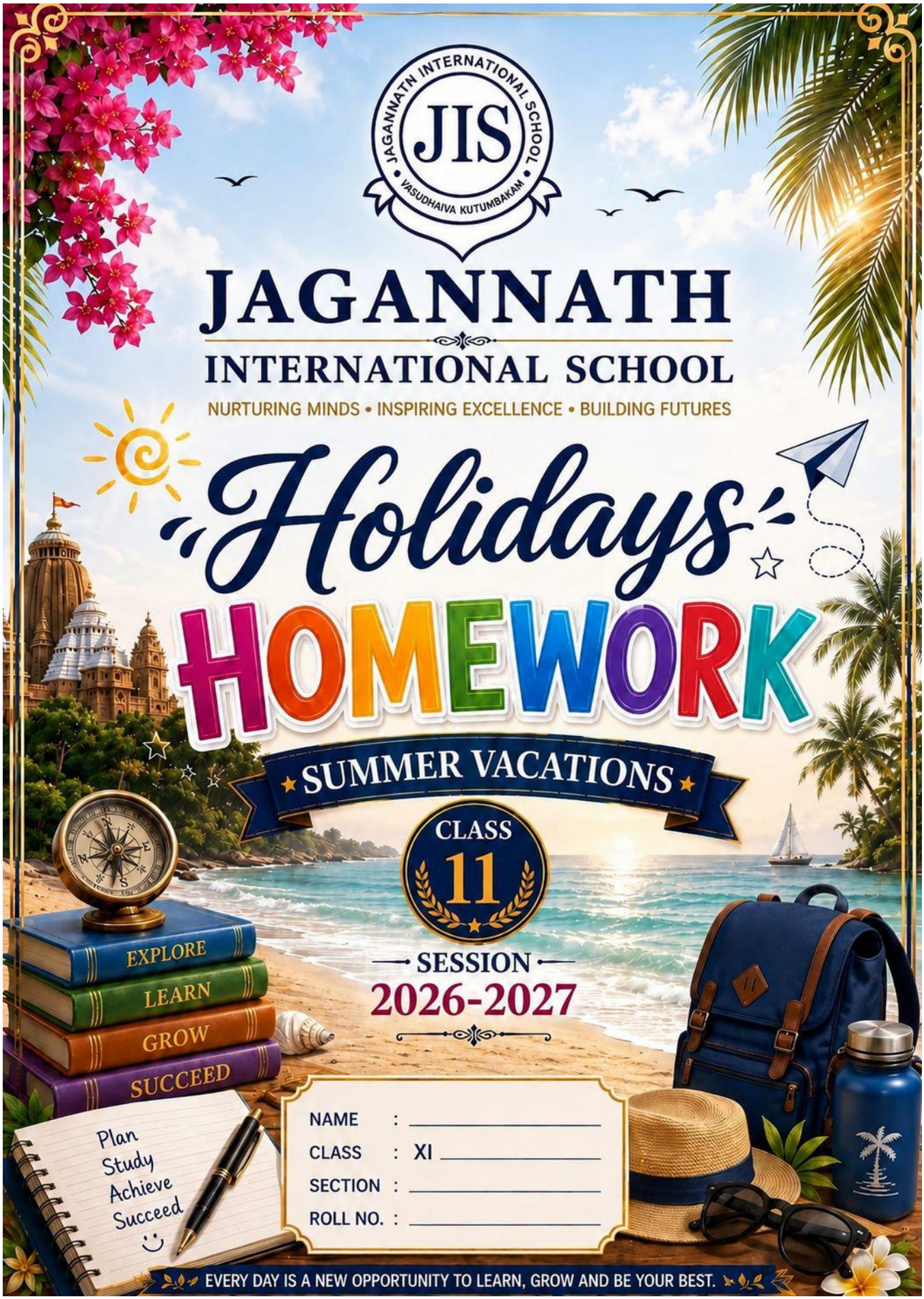
JAGANNATH INTERNATIONAL SCHOOL
JIS
VASUDHAIVA KUTUMBAKAM
JAGANNATH
INTERNATIONAL SCHOOL
NURTURING MINDS • INSPIRING EXCELLENCE • BUILDING FUTURES
Holidays
HOMEWORK
SUMMER VACATIONS
CLASS
11
SESSION
2026-2027
EXPLORE
LEARN
GROW
SUCCEED
Plan
Study
Achieve
Succeed
NAME :
CLASS : XI
SECTION :
ROLL NO. :
EVERY DAY IS A NEW OPPORTUNITY TO LEARN, GROW AND BE YOUR BEST.

