study, Conclusion, Bibliography, Webliography.
2. Word limit of the study should be with in 1500 – 2000 words.

STUDY 2-Need for the Right to Information Act 2005 in today's context.

REFERENCE BOOK –

1. Right to Information law in India by Dr. Vinay N. Pranjape.

WEBSITES-

<https://indiacode.nic.in>

Study should include –

1. Table of content, Acknowledgment, Introduction of the study topic, Body of the study, Conclusion, Bibliography, Webliography
2. Word limit of the study should be within 1500 – 2000 words

THE END

(2/2)