



St. Fidelis College, Vikas Nagar, Lucknow

(Affiliated to Indian School Certificate Examinations, New Delhi)

Office Mobile Numbers: 6394974261, 6394981362, 6386103290

Email: stfidelislko@yahoo.co.in, stfideliscollege74@gmail.com

Website: <http://www.stfideliscollege.com>



A MINORITY INSTITUTION RUN BY CAPUCHIN EDUCATIONAL SOCIETY, LUCKNOW

PROJECTS/ASSIGNMENTS 2025 – 2026 (CLASS XII)

CHEMISTRY

TOPICS 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-hemoglobin 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. Preparation of soap, nail polish, boot polish, varnish, nail polish remover, shampoo and perfumes.
10. Chemicals and chemical processes in forensic studies.
11. Insecticides, pesticides and chemical fertilizers.
12. Ancient Indian medicines and medicinal plants.
13. Organic Chemistry in Nutrition, Food Science and Biotechnology.
14. Effect of Green House Gases.
15. How Plastics have changed the world, both socially and economically.

INSTRUCTIONS FOR PROJECT:

1. Use interleaved punch sheets. Write at least 40 pages for the project.
2. You are already given a particular topic to write, please follow it
3. Topic page or Front Page & Assessment sheet
4. Acknowledgement
5. Index or Content Page
6. Introduction
7. Body of the project
8. Conclusion
9. Bibliography

BIOLOGY

TOPICS FOR THE PROJECT:

1. Genetic Disorder
2. Genetic Variations
3. Human Genome Project
4. Mendel's Law
5. Modern methods of pest control
6. World Population
7. Cancer
8. Biopiracy
9. Role of Microorganisms in industry
10. Role of agrochemical in increasing production
11. Traditional method of pest control, limitation and viability
12. Drugs addiction and community
13. Protein Synthesis
14. DNA fingerprinting
15. Mendelian Inheritance
16. Aids and Hepatitis

INSTRUCTIONS FOR PROJECT:

1. Use interleaved punch sheets. Write at least 20 pages for the project.
2. You are already given a particular topic to write, please follow it.
3. Topic page or Front Page & Assessment sheet
4. Acknowledgement
5. Index or Content Page
6. Introduction
7. Body of the project
8. Conclusion
9. Bibliography

PHYSICS

TOPICS FOR THE PROJECT:

1. Electrostatics
2. Current electricity
3. Magnetostatics
4. A. C. Current
5. Ray Optics
6. Wave Optics
7. Optical Instruments
8. Semiconductor & Electronic Devices
9. Modern Physics

INSTRUCTIONS FOR PROJECT:

1. Use interleaved punch sheets. Write at least 40 pages for the project.
2. Assessment sheet, Acknowledge and index.
3. Paste colorful diagrams on punch sheet.
4. Cover project file with sky blue chart paper.
5. Paste a colorful college logo at middle of cover page.
6. Write your name and Roll no. below college logo
7. Introduction
8. Body of the project
9. Conclusion
10. Bibliography

MATHEMATICS

TOPICS FOR THE PROJECT:

Overall format	1 mark
Content	4 marks
Findings	2 marks
Viva-voce bases on the Project	3 marks
Total	10 marks

List of suggested assignments for Project Work:

Section A

1. Using a graph, demonstrate a function which is one-one but not onto.
2. Using a graph demonstrate a function which is invertible.
3. Construct a composition table using a binary function addition/multiplication modulo upto 5 and verify the existence of the properties of binary operation.
4. Draw the graph of $y = \sin^{-1} x$ (or any other inverse trigonometric function), using the graph of $y = \sin x$ (or any other relevant trigonometric function). Demonstrate the concept of mirror line (about $y = x$) and find its domain and range.
5. Explore the principal value of the function $\sin^{-1} x$ (or any other inverse trigonometric function) using a unit circle.
6. Find the derivatives of a determinant of the order of 3×3 and verify the same by other methods.
7. Verify the consistency of the system of three linear equations of two variables and verify the same graphically. Give its geometrical interpretation.
8. For a dependent system (non-homogeneous) of three linear equations of three variables, identify infinite number of solutions.
9. For a given function, give the geometrical interpretation of Mean Value theorems. Explain the significance of closed and open intervals for continuity and differentiability properties of the theorems.
10. Explain the concepts of increasing and decreasing functions, **using geometrical.....**

Section C

1. Draw a rough sketch of Cost (C), Average Cost (AC) and Marginal Cost (MC).

Or

Revenue (R), Average Revenue (AR) and Marginal Revenue (MR).

Give their mathematical interpretation using the concept of increasing - decreasing functions and maxima-minima.

2. For a given data, find regression equations by the method of least squares. Also find angles between regression lines.
3. Draw the scatter diagram for a given data. Use it to draw the lines of best fit and estimate the value of Y when X is given and vice-versa.
4. Using any suitable data, find the minimum cost by applying the concept of Transportation problem.
5. Using any suitable data, find the minimum cost and maximum nutritional value by applying the concept of Diet problem.
6. Using any suitable data, find the Optimum cost in the manufacturing problem by formulating a linear programming problem (LPP).

