



W.H. Smith Memorial School

Class 9

Project 2026-27 (Holiday Home work)

English Literature

- Q1. How does the opening scene in Julius Caesar strike the keynote of the whole play.
- Q2. Describe the ways in which Shakespeare uses the weather in creating sense of fear in the play.
- Q3. Describe the Supernatural events in Julius Caesar. How effective are they in the story and in characterization.
- Q4. How appropriate is the title of the play Julius Caesar ?
- Q5. How does the lesson show the difference between innocence and authority ?
- Q 6. How does the reaction of the master and the board highlight the cruelty of the work house system?

हिंदी परियोजना कार्य/ग्रीष्मावकाश गृहकार्य

आवश्यक निर्देश : निम्नलिखित में से किन्हीं पाँच प्रश्नों के उत्तर दीजिए।

1. राष्ट्रीय एकता के अर्थ और महत्त्व पर प्रकाश डालते हुए, भारत के संदर्भ में राष्ट्रीय एकता में बाधक तत्वों की चर्चा करते हुए प्रस्ताव लिखिए। (शब्द सीमा 300-400)
2. विज्ञान की अनुपम देन 'चलचित्र' मनोरंजन का सर्वाधिक लोकप्रिय साधन है। चलचित्रों की उपयोगिता एवं गुण-दोषों की चर्चा करते हुए अपने विचार व्यक्त कीजिए। (शब्द सीमा 300-400)
3. आपके विद्यालय में राज्य-स्तरीय वाद-विवाद प्रतियोगिता का आयोजन हुआ जिसमें आपको श्रेष्ठ वक्ता का पुरस्कार मिला। इस आयोजन का वर्णन करते हुए अपनी माताजी को पत्र लिखिए। (शब्द-सीमा 125-150)
4. आपके मोहल्ले में बच्चों के खेलने के लिए किसी प्रकार की व्यवस्था नहीं है। नगर-निगम के अध्यक्ष को पत्र लिखकर एक 'बाल-उद्यान' बनवाने की प्रार्थना कीजिए। (शब्द-सीमा 125-150)
5. 'नागरीप्रचारिणी सभा, काशी का भ्रमण कीजिए तथा इसके संक्षिप्त इतिहास एवं महत्त्व पर प्रकाश डालते हुए लेख लिखिए। (शब्द-सीमा 250-300)
6. 'बात अठन्नी की'- पाठ का सारांश और संदेश अपने शब्दों में लिखते हुए, कथाकार 'सुदर्शन' जी का जीवन परिचय एवं साहित्यिक परिचय दीजिए। (शब्द-सीमा 300)
7. भक्तिकाल का परिचय देते हुए, प्रसिद्ध संत कवि 'कबीरदास' का जीवन परिचय एवं साहित्यिक परिचय दीजिए। (शब्द-सीमा 400)
8. कबीरदास की किन्हीं तीन साखियों का सप्रसंग व्याख्या कीजिए। (शब्द-सीमा 250-300)
9. एक कहानी लिखिए जिसका आधार निम्नलिखित उक्ति हो - "बिना विचारे जो करै सो पाछे पछताय" (शब्द सीमा 300-400)
10. एक ऐसी मौलिक कहानी लिखिए जिसके अंत में यह वाक्य लिखा गया हो - 'अंततः मैं अपनी योजना में सफल हो सका / सकी।' (शब्द सीमा 300-400)

History/Civics

Complete any one project/assignment mentioned below- (Word limit: 300-400 words)

1. West Bengal Assembly Elections have been conducted recently. Prepare a report on the role and performance of major political parties in the recent Assembly Elections. Write the name of Political Parties that rose for elections along with the pictures of their symbols.
2. As a historian, document your visit to Sarnath, highlighting important structures and artefacts. How do these sources help historians interpret the past?
3. Compare the governance systems of the Harappan Civilization and the Mauryan Empire. What does this reveal about the evolution of administration in India?
4. "Peace is not merely a way of life; it is the way." In the light of this statement, analyse the concept of Dhamma propagated by Ashoka and evaluate how far it reflects the idea of peace as a guiding principle of governance and society.
5. Fundamental Duties complement Fundamental Rights.' Illustrate with the help of a Power Point Presentation. (Submit in hard copy).

Physics

Instructions:

Choose any four topics

All experiments and observations must be recorded in a Project File.

Support your data with neat tables, hand-drawn graphs, and photographs of your experiments where possible.

