

Holiday Homework

CLASS XII

Summer Break · Think. Create. Explore.

SUBJECTS INCLUDED

- | | | | |
|----|-----------------------|----|---------------------|
| 01 | History | 06 | Political Science |
| 02 | Geography | 07 | Physical Education |
| 03 | Economics | 08 | Applied Mathematics |
| 04 | English — Book Review | 09 | Painting |
| 05 | Computer Science | 10 | हन्दी |

History

History is one of the difficult subjects in schools. By studying into the past, we gain invaluable insights into the present and can better plan for the future. The history project work in the syllabus provide students the opportunity to study diverse themes and topics, enabling them to deepen their understanding of historical events and cultures.

Some of the intriguing project topics include:

- The Indus Valley Civilization: Archeological Excavations and New Perspectives
- The History and Legacy of the Mauryan Empire
- Exploring “Mahabharat”: The Great Epic of India
- Unraveling the History and Culture of the Vedic Period
- Studying Buddha Charita and its Significance
- A Comprehensive Study of Jainism throughout History
- Investigating the Bhakti Movement: Multiple Interpretations and Commentaries
- Exploring the Mystical Dimensions of Sufism
- Understanding the Global Legacy of Gandhian Ideas
- Analyzing the Architectural Culture of the Vijayanagar Empire
- Shedding Light on the Lives of Women in Mughal Rural Society
- Comparative Analysis of Land Revenue Systems Introduced by the British in India
- Examining the Revolt of 1857: Causes, Planning & Coordination, Leadership, Vision of Unity
- Exploring the Philosophy of Guru Nanak Dev and the Vision of Kabir
- Gaining Insight into the Indian Constitution and its Evolution.

Geography

Unit-1 · **Data – Its sources and compilation**

Unit-2 · **Data Processing**

Unit-3 · **Graphical Representation of Data**

Unit-4 · **Spatial Information Technology**

Map Work Practice

Practice map on the bases of given map PDF.

Economics

Each student have to choose one topic. The project must consist of 3500–4000 words.

- Micro and Small Scale Industries
- Food Supply Channel in India
- Contemporary Employment situation in India
- Disinvestment policy of the government
- Goods and Services Tax Act and its Impact on GDP
- Health Expenditure (of any state)
- Human Development Index
- Inclusive Growth Strategy
- Self-help group
- Trends in Credit availability in India
- Monetary Policy Committee and its functions
- Role of RBI in Control of Credit
- Government Budget & its Components
- Trends in budgetary condition of India
- Exchange Rate determination – Methods and Techniques
- Currency War – reasons and repercussions
- Livestock – Backbone of Rural India
- Alternate fuel – types and importance
- Sarva Shiksha Abhiyan – Cost Ratio Benefits
- Golden Quadrilateral- Cost ratio benefit
- Minimum Support Prices
- Relation between Stock Price Index and Economic Health of a Nation
- Waste Management in India – Need of the hour
- Minimum Wage Rate – Approach and Application
- Digital India- Step towards the future
- Rain Water Harvesting – A solution to water crisis
- Vertical Farming – An alternate way
- Silk Route- Revival of the past
- Make in India – The way ahead
- Bumper Production- Boon or Bane for the farmer
- Rise of Concrete Jungle- Trend Analysis



Economics

- Organic Farming – Back to the Nature
- Aatmanirbhar Bharat
- e-Rupee (e-₹)
- Sri Lanka's Economic Crisis
- Sustainable Development Goals (SDG's)
- Environmental Crisis
- Comparative Study of Economies (Maximum three economies)
- New Education Policy (NEP) 2020: A Promise for a New Education System
- G-20: Inclusive and Action Oriented
- Amrit Kaal: Empowered and Inclusive Economy
- Cashless Economy
- Any other newspaper article and its evaluation on basis of economic principles



English

Prepare a Project File with pictures. Your file must include the following sections:

01 **Cover page**

02 **Acknowledgement**

03 **Introduction of the Book**

04 **About the Author**

05 **Main Characters**

06 **Theme and Message**

07 **Personal Review**

08 **Conclusion**

Computer Science

Project File – Python Programs

Submit a project file containing 15 Python programs.

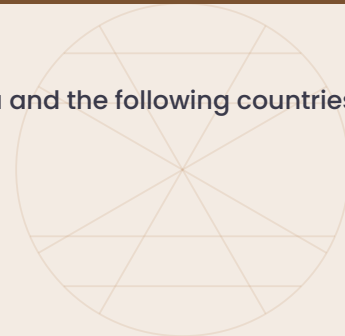


Coding Quality Evaluation



Political Science

Cover the negative as well as positive aspects of the relationship between India and the following countries:



- 1 Relationship between India and Russia And India and China
- 2 Relationship between India and Pakistan And India and Bangladesh
- 3 BRICS and SAARC
- 4 India's Nuclear Policy
- 5 UN Agencies - UNICEF, UNESCO, WHO
- 6 Pandemics: Covid 19- Its global impact (focus on worldwide cooperation and preparedness along with controversies (please collect newspaper clippings for the same)
- 7 Partition of India-Theory behind it and its legacy
- 8 Comparison between NITI AAYOG and Planning Commission and their contribution in India's Development.