SUBJECT- ENGLISH

MARKING SCHEME

- The project consists of 10 MARKS.
- Out of which, 5 MARKS will be allotted for the PROJECT FILE, ● and remaining 5 MARKS for the VIVA based on the file.

Instructions to be followed strictly

- Cover page to be designed with Name of the Institution and address ● with logo, Name of Topic, Guiding Teacher ● Acknowledgement as per the format given.
- Certificate of Completion under the guidance of the teacher (sample will be sent)
- Objectives of the topic
- Content related to the topic
- Student reflections (what new learning experience/outcome you have achieved after completing the project)
- Bibliography or References and their links
- Wherever photographs are there, colour print to be taken.

1. THE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE WILL HELP HUMANITY:

Links for reference:

https://youtu.be/wTbrk0suwbg https://youtu.be/-orTIDWqBN0 https://youtu.be/ZJixNvx9BAc

2. 13. CLIMATE CHANGE IS THE GREATEST THREAT FACING HUMANITY TODAY:

Links for reference:

https://youtu.be/vy3gMVGwjuc
https://youtu.be/cl4Uv9_7KJE
https://youtu.be/ViboIJvWqiw

3. SOCIAL NETWORKING PLATFORMS: IS SOCIAL MEDIA AN EFFECTIVE TOOL FOR QUICK AND CONVENIENT COMMUNICATION, OR IS IT JUST A SOPHISTICATED MEANS FOR STALKING PEOPLE?
Links for reference:

https://youtu.be/ABOgsV2XTEk
https://www.intelligencesquaredus.org/?jwsource=cl
https://www.ted.com/talks/cal_newport_why_you_should_quit_social_media

4.CYBER CRIME AND SECURITY:

Links for reference:

https://youtu.be/AVBlvtEthtc
https://youtu.be/DpjoZGOONiQ
https://youtu.be/1A3sQO_bQ_E

6. Importance of English in corporate world (Last Lesson)

7. Globalisation and English(Last Lesson)

8. Women Empowerment and Gender sensitisation (Aunt Jennifer Tiger)

9. Adolescence: Characteristics and Problems (Going Places)

10. Dreams and problems of Adolescents (Going Places)

11. Deteriorating Parent -Children Relationship in India: Case Study (My Mother at Sixty Six)

12. John Keats and Romantic poetry (Any Six Poems)

SUBJECT- ECONOMICS

- **Write the synopsis of the Topic allotted for CBSE project in the class:**

OBJECTIVE- The objectives of the project work are to enable learners to:

- Enable the student to understand the scope and repercussions of various Economic events and happenings taking place around the country and the world. (eg. The Dynamics of the Goods & Services Tax and likely impacts on the Indian Economy or the Economics behind the Demonetization of 500 and 1000 Rupee Notes and the Short Run and Long Run impact on the Indian Economy or The impact of BREXIT from the European Union etc.)
- Provide an opportunity to the learner to develop economic reasoning and acquire analytical skills to observe and understand the economic events.
- Make students aware about the different economic developments taking place in the country and across the world.
- Develop the understanding that there can be more than one view on any economic issue and to develop the skill to argue logically with reasoning.
- Compare the efficacy of economic policies and their respective implementations in real world situations and analyze the impact of Economic Policies on the lives of common people.
- Provide an opportunity to the learner to explore various economic issues both from his/her day to day life and also issues which are of broader perspective.

SUBJECT AND ART INTERGRATED: FINE ART AND ECONOMICS

Scope of the project:

- Introduction
- Details of the topic
- Pros and Cons of the economic event/happening
- Major criticism related to the topic (if any)
- Students' own views/perception/ opinion and learning from the work
- Any other valid idea as per the perceived notion of the student who is actually working and presenting the Project-Work.

PRESENTATION:

- At the end of the stipulated term, each student will present the work in the Project File (with viva voce)
- It will be an independent, self-directed piece of study
- The project should be handwritten on A4 size sheet.
- Students will prepare economics project as per following headings:
  - Acknowledgement
  - Index'
  - Cover page
  - Introduction of the concept
  - Analysis/explanation and interpretation
  - Conclusion
  - Credits/list of resources used/bibliography

Rubrics: (2.5 marks each)

a. Art b. Presentation c. Content d. Creativity

- **Do the following questions in your notebook:**

1. "Only scarce goods attract price." Comment.
2. "An economy always produces on, but not inside, a PPC", Defend or refute the statement.
3. Frame at least four appropriate multiple choice options for following questions
   (i) Which of the following is the most important when you buy a new dress?
   (ii) How often do you use computers?
   (iii) Which of the newspapers do you read regularly?
   (iv) Rise in the price of petrol is justified.
   (v) What is the monthly income of your family?
4. You want to research on the popularity of vegetable atta noodles among children. Design a suitable questionnaire for collecting this information.
5. In a village of 200 farms, a study was conducted to find the cropping pattern. Out of the 50 farms surveyed, 50% grew only wheat. Identify the population and the sample here.
6. Explain Consumer's Equilibrium with the help of indifference curve.
7. Explain Consumer's Equilibrium in case of single and double commodity with the help of a utility schedule.