Calculations should show all steps clearly, including units.

1. The Soundscape Audit

Task: Use a "Sound Meter" app on a smartphone to record noise levels (in dB) in three different zones: a "Silent Zone" (near a hospital or library), a "Residential Zone," and a "Commercial Zone."

Data: Record the maximum and minimum decibel levels at each spot for 5 minutes.

Analysis: Compare your readings with the standard legal safety limits for these areas. Calculate how much higher or lower your local commercial zone is compared to the standard limit (75 dB).

2. Kinematics of Public Transport

Task: On your next trip in a vehicle (car, bus, or metro), record the odometer reading and the time every 2 minutes for a total of 14 minutes.

Graph: Plot a Distance-Time graph on a proper graph sheet based on your recorded data.

Analysis: Identify segments of "Rest," "Uniform Motion," and "Non-Uniform Motion" from the graph. Calculate the Average Speed for the entire journey in m/s.

3. Precision & The Simple Pendulum

Task: Set up a simple pendulum. Measure the time for 20 oscillations for three different lengths (l): 25 cm, 50 cm, and 100 cm.

Challenge: Calculate the Time Period (T) for each length.

Analysis: Determine from your data if T is directly proportional to l or square root of l . If you were to take this same pendulum to the Moon (where gravity is $1/6$ th of Earth), explain whether the time period would increase or decrease.

4. Acoustic Engineering Case Study

Task: Research the "Acoustic Design" of a famous auditorium or a local high-end cinema hall.

Investigation: Identify three specific materials used for sound absorption and two structural features (like curved ceilings or specific wall angles) used for sound distribution.

Application: Draw a cross-section diagram of a cinema hall and label where you would place "Sound Absorbents" versus "Reflectors" to prevent echoes and optimize sound quality.

5. Velocity-Time Logic

Task: A car starts from rest, accelerates uniformly to 20 m/s in 10 seconds, maintains that speed for 20 seconds, and then applies brakes to come to a stop in 5 seconds.

Graph: Construct a Velocity-Time graph for this entire motion on a graph sheet.

Calculation: Using the "Area under the Graph" method, find the Total Displacement of the car. Calculate the acceleration and retardation (negative acceleration) for the specific segments.

6. The Impact Challenge: Safety & Momentum

Task: Drop a small clay ball from a height of 1 meter onto a hard floor. Then, drop an identical clay ball from the same height onto a thick sponge or a soft pillow.

Observation: Compare the shape and deformation of the two balls after impact.

Analysis: In which case was the "Time of Impact" longer? Use the concept of Change in Momentum to explain why cars are designed with "Crumple Zones" and "Airbags." How does increasing the time of a collision help in reducing the force of impact?

CHEMISTRY

Instructions:

Record all observations in a project file with neat tables and graphs. Begin with an acknowledgement, followed by an index, then detailed content. Include diagrams and pictures, and end with a bibliography. The cover page must have name, class & section, session, and topic.

Prepare a project on any two topic of your choice.

1. Chemistry in Your Daily Life

Explore how chemistry is hidden in your everyday activities.

You can include:

Cooking (fermentation, baking, curd formation)

Cleaning (soaps, detergents, disinfectants)

Medicines and preservatives

(Hint-Explain what chemical changes are happening and why they are useful)

2. Be a Chemical Detective! (Analytical Chemistry)

Investigate and identify different household substances like a scientist.

You can include:

Testing acids and bases using natural indicators (turmeric, etc.)

Identifying unknown substances based on observations

(Hint-Explain how you tested, what you observed, and how you concluded the result).

3. Green Chemistry: Save the Planet with Science

Study how chemistry can be used in an eco-friendly way.

You can include:

Biodegradable vs non-biodegradable substances

Eco-friendly products (natural cleaners, alternatives to plastic)

Reduce, reuse, recycle

(Hint-Explain how green chemistry reduces pollution and protects the environment).

4. Design a Future Without Chemical Harm

Use your creativity to imagine a safer and greener future.

You can include:

Your own ideas for eco-friendly chemicals

New inventions to reduce pollution

Safer alternatives for daily use

(Hint-Explain your ideas clearly with diagrams).

BIOLOGY

Prepare a project on any topic of your choice from biology or environmental science.

