

OM PUBLIC SCHOOL, GOHANA
SUMMER HOLIDAY'S HOMEWORK
CLASS XI

ENGLISH

1. Travel Memoir: Write a short memoir about a place you've visited or dream of visiting. Describe it using vivid sensory details.(200-250 words)
2. A Letter to the Future: Pen a letter to yourself ten years from now. Include your dreams, fears, and expectations.
3. Monologue of an Object: Write a dramatic monologue from the point of view of a common object (e.g., a diary, a mirror, a tree).
4. Write the review of the book-Animal Farm by 'George Orwell' in 250-300 words .Highlight the following things :
 - 1.Summary. 2.Your favourite character and why?
 - 3.A quote from the book and its significance.
 - 4.Personal reflection
 - 5.Prepare a 2-minute video of yourself speaking on:
"What does it mean to be truly educated?"
Use real-life examples, quotes, or stories. Be expressive!
- 6.Choose 20 new words you've learned during the holidays.
For each word, write Meaning,Use in a sentence,Synonym & Antonym
- 7.To revise the syllabus which has been done till May.

PHYSICS

1. All the work should be done in a fair notebook.
2. Activity should be done sincerely.

FIRST WEEK

- 1.i) The number of significant figures in 0.06900 is
(a) 5 (b) 4 (c) 2 (d) 30
- ii). The sum of the numbers 436.32, 227.2 and 0.301 in appropriate significant figures is
(a) 663.821 (b) 664 (c) 663.8 (d) 663.82
2. velocity v of a particle depends upon the time ' t ' according to the equation

$$v = \sqrt{ab} + bt + \frac{c}{d+t}$$

Determine the units of a , b , c and d . What physical quantities they represent. All have SI units.

- 3.If $x=at+bt^2$, where x is in metre and t in hour, what will be the the unit of a and b ?
4. Write dimensional formula's of
 - a) Gravitational constant
 - b) Torque
 - c) Modulus of Elasticity
 - d) Angular momentum

Activity : Take a cuboidal and cube shape object first find the length, breadth and height in decimal form. then find the area and volume of these object to correct significant figure.

SECOND WEEK:

1. Energy density and pressure have the same dimension. Comment
2. The frequency of vibration ν of a string may depend upon the length of the string(L), tension(T) in the string

and mass per unit length(m) of the string using the method of dimension derive the formula for v.

3. Write the dimension of a and b in the relation $P = \frac{a-x^2}{bt}$;

where P is the power, x is the distance and t is the time.

4. The rotational kinetic energy of a body is given by $\frac{1}{2}I\omega^2$. Use this equation to obtain the dimension of I

Activity: Mention some repetitive phenomena in nature which are examples of (i) uniform motion and (ii) non – uniform motion.

THIRD WEEK:

1. A ball is thrown vertically up with a velocity of 20 meter per second. Draw the acceleration time and displacement time graph.

2. Draw velocity time graph of a uniform motion of an object along a straight line .

3. What is the numerical ratio of average speed to average velocity?

4. The value of $\hat{i} \cdot (\hat{j} \times \hat{k})$

(a) 0 (b) 1 (c) 2 (d) none

5. Write dimensional formula for (i) Impulse (ii) Plank's constant 'h'.

Activity:i) Do on A4 size sheet :

Sketch velocity time graph in the following situations:

a. $v_0 > 0 ; a < 0 \quad |a| = \text{constant}$.

b. $v_0 < 0 ; a > 0 \quad |a|$ is increasing uniformly.

ii) Do 4 graph based numericals of uniform motion.

FOURTH WEEK:

Case study

Read the following paragraph and answer the questions.

1. AVERAGE SPEED AND AVERAGE VELOCITY

When an object is in motion, its position changes with time. So, the quantity that describes how fast is the position changing w.r.t. time and in what direction is given by average velocity. It is defined as the change in position or displacement (Δx) divided by the time interval (Δt) in which that displacement occurs. However, the quantity used to describe the rate of motion over the actual path, is average speed. It defined as the total distance travelled by the object divided by the total time taken.

i). Which one of the following is the unit of acceleration? (1)

(a) m/s (b) m/s² (c) km/hr (d) cm/s

(ii) A truck requires 3 hr to complete a journey of 150 km. What is average speed?

