

Rainy Vacation 2026 Home work

Mathematics Class 12

Instructions: Solve all questions neatly in a separate notebook.

Chapters 1–5 (Relations & Functions, Inverse Trigonometric Functions, Matrices, Determinants, Continuity & Differentiability)

- Day 1–2: Relations & Functions – attempt 20 short answer questions from R.S. Aggarwal.
- Day 3–4: Inverse Trigonometric Functions – solve 15 mixed problems (prove + evaluate).
- Day 5–7: Matrices – practice 25 problems (addition, multiplication, transpose, inverse).
- Day 8–10: Determinants – 20 problems (properties, evaluation, application in solving equations).
- Day 11–15: Continuity & Differentiability – 30 problems (limits, derivatives, chain rule, higher order).
- Day 16–20: Mixed revision – combine 10 problems from each chapter + 1 mini project (Matrix application in daily life).

Chapters 10–12 (Vector Algebra, 3D Geometry, Linear Programming) (Days 21–35)

- Day 21–23: Vector Algebra – 20 problems (addition, dot product, cross product).
 - Day 24–27: 3D Geometry – 25 problems (equations of line/plane, distance problems).
 - Day 28–30: Linear Programming – 15 problems (graphical solutions).
 - Day 31–35: Mixed practice – 10 problems from each chapter + project work (e.g., optimize school resources using linear programming).
- ◇ Phase 3: Exam-Oriented Practice (Days 36–50)
- Day 36–40: Solve previous year CBSE board questions (pick from R.S. Aggarwal's solved papers section).
 - Day 41–45: Practice case-study & assertion-reasoning.
 - Solve question paper of Half-Yearly exam 2026.

▣ Project Work (Any two of following)

1. Matrices in Daily Life: Represent school timetable, transport schedules, or business production.
2. Vectors in Physics: Analyse forces acting on a body using vector representation.
3. Linear Programming: Optimize cost/profit in a small business model.
4. Determinants in Geometry: Verify collinearity of points using determinants.

Handwritten signature and date:
19/6/26

DEPARTMENT OF PHYSICS

Rainy-Vacation Homework – 2026

Class 7th

To study & solve the NCERT Textbook (Curiosity : Textbook of Science for Class 7th) exercise from the following chapters:-

1. Electricity : Circuits & their Components
2. Heat Transfer in Nature

Class 8th

To study & solve the NCERT Textbook (Curiosity : Textbook of Science for Class 8th) exercise from the following chapters:-

1. Pressure, Winds, Storms & Cyclones
2. Light : Mirrors & Lenses

Class 9th

To study & solve the NCERT Textbook (Exploration : Textbook of Science for Class 9th) exercise from the following chapters:-

1. How Forces Affect Motion
2. Work, Energy & Simple Machines

Class 10th

To solve the Physics questions of at least 5 previous years CBSE board question papers of Science, asked from the following chapters:-

1. Light – Reflection & Refraction
2. Human Eye & Colourful World
3. Electricity

Link:- www.cbse.gov.in/cbsenew/question-paper.html

Class 11th

To study & solve the NCERT Textbook exercise & NCERT Exemplar Problems from the following chapters:-

1. Units & Measurements
2. Motion in a Straight Line
3. Motion in a Plane
4. Laws of Motion
5. Work, Energy & Power
6. System of Particles & Rotational Motion
7. Gravitation

Class 12th (Science)

To solve the questions of at least 5 previous years CBSE board question papers of Physics, asked from the following chapters:-

1. Electric Charges & Fields
2. Electrostatic Potential & Capacitance
3. Current Electricity
4. Moving Charges & Magnetism
5. Electromagnetic Induction
6. Ray Optics & Optical Instruments

Link:- www.cbse.gov.in/cbsenew/question-paper.html

&

To prepare an 'Investigatory Project' as per the CBSE curriculum.

Prasad
18-06-26

NETARHAT AWASIYA VIDYALAYA, NETARHAT

Biology Homework for Rainy Vacation, 2026

For Class-7-

1. Memorize scientific names of 20 common plants and 20 common animals.
2. List name of 10 biologist and briefly write about their contributions in the field of biological science.
3. Read chapter no. –9(Life processes in animals) of ncert class 7 science book (Curiosity). Solve all the questions given in the end of that chapter.

For Class-8-

1. Memorize scientific names of 20 common plants and 20 common animals.
2. Observe environment around your home and prepare a project report or write essay(in 1000 words) on how human activities affect our environment.
3. Read chapter no. – 12 (How nature works in harmony) of ncert class 8 science book (Curiosity). Solve all the questions given in the end of that chapter.