INSTRUCTIONS FOR PROJECT:

1. Students have to write a project on any two topics out of the above suggested topics. One topic from section A and second topic from section C
2. Project must be made on a class mate register both sides lines. You have to right on both sides of the register pages.
3. Each project must be consisting of 20 to 30 pages (including both sides of paper)
4. The project register must be covered with black chart paper.

5. It should have topic page or Front Page & Assessment sheet
6. Acknowledgement
7. Index or Content Page
8. Introduction
9. Body of the project
10. Conclusion

COMPUTER

TOPICS FOR THE PROJECT:

1. Boolean Algebra

- Introduction
- Propositional logic
- Binary valued quantities
- Logical operations
- Basic postulates of Boolean algebra
- Principle of duality
- Derivation of Boolean expression
 - Minterm
 - Maxterm
 - Canonical expression
- Minimization of Boolean algebra
 - Algebraic Method
 - Simplification using Karnaugh maps
 - Sum of product reduction using K-map
 - Product of sum reduction using K-map

2. Computer Hardware

- Basic Logic Gates
NOT, AND, OR, XOR, XNOR, NOR & NAND gates.
- Application of logic gates
 - Address
 - Encoder
 - Decoder
 - Multiplexer

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. You should write at minimum 15 – 20 pages
3. Acknowledgement
4. Index or Content Page
5. Introduction
6. Body of the project
7. Conclusion
8. Bibliography

HINDI

TOPICS FOR THE PROJECT:

आधुनिक युग की मीरा कही जाने वाली लेखिका महादेवी वर्मा के जीवन परिचय पर प्रकाश डालते हुए उनकी साहित्यिक रचनाओं का वर्णन कीजिए। 'भक्तिन' कहानी के आधार पर भक्तिन के चरित्र -चित्रण पर प्रकाश डालिए तथा कहानी के तीनों परिच्छेदों का वर्णन कीजिए। इस कहानी में लेखिका महादेवी वर्मा क्या उद्देश्य रहा है? स्पष्ट कीजिए।

1. जनसंचार क्या है? इसके कौन -कौन से माध्यम हैं? विस्तार से स्पष्ट कीजिए।
गद्य संकलन -पाठ-6 दासी, 7-क्या निराश हुआ जाए? पढ़ें व समझें।

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. You should write at minimum 15 – 20 pages
3. Acknowledgement
4. Index or Content Page
5. Introduction
6. Body of the project
7. Conclusion
8. Bibliography

COMMERCE

COMMERCE ASSIGNMENT DETAILS

Project1: Comparative Analysis of Marketing Strategies in an industry Objective:

Students will compare the marketing strategies adopted by two different companies within the same industry (e.g., FMCG, Telecommunication, Media and Education). The analysis should focus on the following elements:

- Product Mix
- Price Mix
- Place Mix
- Promotion Mix

Structure:

1. Introduction: Provide an overview of the selected industry and the two companies chosen for comparison.
2. Product Mix: Analyse and compare the range of products offered by both companies.
3. Price Mix Evaluate the pricing strategies of both companies.
4. Place Mix: Compare the distribution channels and market presence of both companies.
5. Promotion Mix: Analyse the promotional strategies used by both companies to attract and retain customers.
6. Conclusion: Summarize the key findings and insights from the comparative analysis.

Project 2: Study of Banking Services and Account Opening Procedures Objective:

Students will visit a commercial bank to understand the procedure for opening a savings account and Gather information on various agency and general utility services provided by the bank.

Structure:

1. Introduction: Briefly introduce the importance of banking services in the commercial sector.
2. Savings Account Opening Procedure: Detail the steps involved in opening a savings account, including required documentation and the process flow.
3. Agency Services: Describe the agency services offered by the bank, such as insurance, mutual funds, and tax services.
4. General Utility Services: Explain the general utility services provided by the bank, such as lockers, online banking, and payment services.
5. Conclusion: Summarize the findings and insights gained from the research on banking services and procedures.

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. You should write at minimum 15 – 20 pages
3. Acknowledgement

4. Index or Content Page
5. Introduction
6. Body of the project
7. Conclusion
8. Bibliography

ACCOUNTS

ACCOUNTANCY ASSIGNMENT DETAILS

Project1: Accounting for Partnership Firms–Admission of a Partner

Objective:

Students are required to complete Problem No.1 under the topic heading “Project Work Problems” from ISC Accountancy Class XII Vol: II (by D K Goel & Rajesh Goel, APC Publications). The focus will be on:

- Trading Account
- Profit & Loss Account
- Balance Sheet

Structure:

1. Introduction: Provide an overview of the topic.
2. Problem Statement: Write Problem No.1 from the prescribed book.
3. Solution: Solve the problem as per the instructions.
4. Conclusion: Summarize what you learned by solving the problem.