(a) 50 km/h (b) 25 km/h
(c) 15 km/h (d) 10 km/h

(iii). A 250 m long train is moving with a uniform velocity of 45 km/h. The time taken by the train to cross a bridge of length 750 m is

(a) 56 s (b) 68 s
(c) 80 s (d) 92 s

(iv). What is the time taken by a train of 100m length to cross a pole, moving at a speed of 5 m/s

(a). 20s (b). 15s (c). 10s d. 18s

Activity: Make a free fall motion of a body from certain height , first calculate the time in which body hit the ground and then calculate the value of g using the second equation of motion. (You can make a short video of this activity)

CHEMISTRY

To solve all the intext and exercise questions of chapter-1. "SOME BASIC CONCEPTS OF CHEMISTRY". and chapter -3 "CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES "

To collect or download 3 last year question papers.

To learn the complete periodic table along with their name and symbol.

To prepare an investigatory report on the topic given....(Roll No. Wise)

A few suggested Projects

I). Checking the bacterial contamination in drinking water by testing sulphide ion.

II). Study of the methods of purification of water

Testing the hardness, presence of Iron, Fluoride, Chloride, etc., depending upon the regional variation in drinking water and study of causes of presence of these ions above permissible limit (if any).

III). Investigation of the foaming capacity of different washing soaps and the effect of addition of Sodium carbonate on it

IV). Study the acidity of different samples of tea leaves.

V). Determination of the rate of evaporation of different liquids.

VI). Study the effect of acids and bases on the tensile strength of fibers.

VII) Study of acidity of fruit and vegetable juices.

Note: Any other investigatory project, which involves about 10 periods of work, can be chosen with the approval of the teacher.

To learn new skills during summer break and make a small video(30 seconds) on it.

To read the book "ATOMIC HABITS by James clear".

MATHEMATICS

- Make a project on great Mathematician Sri Niwas Ramanujan.
- Make a chart of all the formulas and definitions used in the chapters 1,4,5 and 11.
- Revise all the examples of chapters 1,4,5 and 11.
- Make 10 MCQ'S of each chapter i.e. chapter no 1,4,5 and 11.
- Revise the chapters 1,4,5, and 11.

BIOLOGY

1. Visit a garden or a field observe all the plants and Animals.

Make a list of at least 10 animals and 10 plants and write their scientific Name in your fair notebook.

2. Visit a Crop field during morning and also during evening time .write the name of crop and also the name of insects which you have seen in that crop in your Notebook.

3. Write experiment number 1,2,3,4,5 in your lab manual.

4.Solve assignment of Chapter 1.Make one liner of Chapter 14,15.

5.Make project Report on plant kingdom (Boys) and Animal kingdom (GIRLS)

POLITICAL SCIENCE

PROJECT WORK:- Prepare a Project file on the topic- ' LOK SABHA ELECTION 2024' covering the following points:

- Meaning of the term 'Election'.
- Types of Elections.
- Total Phases and Key Dates of Lok Sabha Election 2024.
- Total number of Political Parties in India. Name , symbols and ideology of the National Political Parties of India.
- Member Parties of National Democratic Alliance (NDA) and The Indian National Developmental Inclusive Alliance (INDIA) in 2024 and now (Names only)
- Seat-sharing arrangement of the BJP led- National Democratic Alliance (NDA) and Congress led- INDIA Alliance for 2024 Lok Sabha Election.
- Compare the election Manifestos of Bharatiya Janata Party (BJP) and the Indian National Congress (INC) .
- New measures that Election Commission introduced for free and fair polls in 2024.

- On a political map of India write number of Lok Sabha seats state wise.
- Result of the Lok Sabha Election 2024.

GENERAL INSTRUCTIONS FOR THE PROJECT WORK:

- Project must be of at least 15-20 pages. It should be hand written.
- The Project must include-

A Cover/Front page having the School Logo, School name, Session, Student's Name (Submitted By), Class and Section, and Name of the Subject teacher (Submitted To)

Title Page with name of the Topic

Acknowledgement

Index

Preface/ Introduction

Content (The above mentioned points must be explained.) the Project must be supported with newspapers or magazine cuttings, pictures from internet, comparative graphs, map etc.)

Conclusion

Bibliography.