For Class-9-

1. Talk to elder members of your family and try to know their views regarding changing environmental conditions and its effect on our daily life. List views of your father, mother, grandfather, grandmother, maternal grandmother, maternal grandfather etc.
2. List and Memorize name of water and fat soluble vitamins, its chemical name, It's food source and disease due to its deficiency.
3. chapter no. 12(Patterns in Life: Diversity and Classification) of class 9ncert science book (Exploration). Solve all the questions given in the end of that chapter.

For Class-10-

1. Read chapter no. 7 (How do organisms reproduce) of class 10 ncert science book. Solve all the questions given in the end of that chapter.
2. Visit agriculture fields near your home. Talk to farmers and prepare lists of crop being cultivated, fertilizers and manure being used, types of irrigation system, any other methods (traditional or modern) farmers are using in crop production.

For Class-11-

1. Collect different types of flowering plants from your locality. Cut stem of about 15 cm length, dry for few hours and preserve it under a book. After winter vacation discuss its morphological structures with your teacher.
2. Observe, identify and find out different types of insects. butterfly, etc and its role in the process of pollination. List them all.
3. Read chapter no. 12 (Respiration in plants) of class 11ncert biology book. Solve all the questions given in the end of that chapter.

For Clas – 12 –

1. Read chapter no. 11 (Organisms and populations) of class 12ncertbiology book. Solve all the questions given in the end of that chapter.

Department of Biology

Netarhat Awasiya Vidyalaya

sub - CHE

Rainy vacation homework for class 12

Write practical notes on

1. To analyse the given salt for a acid and basic radicals Salt A
2. To identify the functional group in the given organic compound. (carboxylic acid, alcohol)
3. Explain valence bond theory of coordination compound
4. Explain crystal field theory of coordination compound

Complete the exercises of following chapters

5. Solution
6. Electrochemistry
7. Chemical kinetics
8. Haloalkanes and Haloarenes
9. Biomolecules
10. d and f block

20/06/26
HOD Chemistry

NETARHAT AWASIYA VIDYALAYA, NETARHAT
DEPARTMENT OF COMPUTER SCIENCE
HOLIDAY HOME WORK (Rainy Vacation)

Class: 8

1. Prepare fair notebook of all topics taught/discussed in the classroom.
2. Write at least five features of MS-Excel.
3. Write short notes on Watermark, Bookmark, Header and Footer, inserting image in context of MS-Word.

Class: 9

1. What is mail merge? Write down the steps to create labels to paste on wedding cards.
2. What is the use of referencing in Spreadsheet Software? Explain different types of Referencing.
3. Explain Workspace views available in OpenOffice Calc.
4. Write down the steps to add slide transition in your presentation.

Class: 10

1. Explain how to create new style? Or How can we create our own styles?
2. Define template. What is the advantage of using templates?
3. Differentiate between Relative Hyperlinks and Absolute Hyperlinks with examples.
4. What is a Macro? Explain the process of recording and running a macro in OpenOffice Calc?
5. What is a DBMS? Explain any four major advantages of using a Database Management System over a traditional file system.
6. Differentiate between Forms and Reports. What are the two ways to create a table in OpenOffice Base?

Class: 12

1. Write and prepare Practical Notebook of practicals date wise (to be submitted).
2. Explore a project work for final submission for CBSE Board Exam. Draw all relevant flowcharts, DFDs and prepare algorithms concerned.
3. Solve last five years previous board exam question papers.



Subject Teacher

Dept. of Computer Science

Netarhat Awasiya Vidyalaya, Netarhat

NETARHAT AWASIYA VIDYALAYA, NETARHAT

AGRICULTURE DEPARTMENT

HOME WORK JUNE 2026

CLASS -VII

Write and Remember botanical name of the followings–

निम्नलिखित के वानस्पतिक नाम लिखें एवं याद करें

- (a) Ten Vegetables (दस सब्जी) (b) Ten Fruits (दस फल)
(c) Ten Flowers (दस फूल) (d) Ten Medicinal plants (दस औषधीय पौधे)
(e) Ten Ornamental plants (दस सजावटी पौधे) (e) Ten Cereals (दस अनाज)
-

CLASS -VIII

Prepare fair notes for Mango and Rose cultivation.

Write in details- Plants propagation and its different method with diagram.