Physical Education

Homework has to be done in Physical Education Practical Lab manual file only.

Topic 1 – Game of Your Choice

Football

Hockey

Volleyball

Basketball

Cricket

Kho-Kho

Kabaddi

- 1 Anyone game of your choice.
- 2 History of the game.
- 3 Rules and regulations of the game.
- 4 Measurement and Specifications of the game.
- 5 Fundamental skills of the game.
- 6 Terminologies of the game.
- 7 *Record (Olympic and World Record).
- 8 Five famous sports personality of the game, National and international.
- 9 Major tournaments and trophies related to game. Mention any five names.
- 10 Paste or draw diagram of your game, famous personalities images and trophies images.



Physical Education

Topic 2 – SAI Khelo India Fitness Test

The Sports Authority of India (SAI) introduced this battery of tests to assess the fitness levels of school students across India. It is divided into two age categories.

1. For Age Group 5–8 Years (Class 1–3):

Focuses on fundamental movement skills.

- (i) BMI: Body Mass Index (Height and Weight measurement).
- (ii) Flamingo Balance Test: To assess static balance on one leg.
- (iii) Plate Tapping Test: To assess speed and coordination of limb movement.

2. For Age Group 9–18 Years (Class 4–12):

Focuses on physical fitness components.

- (i) BMI: To check body composition.
- (ii) 50mtr. Dash: To measure explosive speed.
- (iii) 600m Run/Walk: To measure cardiovascular endurance.
- (iv) Sit and Reach: To measure flexibility of the lower back and hamstring.
- (v) Partial Curl Up: To measure abdominal strength and endurance.
- (vi) Push Ups (Boys) / Modified Push Ups (Girls): To measure upper body strength.

Paste or draw diagram of different test items.



Physical Education

Topic 3 – Yoga as Preventive Measure for Lifestyle Diseases

Lifestyle diseases covered:

Obesity

Diabetes

Hypertension

Asthma

Back Pain

- 1 Write Procedure for Asanas, benefits and contraindications for any four asanas for each lifestyle disease.
- 2 Paste pictures of Asanas.

– Physical Education and Sports Dept.



Applied Mathematics

Welcome to your summer project! This assignment is designed to help you bridge the gap between abstract mathematical concepts and real-world applications. Applied Mathematics is about solving problems that affect industries, nature, and society.

Project Instructions

Task: Select any one topic from the list provided below.

Format: The project must be presented in a neatly bound Project File.

Structure: Your project should include the following sections:

- Title Page: Topic name, your name, class/section, and roll number.
- Certificate & Acknowledgement.
- Index.
- Introduction: Brief overview of the mathematical concept involved.
- Data Collection/Methodology: How you gathered your information (surveys, websites, experiments).
- Analysis: Mathematical calculations, graphs, tables, or logical reasoning.
- Conclusion: What did you learn? What are the practical implications?
- Bibliography: Sources used (websites, books, newspapers).



$$f(x)dx$$

$$ax^2 + bx + c$$

Applied Mathematics

Category A: Pure Theory & Logic

- i) Cryptography: The use of prime numbers in coding and decoding messages (RSA encryption).
- ii) Number Theory: Exploring prime numbers and advanced divisibility rules.
- iv) Set Theory: The cardinality of a set and the different orders of infinity.
- v) Number Systems: Comparing sets of Natural, Rational, and Real numbers.
- vi) Logical Visualization: Use of Venn diagrams in solving practical, real-world logic problems.
- viii) Mathematical Logic: Testing the validity of statements and framing complex truth tables.

Category B: Finance & Business Math

- iii) Financial Logarithms: Using logs for interest, present/future value, and profit/loss with large values.
- xx) Inventory Management: Analyzing sales data of Kirana shops to determine optimal stock levels for profit maximization.
- xxi) Stock Markets: Tracking and analyzing stock price movements over a specific period.
- xxii) Actuarial Science: How insurance firms use data for risk assessment.
- xxiii) Market Volatility: Mathematical patterns involved in predicting stock market crashes.



$$f(x)dx$$

$$ax^2 + bx + c$$

Applied Mathematics

Category C: Data Analysis & Statistics

- x) Linguistic Demographics: Visit the Census of India and depict language data in pictorial forms (Pie charts/Bar graphs).
- xi) Consumer Behavior: Survey friends on monthly spending (travel, mobile, movies) and draw conclusions.
- xii) Media Analysis: Comparing newspaper graphical data with your own independent statistical analysis.
- xiii) Urbanization: Analyzing the positive and negative influences of population migration data.
- xv) Sports Analytics: Analyzing the career graph (batting/bowling averages) of a sportsperson to find their "Peak Year."
- xxiv) Psephology: The mathematics behind predicting election outcomes through exit polls.
- xxv) Vital Statistics: Using data to predict and analyze infant mortality rates.