Project 2: Tools for Financial Analysis – Common Size and Comparative Statements

Objective:

Students are required to complete Problems No.7 and 8 under the topic heading “ProjectWork Problems” from ISC Accountancy Class XII Vol: II (by DK Goel & Rajesh Goel, APC Publications). The focus will be on:

- Common Size Statements
- Comparative Statements

Structure:

1. Introduction: Provide an overview of the topic.
2. Problem Statement: Write Problems No.7 and 8 from the prescribed book.
3. Solution: Solve the problems as per the instructions.
4. Conclusion: Summarize what you learned by solving the problems.

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. You should write at minimum 20 – 30 pages
3. Acknowledgement
4. Index or Content Page
5. Introduction
6. Body of the project
7. Conclusion
8. Bibliography

ECONOMICS

ECONOMICS ASSIGNMENT DETAILS

Project 1: Demand and Its Determinants–Elasticity of Demand Objective:

This project on demand and its determinants must cover the following key topics:

1. What is demand?
2. Demand curve and schedule
3. Law of demand

4. Exceptions to the law of demand
5. An introduction to determinants of demand
6. Different determinants of demand (price of the product, income of the consumer, taste and preference of the consumer, price of related goods, etc.) and how they impact the demand of a commodity
7. Price elasticity of demand
8. Degree of price elasticity of demand

Structure:

1. Introduction: Briefly introduce the topics.
2. Research: Conduct research on the given key points and create your project based on the findings.
3. Conclusion: Summarize the key findings and insights from the analysis.

Project 2: Money and Banking

Objective: Research on the procedure to open a savings account and discuss all its components

Structure:

1. Introduction: Briefly introduce the importance of banking services in the commercial sector.
2. Savings Account Opening Procedure: Detail the steps involved in opening a savings account, including required documentation and the process flow.
3. Central Bank
4. Functions of Commercial Bank
5. Credit Creation by Commercial Banks
6. Conclusion: Summarize the findings and insights gained from the research on banking services and procedures.

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. You should write at minimum 20 – 30 pages
3. Acknowledgement
4. Index or Content Page
5. Introduction
6. Body of the project
7. Conclusion
8. Bibliography

ENGLISH LITERATURE

TOPIC FOR THE PROJECT:

'UNNATURAL DEEDS DO BREED UNNATURAL TROUBLES. SHOW HOW THE DESTRUCTION OF NATURAL ORDER BECOMES ONE OF THE MAJOR THEMES OF THE PLAY, MACBETH'.

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. The topic is to be covered in 1500 words.
3. Hard bound file should be used
4. Use White chart paper, covered neatly with cellophane
5. Acknowledgement
6. Index or Content Page
7. Introduction
8. Body of the project
9. Conclusion
10. Bibliography

ENGLISH LANGUAGE

ASSIGNMENT WORK

Specimen papers 1-10

All questions to be done in the Grammar register

TOPIC FOR THE PROJECT

Select any one assignment topic from the list given below. The chosen topic is to be produced in 500 words.

1. The text of a brochure.
2. A product description.
3. A process description (for eg. Instruction to operate a device, a recipe, a scientific experiment)
4. Description of a sporting event.
5. An autobiographical experience.
6. Review of a television serial

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. The topic is to be covered in 1500 words.
3. Hard bound file should be used
4. Use White chart paper, covered neatly with cellophane
5. Acknowledgement
6. Index or Content Page
7. Introduction
8. Body of the project
9. Conclusion
10. Bibliography
11. Orals and Aural will be conducted as class activity in the month of September and then attached with the project.

GEOGRAPHY

PROJECT TOPIC

“Area Development of a Multipurpose River Valley Project-Impact on the region”

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. Project should not be less than 20 pages
3. Acknowledgement
4. Index or Content Page
5. Introduction
6. Body of the project
7. Conclusion
8. Bibliography

NOTE: YOU HAVE TO DO YOUR PROJECT IN PUNCHED PAPERS IN A FILE.

- Supplement your projects with hand drawn diagrams, colored photographs, pie charts, bar graphs, hand drawn maps, tables etc.
- They should be within a frame and also the page should have border on all 4 sides
- These should be done in the left side of your punched sheet.
- You have to hand draw maps, graphs, chart diagrams.
- For diagrams only pencils to be used.
- For graphs and maps you have to plot it by hand for graphs and hand draw the maps by tracing don't paste graph papers or maps

For writing only a BLUE and a BLACK pen to be used.

HISTORY

TOPICS FOR THE PROJECT:

Choose any one of the topic from the following:

1. Martin Luther/Nelson Mandela
2. The Cold War
3. World War II
4. Israeli-Palestine Conflict

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. Project should not be less than 25 pages and more than 35 pages
3. Acknowledgement
4. Index or Content Page
5. Introduction
6. Body of the project
7. Conclusion
8. Bibliography

POLITICAL SCIENCE

TOPICS FOR THE PROJECT:

Choose any one of the topic from the following:

1. Indian Constitution
2. Fundamental Rights

INSTRUCTIONS FOR PROJECT:

1. Topic page or Front Page & Assessment sheet
2. You should write minimum 20 pages
3. Hardbound file should be used
4. Use black chart paper covered neatly with cellophane
5. Acknowledgement
6. Index or Content Page
7. Introduction
8. Body of the project