CLASS – IX

Prepare chapter end question-answers of unit 1, 2 and 3

CLASS – X

(1) Prepare a fair notes and chapter end question-answers of the following chapters –

- (a) Agricultural production and management.
(b) Production and management of Horticultural crops.
(2) Learn in details- Chapter no 3 and 4.
-

CLASS – XI

(1) Learn and prepare a fair note of the following chapters –

- (a) Scope and Importance.
(b) Physical Environment.
(c) Agriculture Economics – Package and cultivation practices of Rice, Wheat, Mango, Potato, Pea, Soybean, Jute, Sugarcane, Rose and Marigold.
-

CLASS – XII

(1) Prepare a fair notes of the following chapters –

- (a) Advance crop production.
(b) Organic Farming.
(c) Subsidiary enterprises of agriculture.
(2) Solve at least 05 full syllabus Sample paper.

Mamta Kumari

(Mamta Kumari) 18/06/26

Agriculture Instructor
Netarhat Awasiya Vidyalaya

NETARHAT AWASIYA VIDYALAYA, NETARHAT
DEPARTMENT OF ENGLISH
READING AND WRITING COMPETITION, 2026
SENIOR GROUP (9 to 12)

A. TOPICS FOR ESSAY WRITING

- The Impact of AI on the Future of Education
- Pros and Cons of Online Learning vs. In-Person Learning
- The Role of Social Media in Shaping Teenagers' Worldviews
- Climate Change and Its Effects on Future Generations
- Should Schools Teach Practical Life Skills (like Budgeting)?
- The Importance of Raising Mental Health Awareness
- Plastic: Boon or Curse to the Environment?
- The Significance of Sports and Exercise in Student Life
- Impact of Fast Fashion on the Environment
- Road Safety Awareness: The Need of the Hour
- The Day Technology Stopped Working Worldwide
- A Letter from the Future Changes Everything
- Discovering a Hidden Talent That Changes Your Life
- A Life-Changing Summer Adventure
- A Secret Society in the High School

B. POEM & STORY WRITING COMPETITION (Word limit: 250 - 300 words)

Option 1: Classic + Open-ended

*Write a short story based on your own imagination.

_Your story can be about any theme — adventure, mystery, friendship, or fantasy. Give it a suitable title and let your creativity flow.

Option 2: Personal touch

"The Day I Became the Hero of My Own Story"

_Weave an original tale where you are the main character. It can be real, exaggerated, or completely fictional — but it should be yours.

Option 3: For rainy vacation theme

"An Unexpected Adventure During the Rainy Vacation"

_Imagine you're on your rainy vacation and something unexpected happens. Craft an original story describing what happened next.

Option 4: Inspiring

"If I Could Write My Future, This Is How the Story Would Go"

Pen down an original story about a dream, goal, or moment from your imagined future. Make it vivid and personal.

Note: 1) submit the topic till 20/08/2026

2) Plagiarism of any kind will not be accepted

3) Judging criteria: Creativity, plot, language, and title.

Rich: Hemu
19/08/26
(H.O.D English)

[Signature]
(Principal) *19/08/26*

NETARHAT AWASIYA VIDYALAYA, NETARHAT
DEPARTMENT OF ENGLISH
READING AND WRITING COMPETITION, 2026
SENIOR GROUP (9 to 12)
ARTICLE WRITING COMPETITION

Social & Current Issues

1. Social Media: Boon or Bane for Teenagers?
2. The Impact of Artificial Intelligence on Future Jobs
3. Climate Change: Whose Responsibility Is It?
4. Online Learning vs Classroom Learning — Which Works Better?
5. Mental Health Matters: Breaking the Stigma in Schools

Environment & Sustainability

6. Plastic-Free Schools: A Dream or a Possibility?
7. Water Conservation — Every Drop Counts
8. Should Fast Fashion Be Banned to Save the Planet?
9. The Role of Youth in Fighting Global Warming
10. My Vision for a Green India by 2047

Personal Growth & Values

11. The Power of Reading in the Digital Age
12. Failure Is the Stepping Stone to Success — Do You Agree?
13. Time Management: The Skill Every Student Needs
14. Is Academic Pressure Killing Creativity?
15. Kindness Costs Nothing But Means Everything

Technology & Innovation

16. Are Smartphones Making Us Smart or Lonely?
17. Space Exploration: Waste of Money or Gateway to the Future?
18. Cyberbullying — How Can Students Fight Back?
19. Should There Be an Age Limit for Using Social Media?
20. The Future of Education with ChatGPT & AI Tools

Light + Creative Angles

21. If I Were the Education Minister for a Day
22. A Day Without Internet — Chaos or Calm?
23. Sports Should Be Compulsory in Every School — Agree or Disagree?
24. My Dream Vacation and What It Taught Me
25. Books vs Movies: Which Tell Stories Better?

