

Bishop Scott Girls' School

**Affiliated to CBSE, New Delhi(Up to +2)
Brahmpur, Jaganpura, By-Pass, Patna-27**



SUMMER HOLIDAY HOMEWORK

**CLASS -X
(Session 2026-27)**

DATE OF SUBMISSION: 18.06.2026

Holiday homework for summer vacation class X

Dear Parents

As we come to the end of a highly successful month and half, I wanted to thank you for all your support. We have curated a Holiday Homework for our students that will keep them busy for some hours of the day. Please do encourage the children to spend some time of their day completing the holiday homework and to revise the content that was delivered to them in April and May. This way they will come back refreshed and well organised for school when it reopens. The holiday homework assigned carries marks and grades which are part of the first term assessments and are reflected in the progress report.

Kindly make sure that the students finish the tasks assigned to them and submit them on the day of school reopening i.e. 18.06.2026. The holiday homework will be marked.

I wish you an abundance of joy, laughter, and love this summer with your family.

Thank You

Regards
Bishop Scott Girls' School

ENGLISH (184)

1. Write a reply letter from God to Lencho
 - (a) Address his complaint
 - (b) Explain the missing money
 - (c) Give him advice on faith and trust
2. Why did Lencho have complete faith in God but not in humans? What does this say about human nature?
3. Rewrite the ending of the story 'A letter to God' What if Lencho found out the truth? How would the story change?
4. Write a short paragraph on 'A small moment that changed my day'.
5. What if the poet had ignored the falling snow? Would his mood have changed? What does this tell us about awareness in life?
6. Tricki visits the zoo with his mistress. He meets the tiger stalking the cage. Tricki decides to interview him. You can begin like this:

Tricki: Good morning Mr. Tiger what's your good name?
Tiger: I was known as Sher Khan when I roamed freely in the jungle.....

Complete this interview taking cues from the poem 'Tiger in the zoo'.
7. Imagine Fire and Ice as characters, create a short dialogue where
 - a. Fire argues it is more dangerous
 - b. Ice defends its power
8. Imagine you are present at Mandela's inauguration. Write a diary entry expressing your feelings and observations in 120 words.
9. Read TEN news articles from newspapers or magazines. Cut the news and paste the article in your notebook Give your analysis in 80 words of each.
10. Take a random picture of any scenery like
 - a. Sunrise
 - b. Full moon night
 - c. Trees with fruit
 - d. Small children playing or anything of your interest.

Paste this picture in your notebook. Write why you chose to click that picture.
11. The following are 10 idioms. Find out their meaning and use them in sentences.
 - a. a blessing in disguise
 - b. break the ice
 - c. spill the beans
 - d. in hot water
 - e. cost an arm and a leg
 - f. a storm in a teacup
 - g. on cloud 9
 - h. in sixes and sevens

- i. bite more than you can chew
- j. in the doldrums

PORTFOLIO

1. Make a Time Table for the whole year to study English. The whole syllabus. Plan this out properly. Use colours, emoji, cartoons, stickers, etc.
2. Read an English Novel of your choice. Classic or Motivational. Few examples
 - a. Jane Eyre
 - b. To Kill a Mocking Bird
 - c. Up from Slavery
 - d. The Hound of Baskerville
 - e. Ikigai
 - f. The Monk who sold the Ferrari
 - g. Alchemist

Write a short review for the same. Use pictures and highlight the main characters.

3. Write a short story 'A Day without modern gadgets including mobile phones or Wi Fi.
4. Your family is planning a trip to some exotic place. They have asked you to plan the trip. Prepare a detailed itinerary for at least 3 places. (For this research at least 3 holidays destination: food, culture, places to visit, etc.)
5. "Baby seagull was afraid to take a plunge into the unknown. We all are afraid to start something new as we are afraid to fail, afraid to fall."

Write down about such an experience in about 120 words. Compare your experience with 'His first flight'. E.g. Learning to ride a bicycle, bike, to swim, to cook etc.

