1. ENGLISH

Book: Flamingo & Vistas
Academic Session: 2025–26
Chapters: 1. The Enemy (Vistas)
        2. Poets and   Pancakes (Flamingo)
        3. The Interview (Flamingo)

Instructions:
    1.Read all the chapters carefully.
    2.Maintain proper presentation and spray diagram of the above mentioned chapters.
    3.Complete the assignment during the winter vacation and submit it on the reopening day.

2. TIBETAN

གཞུང་གསལ་བཀོད་ཡོད།

ཀ་སྟེ། མཛོད་རྣམ་ཚན་པ་གཉིས་པ། སྐྱོབ་ཚན་ཉེར་གཅིག་པ། ལྷ་བའི་རྒྱུན་ངན་ཞེས་པ་བསླབ་རྒྱུ།

༡ སྤྱང་ཆུལ། སྐྱོབ་མ་རང་ངོས་ནས་སྐྱོབ་ཚན་བསླུགས་རྗེས་སུ་དེར་དྲི་བ་༡༠ ཚམ་བཟོས་ཏེ་དེར་ལན་འདེབས་བྱ་དགོས།

༢ དྲི་བ་རྣམས་སྤུངས་བདེ་དང་ཁྱད་གསོད་ལྷ་བུ་མིན་པར། འཛིན་རིམ་བཅུ་གཉིས་པའི་གནས་ཚད་དང་མཐུན་པའི་ དྲི་བ་དང་ལན་ཕྱི་ཐབས་བྱ་དགོས་པ་ལས་སྤང་ཆུང་གི་རྣམ་པ་མཛོན་ཚེ་མི་འགྱིག

༣ བདུན་རེའི་ནང་ཉིན་ཐོ་རེ་རེ་ངེས་པར་དུ་བྱི་དགོས།

ཁ་སྟེ། ངག་རྒྱུགས། བློ་འཛིན་བྱ་རྒྱུའི་སློབ་ཚན།

 ཆགས་འཛུག་དགའ་གནང་གསལ་བའི་མི་ལོང། "ཁྱེར་ན་དབྱངས་མོ་གསལ་བྱེད་པོ། ཞེས་པ་ནས། བཙོང་བའི་ འཛིན་པའང་ཕིན་ཏུ་མང་། །" ཞེས་པའི་བར་དུ་ངག་རྒྱུགས་བློ་འཛིན་ངེས་པར་དུ་བྱ་དགོས།

ཆགས་འཛུག་དགའ་གནང་གསལ་བའི་མི་ལོང་གཞུམ་དུ་བཀོད་ཡོད།

ཁྱེར་ན་དབྱངས་མོ་གསལ་བྱེད་པོ། །དེ་ཁྱེར་ཀུ་ལི་སུམ་ཅུ་པོཚོ་ཡི་ཡི་གི་འབའ་ཞིག་ལ། །ནང་གསེས་ཏེ་ཚོན་ལྔར་དུ་བྱེ་སྟེ།། ཀ་ཅ་ཏུ་པ་ཚ་རྣམས་པོ།། །ཁ་ཆ་ཐ་པ་ཚ་ཐ་ཉིང་།། །གཇ་ད་བ་རྫ་ལྷ་ཞ། །ཟ་ཨ་ཡ་ཤས་རྣམས་མོ།། །ང་ཉ་ནས་ཕིན་ཏུ་མོ།། །ར་ལ་ད་ཨ་མོ་གཞུམ་སྟེ། །ཨ་ནི་མཚན་མེད་ཅེས་ཀྱང་བྱ།། །ཐོན་འགྱུག་ལྷ་ཡི་བ་ཡིག་པོ། །ག་ད་མ་ཞིང་ན་མོ་ཡིག། །མ་ནི་ཕིན་ཏུ་མོ་ཡིན་ནོ།། །དེ་རྣམས་གང་ལ་གང་འགྱུག་ན།། །པོ་ཡིག་བ་ནི་ཀ་ཅ་ཏ།། །ཚ་ག་ང་ཏ་ད་ན།། །ཧ་ཞ་ ར་ཤ་པར་འགྱུག །མ་ཞིང་ག་ནི་ཅ་ཏ་ཚ།། །ཏ་ད་ན་ཟ་ཡ་གསར་འགྱུག་མ་ཞིང་ད་ཡིག་ནི།།ཀ་པ་ག་བ་མར་ འགྱུག །མོ་ཡིག་འ་ནི་ག་ཇ་ད། །བ་ཛ་ཁ་ཐ་པ་ཚ། །ཕིན་ཏུ་མོ་ཡི་མ་ཡིག་ནི།། །ཁ་ཆ་ཚ་ག་ཏ་ད། །ཇ་ང་ཉ་ ན་རྣམས་ལ་འགྱུག །ཇི་ལྟར་འགྱུག་པ་བྱེད་ཅེ་ན། །པོ་ནི་སྔ་རྫོལ་དུ་པར་འགྱུག །མ་ཞིང་རྣ་པར་འགྱུག་པ་ ཡིན། །མོ་ནི་ཞན་པའི་ཚུལ་གྱིས་ཏེ།། །ཕིན་ཏུ་མོ་ནི་མཐའ་མ་པས་སོ།།། ཅི་ཁྱེར་འབྱུག་པར་བྱེད་ཅེས་ན། །ཐོག་མར་འདི་ ལྟར་ཕིས་དགོས་ཏེ། །ལས་གང་ཞིག་ལ་བྱེད་པ་པོ། །གནན་དང་དངོས་སུ་འབྲེལ་བ་ཡི། །དབང་དུ་བྱ་བ་ནས་བྱེད་པོ