- Note:** 1) submit the topic till 20/08/2026
2) Plagiarism of any kind will not be accepted
3) Judging criteria: Creativity, plot, language, and title.

Aish Khan
19/06/26
(H.O.D English)

Netarhat Awsiya Vidyalaya

Che
19/06/26
(Principal)

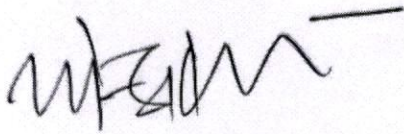
Netarhat Awsiya Vidyalaya

कक्षा-ग्यारह

1. वितान भाग-1 के पाठ भारतीय गायिकाओं में बेजोड़: लता मंगेशकर, आलो-आँधारि और गलता लोहा के अंत दिए गए सभी प्रश्नों के उत्तर लिखें।
2. निम्नलिखित विषयों पर रचनात्मक लेख लिखें
'स्मार्टफोन की स्क्रीन और खोता हुआ बचपन'
रविवार का दिन और आलस्य
अचानक आई मूसलाधार बारिश और नेतरहाट
3. अपने क्षेत्र में बढ़ते साइबर अपराध पर चिंता व्यक्त करते हुए तथा पुलिस गश्त बढ़ाने का अनुरोध करते हुए जिला पुलिस अधीक्षक को एक शिकायती पत्र लिखिए।
4. प्रेमचंद और कबीर का साहित्यिक परिचय लिखें।

कक्षा-बारह

1. वितान भाग-2 के पाठ सिल्वर वैडिंग, जूझ और अतीत में दबे पाँव के अंत दिए गए सभी प्रश्नों के उत्तर लिखें।
2. सूर्यकांत त्रिपाठी 'निराला' और फणीश्वरनाथ 'रेणु' का साहित्यिक परिचय लिखें।
3. निम्नलिखित विषयों पर रचनात्मक लेख लिखें।
मेरे कमरे की खिड़की से बाहर का नजारा
जब घर में अचानक बिजली चली गई
शहर की सुबह बनाम गाँव की सुबह
4. आपके क्षेत्र में नियमित रूप से बिजली कटौती की समस्या हो रही है। इससे छात्रों की पढ़ाई और आम जनजीवन प्रभावित हो रहा है। इस समस्या को उठाते हुए किसी प्रतिष्ठित समाचार पत्र के संपादक को पत्र लिखिए।



अध्यक्ष (हिन्दी विभाग)

नेतरहाट आवासीय विद्यालय, नेतरहाट

परियोजना कार्य (जून - 2026)

कक्षा - 12

विषय - इतिहास

1. निम्न विषयों में से किसी एक पर 1500 शब्दों की परियोजना रिपोर्ट तैयार कीजिए:

Prepare a project report of about 1500 words on any one of the following topics:

(A) हड़प्पा सभ्यता और आधुनिक नगर नियोजन (Harappan Civilization and Modern Urban Planning)

(B) भक्ति आंदोलन और भारतीय समाज (Bhakti Movement and Indian Society)

2. अपने जिले या क्षेत्र के किसी ऐतिहासिक स्थल का अध्ययन कर एक विस्तृत परियोजना रिपोर्ट बनाइए.

Prepare a project on any historical site of your district or region.

3. नेतरहाट क्षेत्र का इतिहास एवं सांस्कृतिक महत्त्व को उल्लेखित करते हुए एक विस्तृत परियोजना रिपोर्ट बनाइए.

Prepare a comprehensive project report on the historical background and cultural significance of the Netarhat region.

4. (i) "Bricks, Beads and Bones" से किसी स्रोत का अध्ययन कर उससे संबंधित 10 प्रश्नों के उत्तर लिखिए।

Study any one source from the chapter "Bricks, Beads and Bones" and answer 10 questions based on that source.

(ii) "Kings, Farmers and Towns" अध्याय के किसी स्रोत का विश्लेषण कीजिए।

Analyze any one source from the chapter "Kings, Farmers and Towns."

(iii) "Bhakti-Sufi Traditions" अध्याय के किसी स्रोत के आधार पर 250 शब्दों की टिप्पणी लिखिए।

Write a 250-word commentary based on any one source from the chapter "Bhakti-Sufi Traditions."

Note :-परियोजना की रूपरेखा (Format)-

1. आवरण पृष्ठ (Cover Page) 2. प्रमाण-पत्र (Certificate) 3. आभार (Acknowledgement) 4. अनुक्रमणिका (Index) 5. भूमिका (Introduction) 6. मुख्य विषय-वस्तुचित्र, मानचित्र 7. निष्कर्ष (Conclusion) 8. संदर्भ-सूची (Bibliography)

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18.06.2026

NETARHAT AWASIYA VIDYALAYA  
DEPARTMENT OF GEOGRAPHY(वर्षावकाश गृह कार्य 2026)

CLASS – 12th

SUBJECT –GEOGRAPHY

Q.1.Explain about retail trading services.