HINDI

1. आप ग्रीष्मावकाश में कहीं पहाड़ी क्षेत्र में घूमने गए हैं, वहां के दृश्यों का वर्णन करते हुए, एक यात्रा वृत्तान्त तैयार कीजिए।
2. ध्वनि प्रदूषण की समस्या से अवगत कराते हुए नगर योजनाधिकारी को एक ईमेल लिखिए।
3. विद्यालय के प्रधानाचार्या की ओर से विद्यार्थियों को अनुशासन भंग न करने की चेतावनी देते हुए एक सूचना लिखिए।
4. आप किसी पर्यटन स्थल पर घूमने गए हैं। वहां के स्थानीय निवासी से घूमने वाली जगह की पूरी जानकारी लेते हुए उससे होने वाले संवाद को लिखिए।
5. सावधानी हटी, दुर्घटना घटी। कहावत के आधार पर एक अनुच्छेद लिखिए।
6. कॉलेजों में होने वाली रैगिंग की रोकथाम करने हेतु भारत सरकार द्वारा राज्य सरकार को पत्र लिखिए।
7. आप अपने विद्यालय के छात्र छात्राओं के साथ समाज सेवा के लिए जाना चाहते हैं। इस कार्यक्रम हेतु अनुमति मांगते हुए अपने पिता को एक पत्र लिखिए।
8. प्लास्टिक की दुनिया इस विषय पर एक अनुच्छेद तैयार कीजिए।

9. निम्नलिखित सरल वाक्यों को मिश्र वाक्य में बदलें-----

- (i) मोहन की मां बीमार है।
- (ii) आज नंदिनी की शादी है।
- (iii) समर परीक्षा में सफल हो गया।
- (iv) हमेशा अपने कार्यों पर ध्यान दो।
- (v) ईश्वर की कृपा असीम है।
- (vi) मंत्री के आते ही लोग शोर मचाने लगे।
- (vii) स्टेशन पहुंचते ही गाड़ी जा चुकी थी।
- (viii) मैं अपना कार्य अच्छी तरह करना चाहती हूं।
- (ix) लोगों की बातों पर ध्यान मत दो।
- (x) सभी स्वयं को अच्छा कहना चाहते हैं।

- 10. कर्तृवाच्य, कर्मवाच्य तथा भाववाच्य के दस दस उदाहरण लिखिये।
- 11. बालगोविंद भगत संन्यासी थे। कैसे तथा उन्होंने समाज सुधार के लिए कौन कौन से कार्य किए?
- 12. उत्प्रेक्षा, मानवीकरण तथा अतिशयोक्ति अलंकार के पाँच पाँच उदाहरण लिखिए।
- 13. "रक्तदान महादान" विषय पर एक विज्ञापन तैयार कीजिए।
- 14. आपने अपने बच्चों की शिक्षा के लिए एक नया विद्यालय खोला है। उसके लिए एक विज्ञापन तैयार कीजिए।
- 15. AI हमारे लिए बहुत अधिक उपयोगी सिद्ध हो सकता है, लेकिन आने वाले भविष्य के लिए उचित नहीं है। इस विषय पर अपने विचार व्यक्त कीजिए।

PORTFOLIO

- 1. "नेताजी का चश्मा" पाठ से सरकंडे का एक चश्मा बनाए तथा उसके विषय में कम से कम साठ शब्दों में लिखें।
- 2. बिना ईमानदारी और साहस के आत्मकथा नहीं लिखी जा सकती। गांधी जी की लिखी हुई पुस्तक "सत्य के प्रयोग" से कोई ऐसा पृष्ठ लिखिए जो आपको सबसे अधिक पसंद हो।
- 3. सूरदास का एक सुंदर चित्र बनाइए तथा भक्तिकाल में लिखी हुई उनकी दो कविताओं को लिखिए जो आपकी पाठ्यपुस्तक में नहीं है।
- 4. तुलसीदास का एक सुंदर चित्र बनाकर उनके किन्हीं दो चौपाइयों को लिखें।
- 5. भारत के किसी एक राज्य के बारे में प्रोजेक्ट तैयार कीजिए, जिसमें वहां के खानपान, रहन-सहन, आजीविका, संस्कृति, भाषा आदि के विषय में लिखिए तथा चित्र भी चिपकाइए।