དང་། །དེ་ཡི་བྱེད་པ་གཉིས་པོ་ནི། །དངོས་པོ་བདག་ཉིད་བྱ་ཁྱུལ་དང་།།བྱ་བ་གཉིས་པོ་དངོས་པོ་གཞན། །དེ་བཞིན་བྱེད་པ་པོ་གཞན་དང་། །དངོས་སུ་འབྲེལ་མིན་ཏེ་སྤྱར་ཡང་། །བྱ་བ་བྱས་ཟིན་འདས་པ་དང་། །ད་བཞིན་པ་ནི་ད་ལྟ་བ། །དེ་ཕྱིར་དུས་གསུམ་དབྱེ་བས་ནི། །བྱེད་ལས་དང་འབྲེལ་ངག་གི་ནི། །སྤྱོར་བ་ཀུན་ལ་ཁྱབ་པ་ཡིན། །བདག་གཞན་དབྱེ་བས་དེ་ཚམ་དུ། །ཁྱབ་པ་མིན་ཡང་བྱེད་པོ་དང་། །བྱ་ཁྱུལ་བསྟུ་ཕྱིར་དབྱེ་བ་དེ། །མཚང་ནས་བདག་གཞན་དང་འབྲེལ་བའི།།བྱེད་རྣམས་ཀྱང་དེ་ཁོངས་བསྡུ། །དེ་ནས་དུས་གསུམ་དུ་དབྱེ་བ། །བདག་གཞན་དབྱེ་བས་མ་ཁྱབ་པ། །བསྟུ་བའི་དོན་དུ་ཤེས་དགོས་པར། །གསུངས་ཀྱང་སྤྱོན་འཛག་ཅ་ཡིག་སྐབས།།བྱེད་ལས་ཚམ་དང་འབྲེལ་བ་ཡི། །དངོས་པོ་བདག་ལའང་འཛག་པ་མཐོན། །དེ་སྤྱར་དངོས་ནས་པོ་ཡིག་བ། །བསྐྲབས་སོ་སྒྲུ་འདས་པ་དང་། །བསྐྲབ་བྱའི་སྒྲུ་དང་བསྐྲབ་པར་བྱ། །ཞེས་སོགས་དངོས་པོ་གཞན་ལ་འཛག །མ་ཞིག་ག་ད་གཉིས་པོ་ནི། །གཅོད་པ་པོ་དང་གཅོད་པར་བྱེད། །གཅོད་པར་འགྱུར་དང་དགྱི་བ་པོ། །དགྱི་བར་བྱེད་དང་དགྱི་བར་འགྱུར། །ཞེས་སོགས་དངོས་པོ་བདག་དོན་དང་། །གཅད་བྱའི་ཤིང་དང་གཅད་པར་བྱ། །དགྱི་བྱའི་སྐལ་མ་དགྱི་བར་བྱ། །ཞེས་སོགས་དངོས་པོ་གཞན་དོན་དང་།། གཅོད་བཞིན་པ་དང་དགྱི་བཞིན་པ།།ཞེས་སོགས་ད་ལྟ་སྒྲུབ་ཅེད་འཛག ཨོ་ཡིག་འ་ནི་འཆད་པ་པོ། །འཆད་པར་བྱེད་དང་འཆད་པར་འགྱུར། །ཞེས་སོགས་དངོས་པོ་བདག་དངོས་དང་། །འགྲོ་བ་པོ་དང་འགྲོ་བར་བྱེད། །ཅེས་སོགས་བདག་དོན་ཐལ་པ་དང་།། འཁྲིལ་ལོ་ཞེས་སོགས་ད་ལྟ་དང་།། འཁྲིལ་བར་འགྱུར་སོགས་མ་འོངས་འཛག །ཤིན་ཏུ་མོ་ཡི་མ་ཡིག་ནི། །བདག་གཞན་དུས་གསུམ་མཐམ་པར་འཛག །འོན་ཀྱང་བྱེད་པོ་ཞེན་དངོས་དང་། །འབྲེལ་བའི་འདས་ལ་འའི་སྤྱོན་འཛག །མེད་པར་དེས་ཤིག་ག་ད་ཐུང་། །ད་ལྟ་བ་ལ་འབའི་སྤྱོན་འཛག །ཐུང་ཞིང་མགོ་ཅན་ད་ལྟ་བར། །བས་འཕུལ་མེད་པ་ཡིས་པ་ཚམ། །གཞན་ཡང་བས་འཕུལ་ཚན་ཐལ་ཆེར། །བྱེད་པ་པོ་ནི་ད་ལྟ་དང་། །བྱ་ཁྱུལ་མ་འོངས་པར་བསྒྲུ་ནས།།འདས་ལ་བས་འཕུལ་ཡང་འཛག་ཡོད། །ད་ལྟ་བ་ལ་གཉིས་ཀ་མེད། །མ་འོངས་འཕུལ་ཡོད་ཡང་འཛག་མེད། །སྐུལ་ཚིག་འཕུལ་མེད་ཡང་འཛག་ཡོད། །སྐྲབས་འགར་འདས་དང་སྐུལ་ཚིག་ལ། །ས་རྐྱང་སྦྱར་བའི་འཕྲས་པའང་ཡོད། །རྟེས་འཛག་ཡི་གེ་བཅུ་པོ་ཡི། །ག་ད་བ་ས་བཞི་རྣམས་སོ། །ང་མ་འ་གསུམ་མོ་ཡིན་ཞིང་།།ན་ར་ལ་གསུམ་མ་ཉིན་ཏེ། །མེད་གཞིའི་ཡི་གེ་ཀུན་ལ་འཛག །ཏེ་སྤྱར་འཛག་ཚུལ་གཉིས་ཡོད་ཏེ། །དང་པོ་སྐྱ་ཡི་འཛག་ཚུལ་ནི། །པོ་ཡིག་ག་ཡིག་ཡང་འཛག་ཅན། །སྐྱེས་བུ་རབ་དང་པོ་ཡིག་བ། །ཡང་འཛག་ཚན་ནི་སྐྱེས་བུ་འབྲིང་།། ག་བ་ཡང་འཛག་མེད་པ་དང་། །ད་སའི་མཐའན་ཚན་ཐ་མསྟེ། །དྲག་པ་པོ་ལའང་ན་གསེལ་ཀྱིས། །དྲག་ཞེན་བར་མ་གསུམ་དུ་དབྱེ། །དེ་བཞིན་ཞེན་པ་མོ་ལ་ཡང་། །ནང་གསེས་དྲག་ཞན་གཉིས་དབྱེ་སྟེ། །ང་མ་ཡང་འཛག་ཚན་མོ་དང་།། ང་མ་ཡང་འཛག་མེད་པ་དང་། །འ་མཐའན་ཚན་རྣམས་ཞེན་ཏུ་མོ། །བར་མ་མ་ཉིན་ན་ར་ལ། །ཡང་འཛག་ཡོད་དས་མེད་ཀྱུན་རུང་། །མིང་གཞི་པོ་ཡིག་མཐར་ཡོད་དང་། །མིང་གཞི་མ་ཉིན་རྟེས་སུ་ནི། །ཡང་འཛག་དང་བཅས་ཞུགས་པ་ན། །དྲག་དང་ཕྱད་པས་དྲག་པར་འགྱུར།།མིང་གཞི་མོ་ཡིག་རྟེས་སུ་ནི། །ཡང་འཛག་མེད་པར་ཞུགས་པ་ན། །ཞན་དང་ཕྱད་པས་ཞན་པར་འགྱུར། །དེ་གཉིས་འགྱུར་བ་མ་ཉིན་ཡིན། །མིང་གཞི་མོ་ཡིག་རྟེས་སུ་ནི།། ཡང་འཛག་དང་བཅས་ཞུགས་པ་ན། །དྲག་ཞན་གཉིས་ཀའི་ཚ་ལྦ་ཕྱིར། །མཚོན་གཉིས་མ་ཉིན་ཞེས་སུ་གགས། །མིང་གཞི་མ་ཉིན་རྟེས་སུ་ནི། །ཡང་འཛག་མེད་པར་ཞུགས་པ་ན། །དྲག་ཞན་གང་དུའང་མི་འགྱུར་བས།།མཚན་མེད་མ་ཉིན་ཞེས་སུ་འདོད། །གཉིས་པ་དོན་ལ་གཉིས་ཡོད་པའི། །ལྷ་མ་གང་ལྟར་འགྱུར་བ་ནི། །རྟེས་སུ་གང་ལ་ཞུགས་པ་ཡི།།མིང་དེས་བདག་གཞན་སོགས་གང་སྟོན།།ཐལ་ཆེར་མིན་དེའི་སྤྱོན་འཛག་གི །ཞུས་པར་སྒྱུར་ནས་རྟོགས་པར་བྱ། །ཕྱི་མ་ཏེ་ལྟར་འགྱུར་བ་ནི།། རྟེས་འཛག་པོ་ཡིས་པོ་ཡིག་གི། མིང་མཐའར་གཞན་དངས་དེ་བཞིན་དུ། །མོ་ཡི་མོ་ཡིས་མིང་མཐའར་དང་། །མ་ཉིན་གིས་ནི་མ་ཉིན་དངས། །དེ་རྣམས་རྟགས་མཆངས་འཇིན་ཚུལ་ཏེ།།བཏོང་བའི་འཇིན་པའང་ཤིན་ཏུ་མང་།།