SUBJECT- BUSINESS STUDIES

SUBJECT	**Business Studies**
ASSESSMENT PARAMETER	Multiple Assessment
TOPIC- PROJECT / ACTIVITY	"Innovating Finance: The Evolution and Challenges of Digital Payments in India" 1.Digital payment systems have undergone a significant evolution in India, reshaping the country's financial landscape. Write an article or comic strip on 'Evolution of digital payment systems in India.' Identify and give real life examples or case studies on common risks associated with digital payments, such as cybersecurity threats, fraud, and technical glitches. Evaluate strategies and best practices for mitigating risks in digital payment systems, including strong authentication, encryption, fraud detection mechanisms, and regular security audits for ensuring the security and reliability of digital payment systems. Design crossword puzzle also. Mention a few precautionary measures expressing in the form of riddles and jokes.
LEARNING OUTCOME/ SKILL ENHANCED	• Recognizing the role of government initiatives and policy frameworks, such as Digital India and demonetization, in driving the adoption of digital payments. • Appreciating the importance of user education and precautionary measures in ensuring the security and reliability of digital payment transactions. • Developing critical thinking skills to analyze the impact of digital payment systems on India's financial landscape and economy. **SKILL ENHANCED** • Analytical skills
RESOURCES	Government Websites, News Articles, Case Studies and Success Stories

MODE OF SUBMISSION	**Business Studies Register**
RUBRICS	Research content :2 Innovation: 1 Creativity : 1 Overall Presentation:1

CHOOSE ANY ONE PROJECT

I. Project One: Field Visit

The objective of introducing this project among the students is to give a first hand experience to them regarding the different types of business units operating in their surroundings, to observe their features and activities and relate them to the theoretical knowledge given in their text books. The students should select a place of field visit from the following: – (Add more as per local area availability.)

1. Visit to a Handicraft unit.

2. Visit to an Industry.

3. Visit to a Whole sale market (vegetables, fruits, flowers, grains, garments, etc.)

4. Visit to a Departmental store.

5. Visit to a Mall.

II. Project Two: Case Study on a Product

a) Take a product having seasonal growth and regular demand with which students can relate.

For example,

• Apples from Himachal Pradesh, Kashmir.

• Oranges from Nagpur,

• Mangoes from Maharashtra/U.P./Bihar/Andhra Pradesh etc.

• Strawberries from Panchgani,

• Aloe vera from Rajasthan,

• Walnuts/almonds from Kashmir,

• Jackfruit from South,

• Guavas from Allahabad,

• Pineapples from North East India,

• Tea from Assam,

• Orchids from Sikkim and Meghalaya,

• Pottery of Manipur,

• Fishes from coastal areas.

Students may develop a Case Study on the following lines: (i) Research for change in price of the product. For example, apples in Himachal Pradesh during plucking and non plucking season. (ii) Effect on prices in the absence of effective transport system. (iii) Effect on prices in the absence of suitable warehouse facilities. (iv) Duties performed by the warehouses. (v) Demand and supply situation of the product during harvesting season, prices near the place of origin and away.

III. Project Three: Aids to Trade Taking any one AID TO TRADE

For example Insurance and gathering information on following aspects 1. History of Insurance Lloyd's contribution. 2. Development of regulatory Mechanism. 3. Insurance Companies in India 4. Principles of Insurance. 5. Types of Insurance. Importance of insurance to the businessmen. 6. Benefits of crop, orchards, animal and poultry insurance to the farmers. 7. Terminologies used (premium, face value, market value, maturity value, surrender value) and their meanings. 8. Anecdotes and interesting cases of insurance. Reference of films depicting people committing fraudulent acts with insurance companies. 9. Careers in Insurance. Teachers to develop such aspects for other aids to trade.

IV. Project Four: Import /Export Procedure

Any one from the following 1. Import /Export procedure The students should identify a product of their city/country which is imported /exported. They are required to find the details of the actual import/export procedure. They may take help from the Chambers of Commerce, Banker, existing Importers/Exporters, etc. They should find details of the procedure and link it with their Text knowledge. The specimens of documents collected should

be pasted in the Project file with brief description of each. They may also visit railway godowns/dockyards/ transport agencies

Presentation and submission of project report. At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission. 1. The total project will be in a file format, consisting of the recordings of the value of shares and the graphs. 2. The project will be handwritten. 3. The project will be presented in a neat folder. 4. The project report will be developed in the following sequence Cover page should project the title, student information, school and year. List of contents. Acknowledgements and preface (acknowledging the institution, the news papers read, T.V. channels viewed, places visited and persons who have helped). Introduction. Topic with suitable heading.

