



BCM School, Basant City, Ludhiana

"Work hard in silence, let your success be your noise."

Holidays Homework For Std-X (2025-26)



English

Theme: "Explore. Imagine. Express."

Where language becomes your canvas, and imagination your brush!

Instructions:

*Compile all tasks neatly in a creative file or folder.

*Label each activity.

*Ensure neatness and originality in your work.

*Late submissions may not be accepted.

1. PPT with Narration.

Contrasting climates, Diverse Traditions: A Comparative Study of Punjab and Andhra Pradesh's Culture, Cuisine, Tourism and Attire.

Instructions:

Prepare a PowerPoint (8-10 slides) comparing the climate of Punjab and Andhra Pradesh, along with their culture, cuisine, attire and tourism. Add artistic elements like traditional patterns or drawings, and include a short narration or voice-over for class presentation.

2. Section A: Reading Skills (from BBC Compacta)

*Solve unseen passages (Classroom Assignment 1 to 3)

3. Section B: Writing Skills

Letter To Editor: Classroom Assignment 12 & Practice Assignment 11

4. Section C: Literature

Textbook Assignment (First Flight & Footprints Without Feet)

*Write the character sketches of any two characters from your literature textbook.

*Choose any one poem from First Flight and explain the theme in your own words.

*Pick 5 poetic devices and explain them with examples from the poem.

5. Section D: Creative Corner

Book Review: Read any one English novel/story book of your choice (other than textbooks).

Example: The Canterville Ghost / The Diary of a Young Girl / Malgudi Days

Prepare a book review covering:

Title, Author

Summary (in 150-200 words)

Your favorite character and why

What did you learn from the book?

6. Section E: Speaking & Listening Task

Oral Presentation Practice

Prepare a 2-3 minutes' speech on any one topic:

*The Importance of Mental Health in Teenagers

*Role of AI in Our Daily Lives

*My Vision for India @2047

Why Reading Books is still Cool in Digital Age?



HINDI

1. किन्ही पाँच सुषिर वाद्ययंत्र बजाने वाले कलाकारों पर परियोजना बनाए ।
2. पंजाब और आन्ध्र प्रदेश राज्य के संगीत और वाद्ययंत्रों का कोलाज तैयार करे।
3. समाचार पत्र लेखन

शीर्षक- 'ग्लेशियर पिघल रहे हैं-खतरे की घंटी?'। किसी एक दैनिक समाचार पत्र के लिए 200-250 शब्दों में एक लेख लिखें।

4. पोर्टफोलियो तैयार करें।

5. मेरी कहानी, मेरी जुबानी

कार्य:

अपने जीवन का कोई एक अनुभव चुनें जो आपके लिए प्रेरणादायक रहा हो। उस अनुभव को एक लघु कथा (**short story**) के रूप में लिखें। शब्द सीमा: **300-400** शब्द

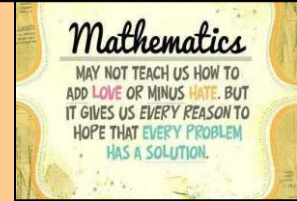
6. विज्ञापन बनाओ – क्रिएटिविटी दिखाओ!

कार्य:

किसी सामाजिक विषय (जैसे: जल संरक्षण, बाल विवाह, पर्यावरण सुरक्षा) पर एक प्रभावशाली विज्ञापन स्क्रिप्ट तैयार करें।



Mathematics



- Solve the given assignment in your notebook.
- Do the following activities in your lab manual.

ACTIVITIES :-

1. To make a graphical exploration of zeroes of a quadratic polynomial.
2. For given a system of simultaneous linear equations graphically such that system is in-consistent.
3. To derive a formula for the sum of the first n natural numbers.
4. Given a sequence of numbers, to find out whether it is an arithmetic progression or not.
5. To verify Basic Proportionality Theorem
6. To verify that the lengths of tangents drawn from an external point to a circle are equal.
7. To verify the fundamental identity: $\sin^2 A + \cos^2 A = 1$
8. To calculate the height of a tree by using trigonometry.
9. To derive the section formula.
10. To obtain a formula for the volume of sphere.