Suggested topics for the Project-

- a. Any topic from plant physiology
- b. Any topic from animal physiology
- c. Diseases (bacterial, protozoan, fungal. Viral)
- d. Drug addiction

- e. Alcoholism
- f. Biodiversity
- g. Ecosystem (land, forest aquatic soil)
- h. Environmental pollution
- i. Corona virus
- j. Diabetes
- k. Diseases related to circulatory system
- l. Diseases related to respiratory system
- m. Diseases related to nervous system, endocrine system
- n. Plant diseases
- o. Crop improvement strategies
- p. Reproduction in organisms
- q. Or any other topic of your choice

GENERAL INSTRUCTIONS:

1. The project has to be handwritten.
2. The project has to be submitted in a hard board file.
3. First page should have the acknowledgement.
4. Second page should have the content.
3. From the third page detail description of the topic.
4. You can attach graph, newspaper cuttings, diagrams, pictures related to the topic in your project.
5. Page limit 25-30 pages
6. Last page should be of bibliography.
7. Your cover page should have the following-
 - a. Name of the student
 - b. Class & Section
 - c. session
 - d. Topic of the project

Mathematics

Instructions:

Record all observations in a project file with neat tables and graphs. Begin with an acknowledgement, followed by an index, then detailed content and end with a bibliography. The cover page must have Name, Class & Section, Session, and Topic.

Prepare a project on any two topic of your choice.

1. Conduct a Survey of a group of students and represent it graphically – height , weight, number of family members, pocket money, etc.
2. Planning delivery routes for a Postman /Milkman.
3. Running a tuck shop/ canteen
4. Study ways of raising a loan to buy a car or house e.g. bank loan or purchase a refrigerator or a television set through hire purchase.
5. Cutting a circle into equal sections of a small Central angle to find the area of a circle by using the formula $A = \pi r^2$
6. To use flat cutouts to form cube, cuboids and pyramids to obtain formulae for volume and total surface area.
7. Draw circle of radius r on a $\frac{1}{2}$ cm graph paper, and then on a 2 mm graph paper. Estimate the area enclosed in each case by actually counting the squares. Now try out the circles of different radii. Establish the pattern, if any, between the two observed values and the theoretical value ($A = \pi r^2$) . Any modifications?

GEOGRAPHY

INTERNAL ASSESSMENT

PRACTICAL WORK/ PROJECT WORK

1. A record file having any **three** of the following exercises will be maintained. (The file will be evaluated out of 10 marks).
 - (a) Uses of important types of maps.
 - (b) Directions and how to identify them - an illustrative diagram.
 - (c) Reading and using statement of scale, graphic scale and scale shown by representative fraction method. (No drawing work, only explaining their meanings).
 - (d) Reading of one town guide map or an atlas map. (Recognising the symbols and colours used, identifying directions and distances).
 - (e) Drawing and recognising forms of important contours viz. valleys, ridges, types of slopes, conical hill, plateau, escarpment and sea cliff.
 - (f) Drawing at least one sketch map to organize information about visiting an important place, a zoo or a monument.

2. Candidates will be required to prepare a project report on any **one** topic. The topics for assignments may be selected from the list of suggested assignments given below. Candidates can also take up an assignment of their choice under any of the four broad areas given below.

(The project will be evaluated out of 10 marks).

Suggested list of Assignments:

(a) **Weather records:** Maintaining and interpreting weather records as found in the newspaper for at least one season.

(b) **Collection of data from secondary sources:**

{Using Modern techniques *i.e.*, Global Positioning System (GPS), Remote Sensing, Aerial Photography and Satellite imageries}:

Preparing a Power Point presentation on current issues like – use of earth resources/ development activities/dangers of development and ecological disasters like droughts, earthquakes, volcanoes, floods, landslides cyclones and tornadoes in the world.

(c) **Physical Features:** Collection of data from primary and secondary sources or taking photographs and preparing notional sketches of features found in the vicinity or areas visited during the year as a part of school activity.

(d) Find out the sources of pollution of water bodies in the locality and determine the quality of water.

(e) Collect information on global environmental issues and problems and communicate your findings through appropriate modes (posters, charts, collages, cartoons, handouts, essays, street plays and PowerPoint presentation).

(f) **Area Studies:** Choosing any aspect from World Studies and preparing a Power Point presentation or a write up on it.

(g) **Meteorological Instruments and their uses:**

Six's maximum and minimum thermometer, mercury barometer, aneroid barometer, wind vane, anemometer, rain gauge and hygrometer.