MATHEMATICS

- 1. Solve the system of equations:
 $99x + 101y = 499$
 $101x + 99y = 501$
- 2. The ratio of incomes of two persons is 9 : 7 and the ratio of expenditures is 4 : 3. If each of them

saves Rs 200 in each month. Find their monthly incomes.

3. Find the value of P for which the system of equations $px - 5y = 2$; $8x + 3y = 7$.
4. Meena went to a bank to withdraw Rs 16,000. She received Rs 500 and Rs 200 notes. If Meena got 50 notes in all then how many notes of Rs 200 and Rs 500 did she receive?
5. If zeroes of the quadratic polynomial $p(x) = (k^2 + 4)x^2 + 7x + 4k$ are reciprocal of each other, then find the value of k.
6. If α and β are the zeros of the polynomial $f(x) = 2x^2 + 5x + k$ satisfying the relation $\alpha^2 + \beta^2 + \alpha\beta = 21/4$, then find the value of k for this to be possible.
7. If one zero of the polynomial $f(x) = x^2 - 6x + b$ is twice the other, find the value of b. Also, find the zeroes of the polynomial so obtained.
8. In a teacher's workshop, the number of teachers teaching French, Hindi and English are 48, 80 and 144 respectively. Find the minimum numbers of rooms required if in each room the same number of teachers are selected and all of them are of the same subject.
9. Solve the system of equation $x + 3y = 6$ and $2x - 3y = 12$ graphically and hence find the value of a, if $4x + 3y = a$.
10. Find the largest number that will divide 398, 436 and 542 leaving remainders 7, 11 and 15 respectively.
11. Find the greatest number of 6 digits divisible by 24, 25 and 36.
12. Solve the following system of linear equations $x - y = 1$ and $2x + y = 8$, graphically. Shade the area bounded by these two lines and y-axis. Also, find this area.
13. Find the zeroes of the polynomial $p(x) = 3x^2 - 4x - 4$. Hence write a polynomial whose each of the zero is 2 more than the zeroes of p(x).
14. Find a quadratic polynomial whose zeroes are negative of the zeros of the polynomial $px^2 + qx + r$.
15. If α and β are the zeros of the polynomial $f(y) = y^2 - 5y + 3$, then find the value of $\alpha^4\beta^3 + \alpha^3\beta^4$

PORTFOLIO

01. Draw the graph of the quadratic polynomial $-x^2 - 2x + 3$.
02. Write about certain terms of polynomials. Types of polynomial, degree of polynomial and zeroes of polynomial.
03. Write a fundamental theorem of arithmetic and verify the relation $HCF \times LCM = \text{Product of the numbers}$ by giving one example.
04. What is the consistency and inconsistency of a pair of linear equations of two variables. Explain each case with appropriate examples.
05. What is discriminant? How is it helpful in determining the nature of roots of a quadratic equation? Explain each case with appropriate examples.

PHYSICS

Activity-Based

1. Perform an activity using a plane mirror to verify the laws of reflection. Write the aim, materials required, procedure, observations, and conclusion.
2. Observe a convex mirror (rear-view mirror) by placing objects at different distances. Note how the size and position of the image change and write your conclusion.

Concept-Based

3. Explain why a convex mirror always forms a virtual, erect, and diminished image.
4. What is lateral inversion? Explain it with at least two real-life examples.

Numerical-Based

5. Two plane mirrors are inclined at an angle of 60° . Find the number of images formed using the formula $n = \frac{360}{\theta} - 1$.