MATHS Assignment

1. If the equation $(1+m^2)x^2 + 2mcx + c^2 - a^2 = 0$ has equal roots then show that $c^2 = a^2(1+m^2)$
2. The sum of two numbers is 9 and the sum of their reciprocals is $\frac{1}{2}$ Find the numbers.
3. Find the value of k for which the roots of equation $3x^2 - 10x + k = 0$ are reciprocal of each other.
4. Find the value of p such that the quadratic equation $(p-12)x^2 - 2(p-12)x + 2 = 0$ has equal roots.
5. What is the HCF of smallest composite number and smallest prime number?
6. LCM of co-prime number is always ____.
7. What is HCF (a,b)=? If $a = x^3y^2$ and $b = xy^3$; x and y are prime numbers.
8. A circular field has a circumference of 360km. Three cyclist start together and can 48,60 and 72 km a day round the field. when will they meet again?
9. Prove that $\sqrt{7}$ is irrational. Hence find $2-\sqrt{7}$ is also irrational.
10. If sum of LCM & HCF of two numbers is 1260 and their LCM is 900 more than their HCF. Find the product of two numbers.
11. If α & β are zeroes of the polynomial $2x^2 + 5x + k$ satisfying $\alpha^2 + \beta^2 + \alpha\beta = 21/4$ then find the value of k.
12. If α & β are zeroes of the polynomial $x^2 + x - 2$, then find the polynomial whose zeroes are $(2\alpha + 1)$ and $(2\beta + 1)$.
13. Find the zeroes of $p(x) = 4\sqrt{3}x^2 + 5x - 2\sqrt{3}$ and verify relationship between zeroes and its coefficients.
14. Place A,B are 90 km apart. Car A starts at point A & car Bat B if they going same directions they meet after 9 hrs & in opposite direction in $9/4$ hrs. find their speed.
15. Solve graphically the following pair of linear equations: $2y - 3x = 14$; $2x + 3y = 8$
Hence, shade the region enclosed by these lines and Y axis.