Planning and activities done during the project, if any. Observations and findings while conducting the project. News paper clippings to reflect the changes of share prices. Conclusions (summarised suggestions or findings, future scope of study). Appendix (if needed).

V. Project Five:

A visit to any State Emporium (other than your school state).

The purpose of this project is that it leads to - Development of deeper understanding of the diversity of products in the states like Assam, Tripura, Nagaland, Mizoram, Manipur, Meghalaya, Sikkim, Arunachal Pradesh, Jammu and Kashmir, Kerala, Chhatisgarh, Telangana, Andhra Pradesh and other states of the country. Sensitization and orientation of students about other states, their trade, business and commerce, Understanding the cultural and socio-economic aspects of the state by the students, Developing the understanding of role of folk art, artisanship and craftsmanship of the state in its growth and economic development Understanding the role of gifts of nature and natural produce in the development of trade, business and commerce Understanding the role of vocational skills and abilities on the livelihood of artisans/ craftsman Understanding of entrepreneurial skills and abilities of the artisans/craftsman Understanding of the unemployment problem of the state and role of art and craft of the state in generating employment opportunities Value aspect - Sense of gratitude - by appreciating the contributions made by others in the betterment of our lives Appreciating the dignity of work Sensitivity towards social, cultural, ethnical and religious differences Benefits of social harmony and peace Understanding and appreciating the unity in diversity in India Appreciating differences in race, skin colour, languages, religion, habits, festivals, clothing coexistence

Presentation and Submission of Project Report At the end of the stipulated term, each student will prepare and submit his/her project report.

ASSESSMENT the marks will be allocated on the following heads.

1 Initiative, cooperativeness and participation 2 Mark

2 Creativity in presentation 2 Mark

3 Content, observation and research work 4 Marks

4 Analysis of situations 4 Marks

5 Viva 8 Marks
Total 20 Marks

- DO ASSIGNMENTS OF CHAPTER-1,2 IN YOUR B.STUDIES REGISTER.(SHARED IN CLASS GROUP

SUBJECT- ACCOUNTANCY

A.

ASSESSMENT PARAMETER	Multiple Assessment
TOPIC-ACTIVITY	**MONEY IN MOTION- THE RISE OF DIGITAL PAYMENTS AND BEYOND** Digital payments have witnessed significant growth in recent years due to advancements in technology, changes in consumer behavior, and regulatory reforms. Electronic fund transfer (EFT) refers to the electronic exchange or transfer of money from one account to another, eliminating the need for physical checks or cash transactions. Write an article (around 1000 words)with real life examples on the various forms of ETFs available in the market …how do they work and what makes each one unique? The article should cover the usage of electronic fund transfer in India through IMPS, RTGS, NEFT, UPI etc.

LEARNING OUTCOME/ SKILL ENHANCED	**Each** student will be able to • Identify various modes of digital payment systems, including IMPS, RTGS, NEFT, UPI, mobile wallets. • Identify the key components and stakeholders involved in digital payment transactions. • Discuss the advantages of digital payments over cash-based transactions, such as convenience, speed, security, and accessibility. • Identify common risks associated with digital payments **SKILL ENHANCED** • Analytical skills, critical thinking, news articles.
RESOURCES	TEXT BOOK,REF.BOOK, INTERNET.
MODE OF SUBMISSION	**ACCOUNTANCY REGISTER**
RUBRICS	Research content :2 Presentation of data: 2 Overall Analysis:1

B.PROJECT WORK

Note down the Transactions for 15 days from June 1st June 2025to 15th June 2025 of the business organisation and Prepare an Accounting Equation for the transactions that has been noted.:

1. Grocery Shop
2. Salon
3. Cosmetic Shop
4. Optician
5. Bakery Shop
6. Sweet Shop
7. Or any form of Business Organization.

Prepare an Accounting Equation for the transactions that has been noted.

ASSIGNMENT SHEET

Solve the assignment sheet given below in subject register.