(फुटकर व्यापार सेवा को स्पष्ट कीजिए।)

Q.2.Explain about quaternary services.

(चतुर्थ सेवाओं का वर्णन कीजिए।)

Q.3.Discuss the significance and growth of the service sector in modern economic development.

(परिवहन एवं संचार सेवाओं की सार्थकता को विस्तारपूर्वक स्पष्ट कीजिए।)

Q.4.Discuss the significance of transport and communication services.

(आधुनिक आर्थिक विकास में सेवा सेक्टर की सार्थकता और वृद्धि की चर्चा कीजिए।)

Q.5.Explain about problems of Indian Agriculture.

(भारतीय कृषि की समस्याओं की व्याख्या कीजिए।)

Q.6.What are the different types of environmental problems of land resources in India? Explain.

(भारत में भूसंसाधनों की विभिन्न प्रकार की पर्यावरणीय समस्याएँ कौन-सी हैं? व्याख्या कीजिए।)

Q.7.Show the following in the outline map of India.

(major sea ports- Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia)

Q.8. Show the following in the outline map of India.

(major International Air Port- Ahmedabad, Mumbai, Bangaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram, Hyderabad)

Q.9. Show the following in the outline map of World.

(major sea ports- London, San Francisco, Hong kong, Aden, Karachi, Perth, Sydney, Colon, Yokohama, Shanghai)

Q.10. Show the following in the outline map of World.

(major Airports- Tokyo, Beijing, Johannesburg, Moscow, Paris, Chicago, Santiago, Mexico City, Buenos Aires, Santiago)

(Use separate maps for each map work) (10)

*Bunni*

# NETARHAT AWASIYA VIDYALAYA

Rainy Vacation Home Work – 2026

## 12<sup>th</sup> Political Science

1. Write a note on partition of India. What are the reasons behind it what is the current situation of Democracy in Pakistan and Bangladesh ?

भारत विभाजन पर एक नोट तैयार करें. विभाजन के पीछे क्या कारण थे ?  
पाकिस्तान और बांग्लादेश में लोकतंत्र का क्या स्वरूप है ?

2. Collect all the news of Rajya Sabha Elections 2026. Write the new Rajya Sabha MPs of Jharkhand

राज्य सभा चुनाव 2026 पर समाचारों को इक्कठा करें. झारखण्ड से नए राज्य सभा सांसदों के नाम लिखें.

3. Collect some information about NITI Aayog reports of Education 2026.

नीति आयोग के बारे में जानकारी इक्कठा करें. शिक्षा से सम्बंधित रिपोर्ट पर चार्ट पेपर पर उनके आकड़ों को प्रदर्शित करें.

4. How Internet can be used during rainy vacation for reading e-books and connecting political news around world ?

ई-बुक्स पढ़ने और दुनिया भर के राजनीतिक समाचारों से जुड़े रहने के लिए हम इन्टरनेट का उपयोग छुट्टियों में कैसे कर सकते हैं ?

5. Identify any two aspects of India's foreign policy that you would like to retain and two that you would like to change. If you were to become a decision maker. Give reasons to support your position.

भारत की विदेश नीति के किन्ही दो पहलुओं की पहचान करें जिन्हें आप बनाए रखना चाहते हैं और यदि आप एक निर्णय निर्माता बनना चाहते हैं तो आप अपना पक्ष कैसे रखेंगे ?

**NETARHAT AWSIYA VIDYALAYA**

**NETARHAT**

**Rainy Vacation Homework 2026 – Economics**

**Class 12<sup>th</sup>**

Subject: Introductory Macroeconomics & Indian Economic Development

**Part A: Assignment Work**

1) Explain the following:

- a) GDP and GNP
- b) Revenue Deficit and Fiscal Deficit
- c) Balance of Payments
- d) Foreign Exchange Rate
- e) Discuss the role of the Reserve Bank of India in controlling inflation.

2) Explain the major economic reforms introduced in India in 1991.

**Part B: Research Project**

1) Topic: "India's Economic Growth and Employment Trends"

Instructions:-

Collect data for the last 5 years on:

- GDP Growth Rate
- Unemployment Rate
- Present the data in tabular form.
- Draw suitable graphs.
- Analyze the relationship between growth and employment.
- Write a conclusion (200–250 words).

*Pawia Singh*  
20/6/26