- 1.ਆਪਣੀ ਪਾਠ ਪੁਸਤਕ ਵਿਚ ਦਰਜ ਇਕਾਂਗੀ ਦੂਜਾ ਵਿਆਹ ਵਿਚਲੀਆਂ ਮੁੱਖ ਸਮਾਜਿਕ ਸਮੱਸਿਆਵਾਂ ਨੂੰ ਸਮਝੋ ਤੇ ਲਿਖੋ।
- 2.ਆਪਣੇ ਸਕੂਲ ਮੈਗਜ਼ੀਨ ਲਈ 'ਸਫਲਤਾ' ਵਿਸ਼ੇ ਨੂੰ ਦਰਸਾਉਂਦੀ ਕਹਾਣੀ ਲਿਖੋ।
- 3.ਆਪਣੀ ਵਿਆਕਰਨ ਪਾਠ ਪੁਸਤਕ ਵਿਚ ਦਰਜ ਗ ਤੋਂ ਝ ਤਕ ਮੁਹਾਵਰੇ ਪੜ੍ਹੇ ਤੇ ਯਾਦ ਕਰੋ।
4. ਆਪਣੀ ਪਾਠ ਪੁਸਤਕ ਵਿੱਚੋਂ ਸਮਾਜੀ ਸ਼ਬਦ, ਬਹੁਅਰਥਕ ਸ਼ਬਦ, ਅਗੇਤਰ ਪਛੇਤਰ ਨੂੰ ਧਿਆਨ ਪੂਰਵਕ ਪੜ੍ਹੇ ਤੇ ਯਾਦ ਕਰੋ।
- 5.ਪੰਜਾਬ ਤੇ ਆਂਧਰਾ ਪ੍ਰਦੇਸ਼ ਦੇ ਪਹਿਰਾਵੇ ਨੂੰ ਦਰਸਾਉਂਦਾ ਪੇਂਜੈਕਟ ਬਣਾਓ। (R.NO.1-10)
- ਪੰਜਾਬ ਤੇ ਆਂਧਰਾ ਪ੍ਰਦੇਸ਼ ਦੇ ਖਾਣ ਪੀਣ ਨੂੰ ਦਰਸਾਉਂਦਾ ਪੇਂਜੈਕਟ ਬਣਾਓ। (R.NO.11-20)
- ਪੰਜਾਬ ਤੇ ਆਂਧਰਾ ਪ੍ਰਦੇਸ਼ ਦੇ ਗੀਤ ਸੰਗੀਤ ਨੂੰ ਦਰਸਾਉਂਦਾ ਪੇਂਜੈਕਟ ਬਣਾਓ। (R.NO.21-30)
- ਪੰਜਾਬ ਤੇ ਆਂਧਰਾ ਪ੍ਰਦੇਸ਼ ਦੇ ਨਾਚ ਨੂੰ ਦਰਸਾਉਂਦਾ ਪੇਂਜੈਕਟ ਬਣਾਓ। (R.NO.31-40)
6. ਓਪਨ ਬੁੱਕ ਪ੍ਰੀਖਿਆਵਾਂ, ਭਾਵੇਂ ਰਵਾਇਤੀ ਕਲੇਜ਼ਡ-ਬੁੱਕ ਪ੍ਰੀਖਿਆਵਾਂ ਨਾਲੋਂ ਸੌਖੀਆਂ ਜਾਪਦੀਆਂ ਹਨ, ਆਧੁਨਿਕ ਸਿੱਖਿਆ ਵਿੱਚ ਕਈ ਮੁੱਖ ਕਾਰਨਾਂ ਕਰਕੇ ਮਹੱਤਵ ਪ੍ਰਾਪਤ ਕਰ ਰਹੀਆਂ ਹਨ। ਇਹ ਰੱਟੇਬਾਜ਼ੀ ਤੋਂ ਧਿਆਨ ਹਟਾ ਕੇ ਗਿਆਨ ਦੀ ਡੂੰਘੀ ਸਮਝ ਅਤੇ ਵਰਤੋਂ 'ਤੇ ਕੇਂਦ੍ਰਿਤ ਕਰਦੀਆਂ ਹਨ, ਜੋ ਅਸਲ-ਸੰਸਾਰ ਦੇ ਦ੍ਰਿਸ਼ਾਂ ਨੂੰ ਦਰਸਾਉਂਦੀਆਂ ਹਨ। ਇਸੇ ਅਭਿਆਸ ਦੇ ਅਧੀਨ ਆਪਣੀ ਪਾਠ ਪੁਸਤਕ ਵਿੱਚ ਦਰਜ ਵਾਰਤਕ ਰਚਨਾ ਪ੍ਰਾਰਥਨਾ ਨੂੰ ਧਿਆਨ ਪੂਰਵਕ ਪੜ੍ਹੇ ਤੇ ਦਿੱਤੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ ਦਿਓ :-