3. HISTORY

Chapters Covered: Chapter 5 – Through the Eyes of Travellers

1. Reading Task
   • Read the chapter thoroughly from the NCERT textbook.
   • Pay special attention to:
   • The background of each traveller
   • Their purpose of visit
   • What they observed about Indian society, religion, economy and culture

 2. Assignment Work

Q1. Answer the following questions (in 120–150 words each):
   1. Who was Al-Biruni? What challenges did he face while understanding Indian society?
   2. Describe Ibn Battuta's observations about Indian cities and social life.
   3. How did François Bernier compare Indian society with European society?
   4. Why are the accounts of foreign travellers considered important historical sources?

Q2. Source-Based Question (Compulsory):

Read the following statement and answer the questions:

"Al-Biruni tried to explain Indian social practices in a comparative framework."
   a) What does this statement suggest about Al-Biruni's approach?
   b) Mention two examples where he compared Indian society with other societies.

3**. Note-Making** (For Revision)

Prepare neat and well-organised notes on the following topics:
   • Al-Biruni: Background, writings and observations
   • Ibn Battuta: Travel account and social descriptions
   • François Bernier: Views on economy and society
   • Importance and limitations of traveller accounts

 Use headings, subheadings and bullet points.

4. POLITICAL SCIENCE (028)

A) **Make a 20-page (including back and front) project on any one of the following political leaders:**
   B) Jawaharlal Nehru
   C) Sardar Vallabhbhai Patel
   D) Lal Bahadur Shastri
   E) Rajiv Gandhi
   F) Indira Gandhi

B) Movie review on Political Themes (10 marks)

Objective: To understand key political concepts and events by analyzing a movie's themes, historical accuracy and relevance to the CBSE syllabus.

-Watch the movies listed below (available on YouTube and OTT platforms) and prepare a reflective note on any two movies:

a.	Gandhi, 1982	d.	Jogi
b.	Parmanu	e.	Partition of India
c.	Emergency 1975		

Guidelines for Movie review/reflective note:

a. Introduction: Mention the movie's name, release year, director and lead actor's name, followed by brief summary of the movie.
b. Key themes: Identify and explain the major political themes depicted in the movie.
c. Highlight any key scenes that helped you understand the topic better.
d. Discuss the role of key characters and their significance in the political Context.
e. Conclude by reflecting on how the movie deepened your understanding of the topic and provide your overall opinion and a rating out of 5 stars.

*Individual/group sharing session will be conducted for both the assignments at the beginning of the new academic session.

5. CHEMISTRY (028)

Chemistry practical project: -

 Prepare a project work on the topics allotted for your Roll no.

(Based on class 11C and 11D Roll no)

- Study of the presence of oxalate ions in Guava fruit at different stages of ripening. **(Roll no. 1,9)**
- Study of quantity of casein present in different samples of milk. **(Roll no. 2,10)**
- Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc.   **(Roll no. 3,11)**
- Study of the effect of potassium bisulphate as food preservative under various conditions (temperature, concentration, time etc) **(Roll no. 4, 12**)
- Study of digestion of starch by salivary amylase and effect of pH and temperature on it. (**Roll no. 5,13**)
- Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc. **(Roll no. 6,14**)
- Extraction of essential oils present in aniseed, carum, illaichi.   **(Roll no. 7,15)**
- Study of common food adulterants in fat, oil, butter, sugar, turmeric powder, chilli powder and pepper. **(Roll no. 8)**

6. ECONOMICS

PART ONE
Indian economic development
Book consist of three different unit
Unit 1: development strategy adopted by Indian government from 1947 to 1990 and new economic policy based on NEP
You are advised to study the development strategy and make project on it
Unit 2: focused on current challenges facing and it consist of four different chapter

a. Rural development
b. Human capital formation
c. Employment and unemployment
d. Sustainable development

Prepared a complete note on any one
Unit 3: development experience of India, Pakistan, and China
Complete report on the development strategy on India with its neighbours

7. BUSSINESS

Prepare the project work on the topic allotted;

PROJCET A: MARKETING MANAGEMENT

On the basis of the work done by the students the project report should include the follows;

1. Why have you selected this product / services?
2. Find out '5' competitive brands that exist in the market.
3. What permission and licenses would be required to make the product?
4. What are your competitors unique selling proposition (U.S.P)?
5. Does your product have any range, give details?
6. What is your name of your product and its features?
7. Draw the 'label' of your product.
8. Draw a logo for your product.
9. What is the selling price of your competitor's product?
10. How will be your product packed and which channel of distribution are used.
11. List 5 ways of promoting your product.
12. Draft any social message for your label.

At this stage the students will realize the importance of the concept of marketing mix and the necessary decision regarding the four P's of marketing: product, price, place and promotions.

➢ Make the project file which includes all the topics.

8. ACOUNTANCY

Chapter: **Financial statements of sole proprietorship**

Q1. Explain the meaning of financial statements. Discuss their objectives and importance for a sole proprietor.

Q2. **Solved any four comprehensive numerical questions** on **Final Accounts of a Sole Proprietorship** covering **Trading Account, Profit & Loss Account, and Balance Sheet.**

9. PHYSICS

A. Make a project from the suggested investigatory projects listed below.
Kindly select the projects according to the roll number allotted.

Suggested Investigatory Projects

1. To study various factors on which the internal resistance/EMF of a cell depends.
2. To study the variations in current flowing in a circuit containing an LDR because of a variation in

    (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance).

    (b) the distance of an incandescent lamp (of fixed power) used to 'illuminate' the LDR.

3. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle.
4. To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.
5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.
6. To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.
7. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.
8. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

B. Device a planning project for the following Sub-Themes for an Exhibit for the National Level Science Exhibition 2026

Sub-Themes:
1. Sustainable Agriculture
2. Waste Management and Alternatives to Plastics
3. Green Energy
4. Emerging Technologies
5. Recreational Mathematical Modelling
6. Health and Hygiene
7. Water Conservation and Management

10. COMPUTER SCIENCE

Write One simple Program in python with output on below :

(Don't copy from internet use real life examples)

1. String functions: (For 1st Jan to 20th Jan)

a. len()   j. title()   s. isspace()
b. capitalize()   k. count()   t. istitle()
c. split()   l. lower()   u. join()
d. replace()   m. islower()   v. swapcase()
e. find()   n. upper()   w. partition()
f. index()   o. isupper()   x. endswith()
g. isalpha()   p. lstrip()   y. startswith()
h. isalnum()   q. rstrip()   z. ord(), chr()
i. isdigit()   r. strip()

2. List functions: (For 21st Jan to 31st Jan)

a. append()   f. len()   k. max()
b. extend()   g. sort() / sorted()   l. pop()
c. insert()   h. clear()   m. del
d. reverse()   i. count()   n. remove()
e. index()   j. min()

3. Tuple functions: (For 1st Feb to 10th Feb)

a. len()   d. min()   g. sorted()
b. count()   e. max()   h. index()
c. any()   f. sum()

4. Dictionary functions: (For 11th Feb to 20th Feb)

a. del   f. items()   k. popitem()
b. pop()   g. keys()   l. min()
c. len()   h. values()   m. max()
d. clear()   i. copy()   n. sorted()
e. get()   j. fromkeys()

5. Random module functions: (For 21st Feb to 23rd Feb)
a. random()   b. randint()   c. randrange()

6. Math module functions: (For 24th Feb to 26th Feb)
a. pi   c. floor()   e. sqrt()
b. ceil()   d. pow()   f. fabs()

7. Statistics module functions: (For 27th Feb to 28th Feb)
a. mean()   b. median()   c. mode()

11. WEB APPLICATION

Write One simple Program in Javascript with output on below :

(Don't copy from internet use real life examples)

Work For 1st Jan to 20th Jan:

1. Arithmetic operators: +   -   *   /   %
2. Relational operators: <   <=   >   >=   ==   ===   !=
3. Logical operators: && || !
4. Bitwise Logical operator: & |
5. Bitwise Shift operator: <<   >>
6. Unary operators: ++   --
7. Ternary operator: ?   :
8. Compound operator: +=   -=   *=   /=   %=

Work For 21st Jan to 31st Jan:

1. If else   (write 3 programs)
2. Nested if else   (write 3 programs)
3. Switch   (write 3 programs)

Work For 1st Feb to 15th Feb:

1. One dimensional loop   (write 3 programs)
2. Two dimensional loop   (write 3 programs)
3. Conversion from while to for   (write 3 programs)
4. Conversion from for to while   (write 2 programs)
5. Conversion from if else to switch   (write 2 programs)
6. Conversion from switch to if else (write 2 programs)
7. Conversion from if else to ternary operator   (write 1 programs)

Work For 16th Feb to 28th Feb:

1. To add two numbers by button click where both number entered by user.
2. Display any number table by button click.
3. Display greatest number between two numbers by button click where both number entered by user.
4. Display smallest number between two numbers by button click where both number entered by user.