ACCOUNTING EQUATION

Q1 : Prepare accounting equation on the basis of the following:
(a) Harsha started business with cash Rs 2,00,000
(b) Purchased goods from Naman for cash Rs 40,000
(c) Sold goods to Bhanu costing Rs 10,000/- Rs 12,000
(d) Bought furniture on credit Rs 7,000

Q2 : Prepare accounting equation from the following:
(a) Kunal started business with cash 2,50,000
(b) He purchased furniture for cash 35,000
(c) He paid commission 2,000
(d) He purchases goods on credit 40,000
(e) He sold goods (costing Rs 20,000) for cash 26,000

Q3 : Mohit has the following transactions, prepare accounting equation:
(a) Business started with cash 1,75,000
(b) Purchased goods from Rohit 50,000
(c) Sales goods on credit to Manish (Costing Rs 17,500) 20,000
(d) Purchased furniture for office use 10,000
(e) Cash paid to Rohit in full settlement 48,500
(f) Cash received from Manish 20,000
(g) Rent paid 1,000
(h) Cash withdrew for personal use 3,000

Q4 : Rohit has the following transactions:
(a) Commenced business with cash 1,50,000
(b) Purchased machinery on credit 40,000
(c) Purchased goods for cash 20,000
(d) Purchased car for personal use 80,000
(e) Paid to creditors in full settlement 38,000
(f) Sold goods for cash costing Rs 5,000 4,500
(g) Paid rent 1,000
(h) Commission received in advance 2,000

Q5 : Use accounting equation to show the effect of the following transactions of M/s Royal Traders:
(a) Started business with cash 1,20,000
(b) Purchased goods for cash 10,000
(c) Rent received 5,000
(d) Salary outstanding 2,000
(e) Prepaid Insurance 1,000
(f) Received interest 700
(g) Sold goods for cash (costing Rs 5,000) 7,000
(h) Goods destroyed by fire 500

Q6 : Show the accounting equation on the basis of the following transaction:

(a) Udit started business with:
(i) Cash
(ii) Goods
(b) Purchased building for cash
(c) Purchased goods from Himani
(d) Sold goods to Ashu (Cost Rs 25,000)
(e) Paid insurance premium
(f) Rent outstanding
(g) Depreciation on building
(h) Cash withdrawn for personal use
(i) Rent received in advance
(j) Cash paid to Himani on account
(k) Cash received from Ashu

Q7 : Show the effect of the following transactions on Assets, Liabilities and Capital through accounting equation:

(a) Started business with cash
(b) Rent received
(c) Invested in shares
(d) Received dividend
(e) Purchase goods on credit from Ragani
(f) Paid cash for house hold Expenses
(g) Sold goods for cash (costing Rs 10,000)
(h) (i) Cash paid to Ragani Deposited into bank

Q8 : Show the effect of following transaction on the accounting equation:

(a) Manoj started business with
(i) Cash 2,30,000
(ii) Goods 1,00,000
(iii) Building 2,00,000
(b) He purchased goods for cash 50,000
(c) He sold goods(costing Rs 20,000) 35,000
(d) He purchased goods from Rahul 55,000
(e) He sold goods to Varun (Costing Rs 52,000) 60,000
(f) He paid cash to Rahul in full settlement 53,000
(g) Salary paid by him 20,000
(h) Received cash from Varun in full settlement 59,000
(i) Rent outstanding 3,000
(j) Prepaid Insurance 2,000
(k) Commission received by him 13,000
(l) Amount withdrawn by him for personal use 20,000
(m) Depreciation charge on building 10,000
Fresh capital invested 50,000
(n)Purchased goods from Rakhi 6,000

Q9 : Transactions of M/s. Vipin Traders are given below.
Show the effects on Assets, Liabilities and Capital with the help of accounting Equation.

(a) Business started with cash 1,25,000
(b) Purchased goods for cash 50,000
(c) Purchase furniture from R.K. Furniture 10,000
(d) Sold goods to Parul Traders (costing Rs 7,000 vide bill no. 5674) 9,000
(e) Paid cartage 100
(f) Cash Paid to R.K. furniture in full settlement 9,700
(g) Cash sales (costing Rs 10,000) 12,000
(h) Rent received 4,000
(i) Cash withdrew for personal use

- **Paste the financial statements of various companies taken from daily newspaper**
- **Find out the names of any five companies registered on a stock exchange. Monitor the prices of their shares for 15 working days. Write your observation about changes in their prices.**

C. Revise the chapters that are covered in class (CHAPTER-1, 2, 4, 5, 6)

SUBJECT- MATHEMATICS

Chapters Covered:

1. Set Theory
2. Relations and Functions
3. Three-dimensional Geometry

Duration: 1 Month

Instructions

- Complete the work in a separate notebook/file/A4 size sheet.
- You can use NCERT textbook for definition but all the questions will be done from any reference books.
- Show all steps clearly.
- Use graph paper with proper tools (pencil, scale, etc.) wherever required.
- Submit on the first working day after vacation.