ਵਾਰਤਕ ਪ੍ਰਾਰਥਨਾ

ਵਾਰਤਾਕਾਰ ਡਾ. ਬਲਬੀਰ ਸਿੰਘ

1. ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ ਨੇ ਡਾਕਟਰ ਬਲਬੀਰ ਸਿੰਘ ਨੂੰ ਕਿਹੜੀ ਉਪਾਧੀ ਦਿੱਤੀ ਮਹਾਰਾਜਾ ਰਣਜੀਤ ਸਿੰਘ ਨੇ ਨੀਂਦ ਲਈ ਕੀ ਕੀਤਾ ?
2. ਡਾਕਟਰ ਬਲਬੀਰ ਸਿੰਘ ਦੀ ਕਿਸੇ ਪੁਸਤਕ ਦਾ ਨਾਂ ਲਿਖੋ?
3. ਰੱਬ ਦੇ ਭਰੋਸੇ ਅਤੇ ਉਸਦੀ ਬੇਅੰਤ ਦਇਆ ਕਾਰਨ ਕਿਸ ਦੇ ਸਭ ਸੰਕਟ ਨਿਵਰਤ ਹੋ ਗਏ ?
4. ਕਿਸ ਦੇ ਦਿਲ ਵਿੱਚ ਸੱਚਾ ਪਛਤਾਵਾ ਆਇਆ ਤੇ ਉਹ ਹੱਥ ਜੋੜ ਕੇ ਪ੍ਰਾਰਥਨਾ ਕਰਨ ਲੱਗਾ ?
5. ਕੀ ਮੇਰੇ ਪਾਪ ਵੀ ਖਿਮਾ ਹੋ ਸਕਦੇ ਹਨ ਇਹ ਸ਼ਬਦ ਕਿਸ ਨੇ ਕਹੇ ?
6. ਕੈਦੀ ਪਰਮੇਸ਼ਰ ਨੂੰ ਕਿਹੜਾ ਭੂਤ ਸਮਝਦਾ ਸੀ ?
7. ਕਿਸਦੀ ਦਰਗਾਹ ਵਿੱਚ ਭਲੇ ਬੁਰੇ ਦਾ ਨਿਸਤਾਰਾ ਹੋਣਾ ਹੈ ਕੌਣ ਸਾਡੇ ਨਾਲ ਪ੍ਰੇਮ ਕਰਦਾ ਹੈ ਕਰਤਾਰ ਤੇ ਵਿਸ਼ਵਾਸ ਰੱਖਣਾ ਕਿਹੜੇ ਸੁੱਖਾਂ ਦੀ ਖਾਣ ਹੈ?
8. ਆਕੀ ਹੋਏ ਇੱਕ ਵੱਡੇ ਸਰਦਾਰ ਨੂੰ ਕਿਸ ਕਿਲੇ ਵਿੱਚ ਕੈਦ ਕੀਤਾ ਗਿਆ ਸੀ ?
9. ਕਿਸ ਨੇ ਕਿਹਾ ਸੀ ਕਿ ਅਰਦਾਸ ਦਾ ਉੱਤਰ ਮਿਲਣਾ ਹੀ ਨਹੀਂ ਚਾਹੀਦਾ ?
10. ਖਾਲਸਾ ਟਰੈਕਟ ਸੁਸਾਇਟੀ ਵੱਲੋਂ ਪ੍ਰਕਾਸ਼ਿਤ ਪਹਿਲੇ ਟਰੈਕਟ ਦਾ ਕੀ ਨਾਂ ਸੀ?
11. ਹਰ ਸੰਸਾਰਕ ਮੌਕੇ ਉੱਪਰ ਕਿਸ ਦੀ ਜਰੂਰਤ ਹੈ ?
12. ਕਿਸ ਧਰਮ ਵਿੱਚ ਅਰਦਾਸ ਦੀ ਖਾਸ ਅਹਿਮੀਅਤ ਹੈ ?
13. ਸਭ ਤੋਂ ਸਿਆਣਾ ਆਦਮੀ ਕੌਣ ਗਿਣਿਆ ਜਾਂਦਾ ਹੈ ?
14. ਅੰਤ ਮਨੁੱਖ ਨੇ ਕਿੱਥੇ ਪੇਸ਼ ਹੋਣਾ ਹੈ ?
15. ਜੂਨਾਂ ਦੀ ਗਿਣਤੀ ਕਿੰਨੀ ਦੱਸੀ ਗਈ ਹੈ ?