Category D: Environment & Nature

- vii) Fibonacci Sequence: Exploring its history and its frequent appearance in nature (flowers, shells, galaxies).
- ix) Functional Analysis: Investigating graphs of functions and their real-world properties.
- xiv) Meteorological Study: Comparing 30 days of temperature/humidity data with the same period from the previous year.
- xvi) Urban Safety: Correlating vehicle registration data with local pollution levels and accident rates.
- xvii) Agricultural Math: Visiting a village to study the effect of rainfall and temperature on crop yields.
- xviii) Rainfall Prediction: Using 10–15 years of data for a specific week in Delhi to predict this year's rainfall.
- xix) Monsoon Modeling: Predicting monsoon patterns based on historical climate data.

Note: Use clear, labeled diagrams and ensure that all statistical data is accurate. If you are conducting a survey (Topic xi or xx), include a blank copy of your questionnaire in the appendix of your file.



$$f(x)dx$$

$$ax^2 + bx + c$$

Painting

Create a Mythological Modern Art piece as described below:



Theme:

Mythological Modern Art

Medium & Canvas:

Acrylic colours on canvas · Size: 24 × 36 inches



ग्रीष्मकालीन अवकाश गृहकार्य सत्र: 2026-27

प्रिय विद्यार्थियों, कक्षा 12 आपके करियर का महत्वपूर्ण पड़ाव है। इस गृहकार्य को बोर्ड परीक्षा () के 'अभिव्यक्ति और माध्यम' तथा साहित्य ('अंतरा भाग 2' और 'अंतराल भाग 2') के पैटर्न को ध्यान में रखकर तैयार किया गया है। कृपया नमिनलखिति नरिदेशों का पालन करते हुए कार्य पूरा करें।

नरिदेश:

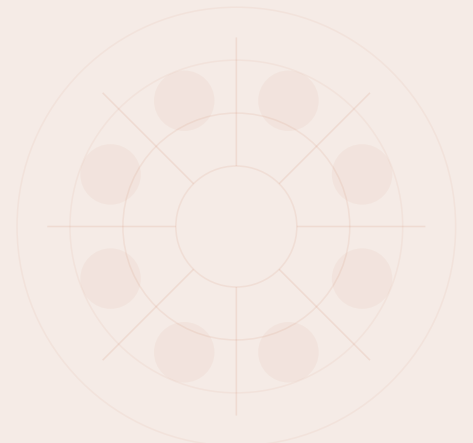
- भाग 1 (प्रश्न संख्या 1) सभी विद्यार्थियों के लिए अनविर्य () है।
- भाग 2 (प्रश्न संख्या 2, 3 और 4) में से किसी एक वकिल्प का चयन करके कार्य पूरा करें।

भाग 1: अनविर्य कार्य

1. रचनात्मक आलेख / फीचर लेखन

नीचे दिए गए वषियों में से किसी एक पर 150-200 शब्दों में एक रचनात्मक आलेख या फीचर लखिए:

- (क) कृत्रमि बुद्धमिता (): वरदान या अभशाप
- (ख) बदलती जीवनशैली और युवाओं में बढ़ता तनाव



हन्दिी

भाग 2: वैकल्पिके कार्य (कोई एक चुने)

यवकिल्प 1: परयोजना कार्य ()

पाठ्यक्रम (अंतरा भाग 2) में शामिल किसी एक कवधिया लेखक (जैसे- जयशंकर प्रसाद, सूर्यकांत त्रिपाठी 'नरिला', या फणीश्वरनाथ रेणु) पर एक सचत्तर परयोजना फाइल तैयार करे। इसमें उनका जीवन परचिय, प्रमुख रचनाएँ और साहित्यिक विशेषताएँ शामिल होनी चाहए।

वकिल्प 2: जनसंचार और रपिर्तगि

एक पत्रकार की भूमिका नभिते हुए अपने शहर या मोहल्ले की किसी प्रमुख समस्या (जैसे- जलभराव, यातायात जाम, या प्रदूषण) पर एक संक्षिप्त रपिर्त तैयार करे। साथ ही संबंधित तस्वीरे () या अखबार की कटगि भी चपिकाएं।

वकिल्प 3: साहित्यिक विश्लेषण

पाठ्यपुस्तक 'अंतराल भाग 2' या 'अंतरा भाग 2' की किसी एक कहानी/अध्याय का सार अपने शब्दों में लिखें। साथ ही, यह भी स्पष्ट करे कि उस कहानी की वर्तमान समाज में क्या प्रासंगिकता () है।

सामान्य नर्दिश:

- सभी कार्य 4 साइज शीट या प्रोजेक्ट फाइल में अत्यंत स्वच्छ लिखावट में करे।
- मौलिकता () का विशेष ध्यान रखे, इंटरनेट से सीधे कॉपी करने से बचे। यह आपके आंतरिक मूल्यांकन का हस्सा है।
- गृहकार्य वदियालय खुलने के प्रथम दविस जमा करना अनवार्य है।

— हन्दिी वभाग