Week 1: Sets

Day 1–2: Theory Revision

Write definitions with examples:

- Set
- Types of Sets
- Subsets
- Universal Set
- Empty Set

Day 3–4: Practice

Solve:

- Representation of sets (**3 sums**)
- Types of sets (**3 sums**)

Day 5–6

Operations on sets:

- Union, Intersection, Difference (**4 sums**)

Day 7: Activity

Prepare a **chart/poster** on *Applications of Sets in Daily Life*.

Week 2: Sets & Relations

Day 8–10

- Venn Diagram problems (**8 sums**)
- Complement of sets (**4 sums**)

Day 11–13: Relations

Write definitions and solve:

- Relation and types of relations (**2 sums each type**)
- Domain and Range (**8 sums**)

Day 14: Activity

Prepare a **mind map** on *Important formulas of Sets and Relations*.

Week 3: Functions & Graphs

Day 15–17

Write definitions:

- Function
- Domain
- Codomain
- Range

Solve:

- Identify whether a relation is a function (**4 sums**)

Day 18–20: Graphs of Functions

Draw graphs of the following on graph paper:

- $y = x$
- $y = x^2$
- $y = -|\ x\ |$
- $y = 1/x$

(Plot neatly and mention domain and range)

Day 21

Draw the graph of the following:

- Signum function,
- Modulus function,
- Greatest Integer function

Also, find domain and range of the functions.

Week 4: Introduction to 3D Geometry

Day 22–24: Theory

Write definitions with examples:

- Coordinate Axes
- Octants
- Coordinates of a point in space

Day 25–27

Plot points in 3D:

- Plot **5 points** in different octants (use graph sheet if possible)

Day 28: Activity

Prepare a **3D model/chart** showing coordinate axes and octants.

Day 29

Prepare **one formula/concept sheet** for all chapters.

Day 30: Self-Test

Attempt:

- Sets: **5 marks**
- Relations & Functions: **5 marks**
- 3D Geometry: **5 marks**

Project Work (Compulsory)

Choose any one:

1. Use of Sets in real-life situations
2. Graphs of basic mathematical functions
3. Applications of 3D Geometry in architecture

(*2 handwritten pages with diagrams/pictures*)

SUBJECT- POLITICAL SCIENCE

Dear Students,

During summer vacations you all need to complete assigned work given below. Read all instructions carefully to complete assigned task.

1. **Project Work (CBSE board practical)**
2. Revise Book-1 (Ch-1,2,3 & 4)
3. Revision Assignments (Objective type and passages)

GUIDELINES FOR PROJECT WORK

Project Work: 20 Marks

Political Science as a field of study in senior secondary classes enable students to get an exposure to political activities and processes that they are exposed to in everyday life.

CBSE has therefore incorporated project work in Political Science to enable students to extend their interest beyond textbooks and provide them with a platform to gather information, value the decisions made to shape the community and visualise future course of action to be taken to ensure healthy democracy.

Objectives of project work

To enable learners to:

- probe deeper, initiate action and reflect on knowledge and skills.
- analyse and evaluate real world scenarios
- become independent and empowered
- develop 21st century skills

Instructions:

- **kindly go through the instructions carefully**

1. Out of 20 marks, 10 marks are to be allotted to viva voce and 10 marks for project work.
2. The project will be individual. The Project can be made on any of the topics given in the syllabus.
3. Students can use primary sources available in city archives, Primary sources can also include newspaper cuttings, photographs, film footage and recorded written/speeches. Secondary sources may also be used after proper authentication.
4. At the end of the stipulated term, each learner will present the research work in the Project File to the External and Internal examiner.
5. It should be **student's original work in their own handwriting.**

The marks will be allocated under the following heads:

Sr.no.	Components	Marks Allotted
1	Introduction/Overview	2
2	Variety Of Contents	3
3	Presentation	3
4	Conclusion	1
5	Bibliography	1
6	Viva-Voce	10
	Total	20

Sr no.	Roll No.	Topic
1	1101C	The making of constitution
2	1102C	Freedom
3	1103C	Constitution as living document
4	1104C	Secularism
5	1105C	Equality
6	1106C	Organs of Government
7	1107C	Social Justice
8	1108C	Fundamental rights in Indian Constitution
9	1109C	Election System in India
10	1110C	Local Government in India
11	1111C	Rights
12	1112C	----------exempt
13	1113C	Nationalism

SUBJECT- PSYCHOLOGY

- Solve the given assignment in PSYCHOLOGY register.
- Prepare individual working model/puzzle /game on the topics assigned (refer youtube link).