16. 'ਜਿਨ ਪ੍ਰੇਮ ਕੀਓ ਤਿਨ ਹੀ ਪ੍ਰਭ ਪਾਇਓ' ਕਥਨ ਕਿਸ ਗੁਰੂ ਸਾਹਿਬ ਦਾ ਹੈ ?
17. ਧਾੜਵੀ ਕੈਦੀ ਕਿਸ ਦੀ ਕਿਰਪਾ ਨਾਲ ਧਾੜਵੀ ਤੋਂ ਸਰਦਾਰ ਬਣਿਆ?
18. ਮਹਾਰਾਜਾ ਰਣਜੀਤ ਸਿੰਘ ਨੇ ਕਿਸ ਦੇ ਕਹਿਣ ਤੇ ਧਾੜਵੀ ਕੈਦੀ ਨੂੰ ਕੈਦ ਤੋਂ ਛੁਟਕਾਰਾ ਦਿੱਤਾ ?
19. ਵਾਹਿਗੁਰੂ ਨੇ ਮਹਾਰਾਜਾ ਰਣਜੀਤ ਸਿੰਘ ਨੂੰ ਕੀ ਬਖਸ਼ਿਆ ?
20. ਨੀਂਦ ਲਈ ਮਹਾਰਾਜਾ ਰਣਜੀਤ ਸਿੰਘ ਨੇ ਕੀ ਕੀਤਾ ਮਹਾਰਾਜਾ ਰਣਜੀਤ ਸਿੰਘ ਨੂੰ ਕਦੇ ਤੱਕ ਨੀਂਦ ਨਾ ਆਈ ਕੈਦੀ ਕਿਸ ਨੂੰ ਸਦਵਾ ਕੇ ਕਈ ਸ਼ਬਦਾਂ ਦੇ ਅਰਥ ਸਮਝਦਾ ਸੀ ?
21. ਇੱਕ ਰਾਤ ਕੈਦੀ ਨੂੰ ਨੀਂਦ ਕਿਉਂ ਨਾ ਆਈ ?
22. ਇਕ ਦਿਨ ਕੁਟੀਆ ਦੇ ਜਾਲੇ ਫਰੇਲਦਿਆਂ ਕੈਦੀ ਦੇ ਹੱਥ ਕੀ ਲੱਗਾ ?
23. ਧਾੜਵੀ ਕੈਦੀ ਕਿਸ ਨੂੰ ਇੱਕੋ ਸਾਹੇ ਹਜ਼ਾਰ ਹਜ਼ਾਰ ਗਾਲਾਂ ਸੁਣਾਉਂਦਾ ?
24. ਮਹਾਰਾਜਾ ਰਣਜੀਤ ਸਿੰਘ ਨੇ ਕਿਸ ਨੂੰ ਰੁਹਤਾਸ ਦੇ ਕਿਲੇ ਵਿੱਚ ਕੈਦ ਕੀਤਾ
25. ਸਿੱਖ ਦੀ ਅਰਦਾਸ ਕਿਸ ਦੇ ਭਲੇ ਦੀ ਮੰਗ ਤੇ ਖਤਮ ਹੁੰਦੀ ਹੈ ?
26. ਖਾਲਸਾ ਟਰੈਕਟ ਸੁਸਾਇਟੀ ਕਿਸ ਤੇ ਯਤਨਾਂ ਦਾ ਸਿੱਟਾ ਹੈ ?
27. ਖਾਲਸਾ ਟਰੈਕਟ ਸੁਸਾਇਟੀ ਦਾ ਮੁੱਢ ਕਦੇ ਬੋਲਿਆ ?
28. ਡਾ.ਬਲਬੀਰ ਸਿੰਘ ਦਾ ਕਿਹੜਾ ਲੇਖ ਤੁਹਾਡੀ ਪਾਠ ਪੁਸਤਕ ਵਿੱਚ ਦਰਜ ਹੈ ?
29. ਡਾਕਟਰ ਬਲਬੀਰ ਸਿੰਘ ਨੂੰ ਸ਼੍ਰੋਮਣੀ ਪੰਜਾਬੀ ਸਾਹਿਤਕਾਰ ਪੁਰਸਕਾਰ ਕਿਸ ਨੇ ਦਿੱਤਾ ?
30. ਪ੍ਰਾਰਥਨਾ ਲੇਖ ਦਾ ਵਾਰਤਕਕਾਰ ਕੌਣ ਹੈ ?
31. ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ ਨੇ ਡਾਕਟਰ ਬਲਬੀਰ ਸਿੰਘ ਨੂੰ ਕਿਸ ਉਪਾਧੀ ਨਾਲ ਸਨਮਾਨਿਆ ?
32. ਡਾਕਟਰ ਬਲਬੀਰ ਸਿੰਘ ਕਿਸ ਸਕੂਲ ਵਿੱਚ ਕੁਝ ਸਮੇਂ ਲਈ ਪ੍ਰਿੰਸੀਪਲ ਰਹੇ ?
33. ਡਾਕਟਰ ਬਲਬੀਰ ਸਿੰਘ ਅੰਮ੍ਰਿਤਸਰ ਦੇ ਕਿਸ ਕਾਲਜ ਵਿੱਚ ਪ੍ਰੋਫੈਸਰ ਰਹੇ ?
34. ਡਾਕਟਰ ਬਲਬੀਰ ਸਿੰਘ ਦਾ ਦੇਹਾਂਤ ਕਦੇ ਹੋਇਆ ?
35. ਡਾ ਬਲਬੀਰ ਸਿੰਘ ਦੇ ਪਿਤਾ ਜੀ ਦਾ ਕੀ ਨਾਂ ਸੀ ?