READING and WRITING WORK :

- Read boxes, tables, articles carefully and frame 8-10 questions (mcqs, very short, one word etc.) along with their answers from each page of the following chapters.
- Constitution : Why and How
- Rights in the Indian Constitution
- Election and Representations
- Executive
- Read Newspaper daily ,collect headlines of national and international news and write in your Notebook. Write in brief your understanding of the issue also.

HISTORY

- Do learning & written practice of 6 Questions of 3 marks (2 from each chapter 1,2)
- Do learning & Written practice of 4 Questions of 8 marks (2 from Each chapter 1,2)
- **Prepare any one project from the given topic on A4 size sheet (maximum 25 Pages)**

1. Facets of the Industrialization in sixteenth- eighteenth centuries.
2. Crusades: causes; rationale; events; outcomes; Holy Alliance
3. Ancient History in depth: Mesopotamia
4. Greek Philosophy and City States
5. Contributions of Roman Civilization
6. The spirit of Renaissance: Manifestation in art; Literature; Sculpture; Influence on Trading Community; Social Fabric; Philosophy; Political Values; Rational Thinking; Existentialism
7. Aspects of Development -South American States /Central American States
8. Different schools of thoughts- Realism: Humanism: Romanticism
9. Piecing together the past of Genghis Khan
10. Myriad Realms of Slavery in ancient, medieval, and modern world

11. History of Aborigines – America /Australia
12. Facets of Modernization – China /Japan/Korea

Project Format

1. Cover Page (Title, Name, Roll No., School, Year)
2. Acknowledgement
3. Certificate
4. Index
5. Introduction
6. Statement of Purpose / Research Question
7. Objectives of the Study
8. Research Methodology (sources used – primary/secondary)
9. Project Content / Research Findings
10. Analysis and Interpretation
11. Conclusion
12. Bibliography
13. Appendices (if any)

Tips for Project

- Use maps, charts, timelines, and illustrations wherever relevant.
- Use handwritten format unless otherwise instructed.
- Maintain clarity and coherence in presentation.
- Avoid plagiarism; use your own words and analysis.

ECONOMICS

1. To revise numericals of Chapter 2 of Microeconomics.
2. To revise Chapter 1-2 of Microeconomics and chapter 1-2 of Statistics for test.
3. To do practice of all competency based questions, Assertion-Reason and Statement questions of both books.
4. To prepare a project (minimum 10 pages) of given topics.

Roll No.	Topic
1,7,13,19,25,31,39 (XI-C) Dipti,	Effect on PPC due to government policies (discuss any one)
2,8,14,20,26,32,40(XI-C) Prachi, Sharvi (XI-H)	Opportunity cost as an Economic tool
3,9,15,21,27,33,37,41(XI-C) Kashish(XI-H)	Any two methods of primary data
4,10,16,22,28,34,42(XI-C) yashmit (XI-H)	Role of statistics for economists

5,11,17,23,29,35,38,43(XI-C) Yashvardhan (XI-H)	Effect of GST in an economy
6,12,18,24,30,36,44(XI-C) Garima (XI-H)	Sources of secondary data

5. Read 10 economics news on daily basis.
6. To revise all MCQ type questions of both books.
7. To prepare and revise notes of chapter 2(statistics for economics)

GEOGRAPHY

1. (a) Prepare a folder of mapwork as per CBSE syllabus 2025-26.
(b) Make a practical file including the following chapters from the practical book.
 - i) Introduction to Maps
 - ii) Map Scale
 - iii) latitude longitude and Time
2. Make a model of grid of latitude and longitude.
3. Make a chart of major and minor lithospheric plates.
4. Make a chart of Brahmaputra and Sindhu river system.
5. Make a project on different types of volcanic landforms.(Roll no.1to 15)
6. Make a project on earthquake.(Roll no.15 onwards)

BUSINESS STUDIES

- During summer break plant three plants PARIJAT,PEEPAL,GILOY and extend your support in their growth
- Do yoga and meditation for 30 minutes in morning daily to keep your self fit.
- Help your mother in kitchen or do domestic work to assist her.
- Write -notes of unit 2.4to 2.6, and unit 3,4,5
- Learn unit 1,2
- Research and write about RATAN TATA on A3 Colourful Sheets, including their background, business idea, challenges faced, and lessons learned.

ACCOUNTANCY

- Prepare notes of chapter 1,7,and 8
- Earn Rs 100 on your own with zero capital investment and without any physical/human support
- Visit the near by bank and observe the functioning environment of it.
- Help your self in drinking water (No assistance from any of the family members)
- Do assignment of Ch-2,3 in your class notebook.