PORTFOLIO

1. Write a short note on the applications of reflection of light in daily life (minimum five points).
2. Draw a ray diagram for a plane mirror and mention all the characteristics of the image formed.

CHEMISTRY

1. Why is it necessary to balance a chemical equation? State the law that justifies your answer. Write the balanced chemical equation for the reaction between Lead Nitrate and Potassium Iodide.
2. A student took a small amount of Quick Lime (Calcium Oxide) in a beaker and slowly added water to it.
 - a. What change in temperature will the student observe?
 - b. Identify the type of reaction.
 - c. Write the balanced chemical equation for the process and name the product formed.
3. A colorless gas 'G' is evolved when **Lead Nitrate** powder is heated strongly in a boiling tube.
 - a. Identify the gas 'G' and the color of the residue left in the tube.
 - b. Write a balanced chemical equation for this reaction.
 - c. Mention the specific subtype of decomposition reaction this represents.
4. When an Iron nail is dipped in a solution of Copper Sulphate, the blue color of the solution fades and a reddish-brown coating is formed on the nail.
 - a. Identify the type of chemical reaction that takes place.
 - b. Write the balanced chemical equation with state symbols.
 - c. Why does the blue color change to light green?
5. A student performs an experiment where Barium Chloride solution is added to Sodium Sulphate solution.
 - a. State the observation made during this reaction.
 - b. What is the special name given to this type of reaction based on the observation?
 - c. Write the balanced chemical equation and identify the substance that remains insoluble in water.

Instruction for Students:

- Use state symbols (s, l, g, aq) for all chemical equations.
- Ensure all numerical coefficients are in the simplest whole-number ratio.

PORTFOLIO

Activity 1: The "Color-Changing" Precipitation Study (Double Displacement)

Context: You are working with two colorless aqueous solutions: **Lead Nitrate** and **Potassium Iodide**. This activity focuses on the formation of an insoluble product.

Task:

- i. **Observation Log:** Describe the immediate visual change that occurs when these two colorless solutions are mixed. What is the color of the precipitate formed?
- ii. **Chemical Analysis:** * Write the balanced chemical equation for this reaction.
 - (a) Identify the specific chemical name of the precipitate.
 - (b) Explain why this reaction is classified as a "Double Displacement" reaction.
- iii. **Experimental Inference:** If the test tube is left undisturbed for 10 minutes, what will happen to the precipitate? Does this reaction involve a change in the oxidation state of the elements? (Briefly justify).

Activity 2: The "Metal Displacement" Mystery (Displacement Reactions)

Context: You have three test tubes containing solutions of Magnesium Sulphate, Zinc Sulphate, and Copper Sulphate. You are also given strips of Magnesium (Mg), Zinc (Zn), and Copper (Cu).

Task:

- i. **Data Table Construction:** Create a 3 x 3 table to predict in which combinations a reaction will occur and where "No Reaction" will be observed based on the **Reactivity Series**.
- ii. **Observation Analysis:** Suppose you place a Zinc strip into the Copper Sulphate solution.
 - (a) Describe the change in the color of the solution.
 - (b) Describe the change in the appearance of the Zinc strip.
- iii. **Conclusion:** Write the balanced chemical equation for the reaction between Zinc and Copper Sulphate. Based on your observations in this activity, arrange Mg, Zn, and Cu in increasing order of their reactivity.

BIOLOGY

1. During an experiment, a leaf is tested with iodine solution after boiling in alcohol. What observation will you make and what does it indicate about photosynthesis?
2. You observe a diagram of the human digestive system. Label any three parts and explain their role in digestion.
3. Explain the process of photosynthesis and write the balanced chemical equation.
4. A person has a blockage in the coronary artery. Explain how this affects the transport of materials in the body.
5. Plants close their stomata under water stress. Analyze how this affects photosynthesis and transpiration.