12. MATHS

1. Evaluate: $\lim_{x \to 0} (\sin 3x / x)$.

2. Find $\lim_{x \to 0} ((1 - \cos 5x) / x^2)$.

3. Evaluate: $\lim_{x \to 0} ((e^x - 1) / x)$.

4. Find $\lim_{x \to 0} ((\tan 2x - \sin 2x) / x^3)$.

5. Evaluate: $\lim_{x \to 0} ((a^x - 1) / x)$, $a > 0$.

6. Find $\lim_{x \to 0} ((\sqrt{(1 + x)} - 1) / x)$.

7. Evaluate: $\lim_{x \to 0} ((\sin x + \tan x) / x)$.

8. Find $\lim_{x \to 0} ((1 / x) - (1 / \sin x))$.

9. Evaluate: $\lim_{x \to 0} ((\cos x - \cos 2x) / x^2)$.

10. Find $\lim_{x \to 0} ((x - \sin x) / x^3)$.

11. Evaluate: $\lim_{x \to 0} ((\tan x - x) / x^3)$.

12. Find $\lim_{x \to 0} ((\sec x - 1) / x^2)$.

13. Evaluate: $\lim_{x \to 0} ((\sin^2 x) / x^2)$.

14. Find $\lim_{x \to 0} ((e^{2x} - 1) / x)$.

15. Evaluate: $\lim_{x \to 0} ((a^x - b^x) / x)$.

16. Find $\lim_{x \to 0} ((\log(1 + x)) / x)$.

17. Evaluate: $\lim_{x \to 0} \left(\frac{\cos 3x - 1}{x^2}\right)$.

18. Find $\lim_{x \to 0} \left(\frac{\sqrt{1 + 2x} - 1}{x}\right)$.

19. Evaluate: $\lim_{x \to 0} \left(\frac{\sin 5x}{\sin 2x}\right)$.

20. Find $\lim_{x \to 0} \left(\frac{1 - e^{-x}}{x}\right)$.

21. Find the derivative of $y = \sin x \cos x$ with respect to x.

22. Differentiate $y = x^3 + 5x^2 - 7x + 4$.

23. Find dy/dx if $y = e^x \sin x$.

24. Differentiate $y = \log(\sin x)$.

25. Find the derivative of $y = \tan^2 x$.

26. Differentiate $y = x^2 e^x$.

27. Find dy/dx if $y = \sin^2 x$.

28. Differentiate $y = \ln(x^2 + 1)$.

29. Find the derivative of $y = \sec x + \tan x$.

30. Differentiate $y = (x^2 + 1)/(x)$.

31. Find dy/dx if $y = e^{2x}$.

32. Differentiate $y = \sqrt{1 + x^2}$.

33. Find the derivative of $y = \cos x / \sin x$.

34. Differentiate $y = x \sin x$.

35. Find dy/dx if $y = (\sin x)^3$.

36. Prove: $(\sin x / (1 + \cos x)) + ((1 + \cos x) / \sin x) = 2 \csc x$.

37. Prove: $(\tan x / (\sec x - 1)) - ((\sec x - 1) / \tan x) = 2$.

38. Prove: $(\sin \theta / (1 - \cos \theta)) - ((1 - \cos \theta) / \sin \theta) = 2 \cot \theta$.

39. Simplify: $(1 - \tan^2 x) / (1 + \tan^2 x)$.

40. Prove: $(1 + \sin x) / \cos x + \cos x / (1 + \sin x) = 2 \sec x$.

41. Evaluate $\sin 75°$ using trigonometric identities.

42. Prove: $(\sec x - \tan x)(\sec x + \tan x) = 1$.

43. Simplify: $\sin x / (1 - \cos x) + (1 - \cos x) / \sin x$.

44. Prove: $(1 - \sin x) / \cos x = \cos x / (1 + \sin x)$.

45. Find the value of $\tan 15°$ using identities.

46. Prove: $(1 + \tan^2 x) / (1 + \sec^2 x) = \cos^2 x$.

47. Simplify: $(\sin 2x) / (1 + \cos 2x)$.

48. Prove: $\sin^3 x + \cos^3 x = (\sin x + \cos x)(1 - \sin x \cos x)$.

49. Evaluate $\cos 75°$ using trigonometric identities.

50. Prove: $(\tan x + \cot x)^2 = \sec^2 x + \csc^2 x$.

13. BIOLOGY

1. Buy this copy {**Speed Writing In Improved Handwriting - Cursive writing - Book B (For Age 9+ Years) - Cursive handwriting practice book**} from **Amazon website** and Practice and complete it and bring it back to school.
2. Make an assignment on any topic from class 12 biology syllabus aligned with the **Scientific Method.**
3. Make an **Herbarium record file** collecting 10 plant specimens from your locality.

14. ART   SUBJECT: GEOGRAPHY (029)

Instructions:

i. This assignment is to be completed during the winter holiday.

ii. Take the help of a world map and India map. (Refer to the official NCERT textbook available online)

iii. Neatly locate and label the following features and learn them properly.

iv. Use separate maps for each topic.

v. Submit your assignment on the first day after the winter break.

Book I: Fundamentals of Human Geography

I.   Map items for identification on outline political map of the world:

Chapter Name	Transport, Communication and Trade
	Major seaports: i. Europe: -North Cape, London, Hamburg ii. North America: -Vancouver, San Francisco, New Orleans iii. South America: -Rio De Janeiro, Colon, Valparaiso iv. Africa: -Suez and Cape Town iv. Asia:-Yokohama, Shanghai, Hongkong, Aden, Karachi, Kolkata v. Australia: Perth, Sydney and Melbourne Major Airports: i. Asia: Tokyo, Beijing, Mumbai, Jeddah, Aden ii. Africa: -Johannesburg and Nairobi iii. Europe: -Moscow, London, Paris, Berlin and Rome iv. North America: -Buenos Aires and Santiago v. Australia: - Darwin and Wellington Inland Waterways: Suez Canal, Panama Canal, Rhine waterways and St Lawrence Seaways

Book II: India People and Economy

II.   Map items for locating and labelling on political outline map of India:

Chapter Name	
Population	• State with highest population density and state with lowest population density (2011)
Land resources and Agriculture	• Leading producing states of the following crops: a) Rice b) Wheat c) Cotton d) Jute e) Sugarcane f) Tea g) Coffee
International Trade	• International Airports: Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram and Hyderabad.

III. Read chapter number 12(**GEOGRAPHICAL PERSPECTIVES ON SELECTED ISSUES AND PROBLEMS**) from book II and note down the causes, consequences and effects of the different types of environmental pollution.

        a) Air pollution
        b) Water pollution
        c) Noise pollution

15. PE

UNIT 1: Management of Sporting Events
The planning of sports events includes:
a) Organising
b) Staffing
c) Directing
d) All of the above

Which committee prepares the budget of a sports event?
a) Technical committee
b) Finance committee
c) Transport committee
d) Ground committee

Knock-out tournament is also known as:
a) League tournament
b) Round robin
c) Elimination tournament
d) Combination tournament

In a league tournament, the total number of matches is calculated by:
a) N(N+1)/2
b) N(N–1)/2
c) N²
d) 2N

Which tournament is best when time is limited?
a) League
b) Knock-out
c) Combination
d) Round robin

Byes are given in which tournament?
a) League
b) Knock-out
c) Round robin
d) None