COMPUTER

PRACTICAL WORK/ PROJECT WORK

- Q1. Write a Java program to calculate the area of a square using assignment statements where side of square is 15m.
- Q2. Write a Java program to calculate Volume of sphere using assignment statements where radius and height is 14 m and 21 m respectively.
- Q3. Write a Java program to swap two integer variables using a temporary variable. Take input from user.
- Q4. Write a Java program to convert a temperature from Celsius to Fahrenheit. Take input from user.

Hint : Use Formula: $F = (C \times 9/5) + 32$

- Q5. Write a Java program to check if a number is odd or even. Take input from user.
- Q6. "Write a Java program to evaluate voting eligibility. The program should accept an age as a command-line input. If the age is 18 or above, it should confirm eligibility; otherwise, it should inform the user they are not yet eligible."
- Q7. Write a program that uses a method to calculate Simple Interest. Take input from user.

Q8. Differentiate between JDK, JRE, and JVM. Provide a simple diagram or flowchart showing how they relate to one another.

Q9. Define Escape Sequences in Java. Create a comprehensive table listing at least six common escape sequences, providing their syntax and a brief description of their functional purpose in a print statement.

Q10. Explain the four pillars of Object-Oriented Programming with an example of each.

Note: The final submission must include the typed source code along with its printed output, securely fastened in a project file.

Physical Education

Dear students please make a proper practical file and project of Volleyball, Cricket and Badminton.

- History of Games
- Rules and Regulations
- Skills, Terminology
- National and International Governing body.
- National and International Tournament etc.

Please make sure you cover all the topics given above.

COMMERCIAL STUDIES 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 four separate assignments (Project) as per the topics given. They will be kept in one file later on (spiral binding).
2. Start with **Acknowledgement**, should be of one page, short and simple. Also write your name, class , section and roll no. below it. Don't make separate acknowledgement for each topic. There should be only one common acknowledgement.
3. Order of each topic:
 - 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. Should not be more than 4 to 5 pages.)
 - **Conclusion** (one page)
 - **Bibliography** (One page. Write the name of relevant websites and books consulted for the making of the assignment.)
 - Note: Same order will be followed for each topic.
4. Each assignment should not be more than 8 to 10 pages including all the points mentioned above. Don't use vulgar or objectionable pictures.
5. 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.
6. Sample assignments are given at the end of the course book. These can be read to understand the topic but don't copy the matter from there.
7. Course book, other reference books and relevant websites can be used to find the subject matter of the assignment.

Course Book – Commercial Application part 1 by Dr. C.B. Gupta.

TOPIC 1: COMMERCIAL AND NON COMMERCIAL ACTIVITIES

Take and three commercial activities and three non commercial activities . Paste their pictures and explain in each category why they are considered to be economic or non economic.

TOPIC 2: COMMUNICATION

What is communication and its types. Discuss the various modes of communication used nowadays. Paste the relevant pictures.

TOPIC 3:Banking

Study different types of bank accounts (fixed deposits, recurring account, current account etc), any 5 types and find out what are the relevant documents required for opening such types of accounts, who all can open it and what is the difference in their rates of interests

TOPIC 4: SOLEPROPIETORSHIP

Study the topic sole proprietorship, its merits ,demerits and scope and prepare a project on a sole proprietor whom you know. Write the name of the shop, which kind of trade he is into and from how many years he is working in that field. Write all the merits and demerits and paste the pictures of his shop

Commercial Applications

General Instructions for project work:

- 1- Properly covered cardboard file is only acceptable. Cover could be chart papers or brown cover only.
- 2- Paste pictures (could be coloured or black / white) or draw charts/ graphs, pictures etc. (choose as per your convenience).
- 3- Simple white sheet should be used for writing work. No coloured papers are allowed.
- 4- Page sequence should be strictly followed as: cover page, acknowledgement, preface, index, project content, conclusion, bibliography.
- 5- Each assignment should not be more than 4 to 5 pages and describe the topics with introduction, relevant headings and sub-headings, supported with pictures/ diagrams/ graphs as per the requirement.

Topic 1 -Visit a bank and study its type of accounts with its interest rate and make a print advertisement for “safe online banking” covering 3 safety tips. Paste it on your project file.

Topic 2- Visit any business firm which is owned and controlled by one person. Meet its owner and find out the problems faced by him.

Topic 3 - Suppose you and two of your classmates want to start a partnership business after completing your education. Draw up a partnership deed of your proposed business with total amount of capital with its objective, capital control, liability and continuity.