S NO.	TOPICS
1 (XI-A)	Human Memory https://www.youtube.com/watch?v=aM6PDJfVhV4
2 (XI-B)	Human Development https://www.youtube.com/shorts/jW9URM5ExxA
3 (XI-C)	*Motivation and Emotion * Learning *Perception * Span of Attention https://www.youtube.com/shorts/_DhtRTQijqQ https://www.youtube.com/shorts/SukUZCMqOC4

SUBJECT- PHYSICS

- Solve the given assignment in your register.
- Revise Chapters – Units and Dimensions, Motion in a Straight line and Motion in Plane.
- Prepare formula sheets of the Chapters covered till now.
- Make an innovative working model on any of the topics given below. Links have been shared for reference.

S NO.	TOPICS	LINK
1	Future Transportation System	future transportation project | transport and communication based science project (youtube.com)
2	Piezoelectric shoe/Free Energy generating Shoe	Inspire Award Project | Free energy Generating Shoes | Best science Project (youtube.com)
3	Automatic Fire Extinguisher	Inspire Award Project || How to make Automatic Fire Extinguisher without Arduino || Science Project (youtube.com)
4	Spirograph	(3) spirograph project - YouTube
5	Spiral Marble Machine	School Science Projects | Marble Machine (youtube.com)
6	Soil Moisture Sensor	(7) how to make Soil moisture sensor for plants at home - YouTube

SUBJECT- BIOLOGY

1. Solve the worksheet of Ch 1 the living world and Ch 2 Biological Classification.
2. An activity (Power Point Presentation and Role play) will be given to students on TOPIC- BIODIVERSITY.
3. Prepare an investigatory project on the topics: Ebola Virus, AIDS, Cancer and its treatment with the following instructions:
   Page no. 1 – name and topic page
   Page no. 2 – acknowledgement
   Page no. 3 – certificate
   Page no. 4 – index
   Page nos. 5 to 15 – content which includes pictures on every plain sheet, case study and reports.
   Page no. 16 – bibliography
4. Write 50 biological names of the flora and fauna.

SUBJECT- CHEMISTRY

- Solve the given assignment in your register.
- **Periodic Table of Real Elements" (Periodic Classification)**

- Create a 3D Periodic Table using small boxes or recycled materials.
- In each box, put real samples (safe) or pictures with properties, uses, and interesting facts.
- Highlight important groups (Alkali metals, Halogens, Transition metals) with glowing effects or LED lights.

- **Molecular Models & Hybridization Gallery (Using Balls & Sticks or Recyclables)**

- Concept: Chemical bonding, VSEPR theory, hybridization (sp, sp^2, sp^3), organic molecules.
- What to do: Build 3D models of methane (sp^3), ethene (sp^2), ethyne (sp), benzene, diamond/graphite allotropes, or coordination compounds. Use styrofoam, clay, or recycled materials.

- Prepare a working model on the topics assigned in the groups as discussed in the class. Link has been shared for reference.

S NO.	TOPICS	LINK
1	Waste water treatment plant.	https://youtu.be/3gel2r9EZkw?si=s09ZUvabSX6XhvHn
2	Plastic waste management.	https://youtube.com/shorts/89lZjsS5nC0?si=EyA3_yPXY9IZH0UH
3	Carbon collector Machine.	https://youtu.be/Dmg9j2LZE6M?si=_e5xGE_EeMlMihlu
4.	Acid rain Formation	https://youtu.be/R_J1twu_YIw?si=EmqBtnv23RSMtfgp
5.	Nuclear Reactor Plant	https://youtube.com/shorts/lU7rR3jYlaE?si=UBDbBjBksRZmxmjZ

SUBJECT- COMPUTER SCIENCE

List of Practicals

(To be attempted in Python Idle on your laptop/PC)

Instructions:

i. **Take screenshots of all the source codes as well as of the program outputs). Paste them in MS-word in the following sequence:**
-Q. No Question statement
-Source code screenshot
-Output screenshot

LIST OF PRACTICALS

1. Write a Python program to accept two numbers and swap their values
   i. using a third variable
   ii. without using a third variable
   iii. using multiple assignment
2. Write a Python program to convert temperature in Celsius to Fahrenheit and vice- versa. The temperature must be input in decimal number.
3. Write a Python program to accept principal, rate of interest and time period of an investment and compute and print the simple interest.
4. Write a Python program that uses arithmetic operators (+,-,*, /, %) on two numbers input from the user, and displays the respective results.
5. Write a Python program to obtain temperatures of 7 days of a week and then display the average temperature of the week. The input must be taken from the user in decimals.
6. Write a Python program to take values of x,y,z from the user and calculate the equation:

   $$4x^4 + 3y^3 + 9z^2 + 6\pi$$

7. WAP that asks your height in centimeters and converts it into foot and inches.
8. Write a Python program to check if a number input from the user is even or odd.
9. Write a Python program to find if a given year is leap year or not.
10. Write a program to calculate bonus for employees based on following conditions:

if the employee is male

bonus will be 10 % of salary where salary is less than 50000 otherwise bonus will be 15 %

if the employee is female

bonus will be 20 % of salary where salary is less than 50000

otherwise bonus will be 25 %

11. Write a Python program that inputs a student's marks in five subjects (out of 100), then prints the percentage of marks, and calculates grades as per the following rules:

Marks	**Grade**
85% and above	A
75-84%	B
65-74%	C
50-64%	D
40-49%	E
39% and below	Fail

12. Write a Python program to find the smallest of 3 numbers input from the user.
13. Write a Python program to print the roots of a quadratic equation $ax^2 + bx + c = 0$ (where $a \neq 0$). The program should check a**l** possibilities of the discriminant d.
14. Write a program to calculate electricity charges based on number of consumed electricity units as per following conditions:

Units	**Charges**
Upto 100	Rs. 2 per unit
101 - 200	Rs. 200 + Rs. 3.5 per unit for units exceeding 100
201 - 300	Rs. 550 + Rs. 7.5 per unit for units exceeding 200
301 & above	Rs. 1300 + Rs. 9 per unit for units exceeding 300

SUBJECT- INFORMATICS PRACTICES

SQL Queries

(To be attempted in MySQL Server on your laptop/PC)

Instructions:

i. **Take screenshots of all the queries as well as of the outputs).**

Make a MS-word file as per the format given below:

-Q.No-Question Statement

-Query and Output screenshot in sequence given in the question.

1. **Write SQL Commands for (i) to (iv).**

Bankid	Custname	Bankname	Amount	Transaction
1	Amit	State Bank	20000	25
2	Sunil	Union Bank	25000	20
3	Nidhi	UCO Bank	18000	15
4	Ashish	Union Bank	10000	22
5	Suman	State Bank	185000	8

i. Create the above table and insert records into it.
ii. Display details of those customers whose transactions are more than 20.
iii. Display customer name and amount of all the customers of State bank.
iv. Display details of customers whose name contains 'I'.

2. **Write SQL Commands for (i) to (iv).**

p_id	p_price	p_name	p_warranty	p_qty
1	35000	Washing Machine	3	10
2	45000	Smart TV	2	5
3	33000	AC	5	6
4	20000	Home Theatre	1	

i. Display details of product whose warranty is more than 2 Years.
ii. Display all details of Smart TV.
iii. Display the price of those products whose quantity is Null.
iv. Display distinct product name from table product.

3. **Write SQL Commands for the following:**

Table : Teacher

TID	TName	TSal	TDept	TDesig
1	Amit	2000	IT	PGT
2	Sumit	1500	History	TGT
3	Naina	1800	Math	PGT

a. Write the degree and cardinality of Table : Teacher
b. Identify the primary key in given Table.
c. Dislay records of all PGT Staff
d. Increase the salary of teachers of Math department.

4. Consider the below given table and write queries for (i) to (iii) and output of (iv) –(vii):

Table Name: HOSPITAL

PNO	NAME	AGE	DEPARTMENT	CHARGES	SEX
1	BABITA	54	SURGERY	400	F
2	KASHISH	33	ENT	400	F
705	TARUN	67	ORTHOPAEDIC	300	M
670	Harsh	42	SURGERY	220	M
900	Kartvya	69	ENT	150	M
400	Vyas	41	CARDIOLOGY	260	M

a. Display name, and department of female doctors.
b. Display Name, charges and age of all doctors whose age is more than 30 years.
c. Display name of departments only. (non duplicate)
d. select name, charges, Pno from hospital where name like ‘KA’;
e. select name, age from hospital where department=’ENT’ and age between 30 and 40;
f. select * from hospital where pno in (705,666,670) or charges>300;
g. select pno,name, departmet from hospital where gender =’M’ or gender = ‘F’;

5. Observe the following table and write answers for the below given questions:

Table Name: Movie

Movie_id	Movie_name	Category	releasedate	Director
M0001	Ghandhi Godse	History	2023-01-26	Rajkumar Santoshi
M0002	Faraaz	Action	2023-02-03	Hansal Mehta
M0003	Shehzada	Drama	2023-02-10	Rohit Dhawan

M0004	Bawaal	Null	2023-04-07	Nitesh Tiwari

a) Write command to add a column Language char(40).

b) Write command to change the size of category column to 50 characters.

c) Write command to delete column release date.