What is the formula for calculating byes?
a) Next power of 2 – number of teams
b) Teams – next power of 2
c) Teams × 2
d) Teams ÷ 2

The committee responsible for accommodation is:
a) Transport committee
b) Boarding & lodging committee
c) Ground committee
d) Finance committee

The first Olympic Games were held in:
a) Rome
b) Athens
c) London
d) Paris

The motto of Olympic Games is:
a) Faster, Higher, Stronger
b) Unity in diversity
c) Play fair
d) Sports for all

UNIT 2: Children & Women in Sports
Female athlete triad includes:
a) Obesity
b) Menstrual dysfunction
c) Hypertension
d) Diabetes

Which hormone is responsible for growth?
a) Estrogen
b) Testosterone
c) Growth hormone
d) Insulin

Motor development refers to:
a) Emotional growth
b) Intellectual growth
c) Development of movement
d) Moral growth

According to WHO, adolescence age is:
a) 8–16 years
b) 10–19 years
c) 12–20 years
d) 14–21 years

Which postural deformity affects the spine sideways?
a) Kyphosis
b) Lordosis
c) Scoliosis
d) Flat foot

Which deformity shows inward bending of knees?
a) Bow legs
b) Flat foot
c) Knock knees
d) Round shoulders

Bow legs is also known as:
a) Genu valgum
b) Genu varum
c) Knock knees
d) Flat foot

Physical activity helps in women by:
a) Improving bone density
b) Reducing stress
c) Hormonal balance
d) All of the above

Menarche refers to:
a) End of menstruation
b) Beginning of menstruation
c) Ovulation
d) Pregnancy

Which vitamin helps in calcium absorption?
a) Vitamin A
b) Vitamin B
c) Vitamin C
d) Vitamin D

UNIT 3: Yoga & Lifestyle Diseases

Diabetes is caused due to deficiency of:
a) Thyroxine
b) Insulin
c) Estrogen
d) Growth hormone

Which asana helps in back pain?
a) Shalabhasana
b) Vajrasana
c) Padmasana
d) Sukhasana

Which asana is helpful for obesity?
a) Bhujangasana
b) Tadasana
c) Paschimottanasana
d) All of the above

Lifestyle diseases are caused due to:
a) Physical inactivity
b) Unhealthy diet
c) Stress
d) All of the above

Hypertension means:
a) Low blood pressure
b) Normal blood pressure
c) High blood pressure
d) Blood cancer

Yoga improves flexibility by:
a) Strengthening muscles
b) Stretching muscles
c) Increasing fat
d) Reducing oxygen

Which pranayama is best for stress relief?
a) Kapalbhati
b) Anulom Vilom
c) Bhastrika
d) Suryabhedan

Meditation mainly improves:
a) Strength
b) Endurance
c) Concentration
d) Speed

Asthma mainly affects:
a) Heart
b) Lungs
c) Liver
d) Kidney

Pranayama relates to control of:
a) Body
b) Mind
c) Breath
d) Food

UNIT 4: Physical Education & Sports for CWSN

CWSN stands for:
a) Children With Special Needs
b) Children With Sports Needs
c) Creative Work Sports Network
d) None

ADHD is related to:
a) Vision
b) Attention
c) Hearing
d) Speech

Which disability affects hearing?
a) Visual impairment
b) Hearing impairment
c) Intellectual disability
d) Physical disability

Intellectual disability affects:
a) Muscles
b) Bones
c) Intelligence
d) Height

Special Olympics are for:
a) Physical disability
b) Intellectual disability
c) Visual impairment
d) Hearing impairment

Sports help CWSN by:
a) Improving confidence
b) Social integration
c) Physical fitness
d) All of the above

Paralympics are for:
a) Normal athletes
b) Women athletes
c) Disabled athletes
d) Children

Autism is a disorder of:
a) Muscles
b) Bones
c) Social behavior
d) Heart

Inclusive education means:
a) Separate schools
b) Equal education for all
c) Sports education only
d) Yoga education

Which game is suitable for visually impaired?
a) Football
b) Basketball
c) Goalball
d) Cricket

UNIT 5: Sports Nutrition

Carbohydrates are the main source of:
a) Vitamins
b) Energy
c) Minerals
d) Water

BMI stands for:
a) Body Mass Index
b) Body Muscle Index
c) Bone Mass Index
d) Balanced Mass Index

Proteins help in:
a) Energy production
b) Muscle growth
c) Hydration
d) Temperature control

Normal BMI range is:
a) 15–18
b) 18.5–24.9
c) 25–30
d) Above 30

Fats provide energy per gram:
a) 4 kcal
b) 7 kcal
c) 9 kcal
d) 12 kcal

Which vitamin is water soluble?
a) Vitamin A
b) Vitamin D
c) Vitamin E
d) Vitamin C

Dehydration is caused due to lack of:
a) Protein
b) Fat
c) Water
d) Vitamins

Sports drinks mainly provide:
a) Protein
b) Electrolytes
c) Fat
d) Fiber

Malnutrition means:
a) Excess nutrition
b) Balanced diet
c) Lack of nutrition
d) Overweight