PORTFOLIO

A. “Respiration and Physical Exercise: A Real-Life Study”

- Connect breathing rate with exercise.
- Activity:
 - ✓ Measure breathing rate before/after exercise
 - ✓ Record data in table and graph

B. “Impact of Lifestyle on the Human Digestive System”

- Study eating habits and digestion
- Add:
 - ✓ Survey of 5–10 people
 - ✓ Common problems (acidity, indigestion)
 - ✓ Preventive measures

SOCIAL SCIENCE

Nation as a Symbol – Art Integration

1. Draw or digitally create an image of a nation as a female allegory (like Marianne or Germania)
 - a. Include: Symbols used (crown, sword, flag, etc.)
 - b. A short explanation: What each symbol represents?

Timeline Creation

2. Make a creative timeline (chart/rope timeline)
 - a. Include key dates: 1789 1815, 1830, 1848 1871

Role Play / Activity-Based Learning

3. “Be the Leader” Speech
 - a. Prepare a short speech as: Giuseppe Mazzini, Otto von Bismarck, Napoleon
 - b. Include: Your vision for Europe, Role in nationalism

Symbolism Poster

4. Draw and explain “Germania” or “Marianne”.
 - a. What symbols are shown?
 - b. What do they represent?
 - c. Add: A 5-line explanation of how symbols build nationalism?

Diary Entry

5. Write a diary entry: “A day in a country WITHOUT power sharing”.

- a. Include: Problems. Conflicts, Lack of equality, Federalism in Action.

India Federal Map Work

6. On a political map of India mark: 5 states, 5 union territories.

Case-Based Question

7. Read and answer: “In a country, all power is held by one central authority.”
 - a. What problems can arise?
 - b. How can federalism solve them?

Compare Systems

8. Compare: Unitary vs Federal system
 - a. Make a table: Power distribution, Examples, Advantages

Sustainable Development Project

9. Observe your surroundings in India
 - a. Identify: Problems (pollution, water wastage)
 - b. Suggest: 5 practical solutions

Family Income & Needs Analysis

10. List needs of your family: Basic (food, shelter), Secondary (education, transport).

PORTFOLIO

1. What was the main objective of Giuseppe Mazzini?
2. What was the significance of the Frankfurt Parliament (1848)?
3. Why is income not the only measure of development?
4. Why is federalism important for a large country?
5. State any two measures to control land degradation.

INFORMATION TECHNOLOGY

1. Riya wants to use RI, but she is not able to understand the various options given by Libre Office Base to maintain RI. Help Riya to understand it.
2. What are the different parts of field control?
3. What is the default name of the form?
4. Raj has created a report but he is confused with dynamic and static types in a report, help him to understand both the concepts.
5. What is the default orientation of a report?
6. What is the use of **Alias** textbox in a query?
7. Why is **Criterion** row used in query?
8. What is the use of query with respect to DBMS?

9. Aditi, a friend of yours is not able to understand **Tool tip**, help her to know the use of adding a tool tip.
10. Explain types of relationship with examples.
11. What are different ways to create a query?
12. Explain the various data types of Libre Office Base.
13. Ram is confused with primary key and foreign key. Help him to clear his confusion by giving definitions and examples of each.
14. Explain the various objects of RDBMS.
15. Give some examples of DBMS.

PORTFOLIO (PRINTOUTS TO BE TAKEN)

1. Create a database named Employee with 4 fields and 5 records.
2. Create a database named Student with of 5 records and 5 fields named Name, Class, English, Hindi, Maths. Create a query for retrieving records of students scored less than 10 in Maths for a PT.
3. Create a database object – Report of your class with 15 records and 8 fields to show report card.
4. Create a database for the population of 5 different districts of Bihar. Create a Report for it.
5. Given below is database fields for Table FLIGHT,

Field	Type
Flight_Id	Char (4)
Flight_Name	Varchar (25)
Source	Varchar (30)
Destination	Varchar (30)

Answer the following-

- a. Which field can be primary key and why?
- b. Is the table having any candidate key or alternate key?
- c. Create a table with five records
- d. Create 2 forms.
- e. Create a report.