Ch-2 BASIC ACCOUNTING TERMS

1. What is Double Entry System? Explain its principles.

2. Give the Golden Rules of Debit and Credit and explain them with imaginary examples.
3. Every debit must have a corresponding credit. Discuss.
4. State the types of Personal Accounts.
5. What is Intangible Real Account? Give two examples of such type of accounts.
6. Classify the following accounts under personal, real or nominal accounts: Commission Paid, Commission Received, Prepaid Salaries, Carriage Inwards A/c, Leasehold Property A/c, life Insurance Corporation A/c, Rent Received in Advance Debtors, Rent paid in Advance Bank Overdraft.

Ch-3 ACCOUNTING PRINCIPLES

1. Revenue earned and cost of earning that revenue should be properly identified for a period. Explain this statement.
2. Explain the business entity concept with example.
3. Capital is a liability for the business. Explain this statement with the principle applied.
4. Why is it necessary for accounts to assume that a business entity will remain a going concern?
5. Explain the meaning and significance of money measurement concept.
6. Discuss the principle based on the prudence 'do not anticipate profits but provide for all losses'.
7. Every transaction has debit and credit aspects. Explain.
8. Why should a business follow the consistency concept?
9. Closing stock is valued at lower of cost or realisable value. Which principle of accounting is applied here?
10. How does matching concept apply to depreciation?
11. State limitation of historical cost.
12. Why the entire life of business is divided into time intervals?
13. Under which principle, resignation by a Marketing Manager is not recorded in books of accounts?
14. Name and explain the accounting concept under which it becomes necessary for business concerns to take their unsold stock at the end of the year to the next year.
15. Why capital of owner is shown on the liabilities side of balance sheet?

PSYCHOLOGY

1. Psychology Diary (Chapter 1)

Observe **one behavior** each day for **5 days** (yours or others').

Write:

- Behavior observed
- Related psychological concept (e.g., emotion, motivation)
- 4–5 lines reflection
- Comparison between your behaviour and others in respect of – emotion, motivation,

2. Mini Survey/Interview

Create a **questionnaire (5–7 questions)** on a topic like study habits or stress.

- interview 3–5 people
- Present findings in 1–2 pages (include method used and what you learned)

Summarize each chapter in **bullet points**:

- Key definitions
- Main terminologies
- Diagrams
- make a comparison table of methods of inquiry

PHYSICAL EDUCATION

Task: Make a list of 5 new or modern sports you see on YouTube or TV (like skateboarding, parkour, e-sports).

Write a paragraph with (100-150 words) on why these are becoming popular.

Task: Interview a sports coach, PE teacher, or fitness trainer.

Ask them how their career started, and what they love most about their job.

Write the answers on project file- A4 size colour sheets.

Task: List 5 different careers in physical education (example: physiotherapist, referee, personal trainer).

Write a paragraph with (100-150 words) on what they do.

Practical file work.

1. Labelled diagram of 400M track & field with computation with pencil .
2. Write physical fitness test (age group 9-18 years) (SAI Khelo India)
3. Labelled diagram of field & equipment of any recognised sports/ game of choice(Volleyball, Basketball, Kabaddi, Kho-kho)
4. Yoga:- 5 yoga flexibility increase and 5 Diabetes removal with diagram.

Paste your own photographs practising yoga, in your practical file.

I.P

1. Search 10 IT Personalities and write in brief (at least 3-4 lines) about them in your notebook.
2. Search about how we can develop simple games in Python and write the points and steps in your Notebook to develop a game.
3. To learn about different storage devices and memory.
4. To learn about different types of operating systems used in computers.
5. To do practice of any 2-3 python programs everyday.
6. To read ch- 4 and ch- 5 and watch videos for the programs of : if condition, while loop and for loop.
7. Search about chat GPT and write a report/paragraph on chat GPT in your notebook.
8. Search about what is : AI , Machine learning, Robotics, Block Chain Technology and write some points /paragraph in your notebook.

MUSIC

- Teen Taal [Ekgun to chargin] [Write 2 times]
- Write Jeevan parichay of Tansen Ji [Write 2 times]
- Do Om Chanting for 15 minutes everybody.
- Practice Patriotic songs everyday.