Iron deficiency causes:
a) Obesity
b) Anemia
c) Diabetes
d) Asthma

UNIT 6: Test & Measurement

Test is used to measure:
a) Fitness
b) Skill
c) Performance
d) All of the above

BMI is calculated using:
a) Height only
b) Weight only
c) Height & weight
d) Age

Harvard step test measures:
a) Strength
b) Speed
c) Endurance
d) Flexibility

Sit and reach test measures:
a) Strength
b) Speed
c) Flexibility
d) Balance

50m run test measures:
a) Endurance
b) Speed
c) Strength
d) Agility

Standing broad jump measures:
a) Arm strength
b) Leg strength
c) Flexibility
d) Balance

Push-up test measures:
a) Leg strength
b) Arm & shoulder strength
c) Speed
d) Balance

Rikli and Jones test is for:
a) Children
b) Adults
c) Senior citizens
d) Athletes

Measurement means:
a) Collection of data
b) Evaluation
c) Comparison
d) Testing

Reliability of a test means:
a) Accuracy
b) Consistency
c) Validity
d) Objectivity

UNIT 7: Physiology & Injuries

Muscle fatigue occurs due to:
a) Oxygen excess
b) Lactic acid
c) Protein
d) Fat

Greenstick fracture is common in:
a) Adults
b) Women
c) Children
d) Athletes

Sprain is injury to:
a) Bone
b) Muscle
c) Ligament
d) Tendon

Strain is injury to:
a) Bone
b) Muscle
c) Ligament
d) Joint

RICE stands for:
a) Rest, Ice, Compression, Elevation
b) Run, Ice, Compression, Elevation
c) Rest, Injury, Care, Exercise
d) None

Oxygen debt occurs during:
a) Aerobic exercise
b) Anaerobic exercise
c) Rest
d) Sleep

Cardiac output is related to:
a) Heart
b) Lungs
c) Brain
d) Kidney

Warm-up helps to prevent:
a) Fatigue
b) Injury
c) Stress
d) Obesity

Cool-down helps in:
a) Increasing heart rate
b) Removing waste products
c) Increasing strength
d) Reducing oxygen

Blood pressure is measured using:
a) Thermometer
b) Spirometer
c) Sphygmomanometer
d) Stethoscope

UNIT 8: Biomechanics & Sports Psychology
Biomechanics deals with:
a) Mental health
b) Body movements
c) Nutrition
d) Injuries

Axis is an imaginary line around which:
a) Force acts
b) Body rotates
c) Energy flows
d) Muscles grow

Friction helps in:
a) Falling
b) Slipping
c) Movement control
d) Fatigue

Motivation increases:
a) Anxiety
b) Performance
c) Injury
d) Fatigue

Anxiety affects performance by:
a) Improving it
b) Reducing it
c) No effect
d) Increasing strength

Personality refers to:
a) Physical structure
b) Behavior pattern
c) Diet
d) Fitness

Reaction time is:
a) Time taken to think
b) Time between stimulus & response
c) Running time
d) Rest time

Stress can be reduced by:
a) Yoga
b) Meditation
c) Physical activity
d) All of the above

Coordination is the ability to:
a) Move fast
b) Use muscles together
c) Balance body
d) Jump high

Balance is classified into:
a) Static & dynamic
b) Speed & agility
c) Strength & endurance
d) Flexibility & power

UNIT 9: Training & Doping

Training is a process of:
a) Teaching
b) Conditioning
c) Competing
d) Resting

Blood doping increases:
a) Muscle size
b) Oxygen carrying capacity
c) Fat
d) Injury

Interval training improves:
a) Speed
b) Endurance
c) Strength
d) Flexibility

Ethics in sports means:
a) Cheating
b) Fair play
c) Winning at all costs
d) Aggression

Overtraining causes:
a) Fitness improvement
b) Fatigue
c) Strength gain
d) Speed gain

Circuit training improves:
a) Strength & endurance
b) Speed only
c) Flexibility only
d) Balance only

Doping means:
a) Legal medicine
b) Balanced diet
c) Use of banned substances
d) Exercise

Load in training refers to:
a) Exercise stress
b) Rest
c) Diet
d) Sleep

WADA stands for:
a) World Anti-Doping Agency
b) Women Athletic Development Authority
c) World Athletic Doping Association
d) None

Recovery is important for:
a) Injury
b) Adaptation
c) Fatigue removal
d) All of the above

UNIT 10: General Awareness

National Sports Day is celebrated on:
a) August 29
b) January 26
c) October 2
d) December 25

Khelo India program is launched to promote:
a) Education
b) Sports
c) Yoga
d) Health

Major Dhyan Chand was related to:
a) Cricket
b) Football
c) Hockey
d) Athletics

Yoga Day is celebrated on:
a) June 21
b) July 11
c) May 1
d) August 15

First Asian Games were held in:
a) India
b) China
c) Japan
d) Indonesia

Sports help in developing:
a) Discipline
b) Leadership
c) Team spirit
d) All of the above

Physical education improves:
a) Physical fitness
b) Mental health
c) Social skills
d) All of the above

Olympic flag has rings of:
a) 4 colors
b) 5 colors
c) 6 colors
d) 7 colors

Which award is highest in Indian sports?
a) Arjuna Award
b) Dronacharya Award
c) Khel Ratna
d) Padma Shri

Physical education is essential for:
a) Students
b) Athletes
c) Society
d) All of the above

****