Artificial Intelligence

1. Task : Design Thinking (AI Project Cycle)

Scenario: You want to develop an AI solution to reduce food wastage in your school canteen.

- **Problem Scoping (Write):** Define the problem and list three key questions to investigate.
- **Data Collection (Research):** Identify 3 possible data sources to help your model detect wastage trends.
- **Model Plan (Think):** Describe what kind of AI model you'd build – Rule-based, Supervised or Unsupervised?

2. Task : Build an Ethical Framework

Scenario: Your school plans to use face-recognition-based attendance. There are concerns about misuse.

- List 3 ethical concerns you would raise as a student representative.

3. Scenario: You built a spam email detector. You tested it on 20 emails – 15 were spam, but it correctly detected only 12.

- Using the results, create a **confusion matrix** (TP, FP, TN, FN).
- Calculate **Accuracy**, **Precision**, and **Recall** using your matrix.
- Explain which metric matters most and why, in this case.

4. Case Study:

A music app wants to suggest songs to new users based on their mood. It has no previous user data.

- Which learning method should the app use?
- Justify your answer.

5. WAP in python:

- to Find the Largest of Three Numbers.
- to Print Multiplication Table
- to convert length given in kilometers into meters.

“

**No. I'm not going to
enslave the world.**

- Artificial Intelligent



Science

Physics

•Do the following activities in your lab manual.

ACTIVITIES :

1. Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between V and I.
2. Determination of the equivalent resistance of two resistors when connected in series and parallel.
3. Determination of the focal length of (i) Concave mirror (ii) Convex lens by obtaining the image of a distant object.
4. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.
5. Tracing the path of the rays of light through a glass prism.

•Project work (Do the work in a project file)

1. (i) Explain the laws of reflection with the help of a neat and labeled ray diagram.
- (ii) Draw ray diagram for the image formation by a concave mirror and convex mirror for all the position of the object.

•Numericals

1. An object is placed 10 cm in front of a convex mirror of focal length 15 cm. Find the position and nature of the image using the mirror formula.
2. A concave mirror produces a real image of height 2 cm of an object of 0.5 cm placed 10 cm away from the mirror. Find the position of the image and focal length of the mirror?
3. A dentist uses a small concave mirror of focal length 3.0 cm and holds it at a distance of 2 cm from the tooth. What is the magnification of the image?
4. How far should an object be held from a concave mirror of focal length 40 cm so as to get an image magnified three times?
5. A concave mirror of focal length 10 cm is kept in front of an object at a distance of 50 cm from it. If the object is 1.0 cm high, what will be the size of the image?
6. How far from a lamp must a concave mirror of focal length 3.0 m be placed in order to throw its image on the screen 8.0 m from the lamp?
7. An object is located 20 cm in front of a concave mirror of radius of curvature 60 cm. Find the position and nature of the image formed.
8. An object 5 cm in height is placed in front of a concave mirror on the principal axis at a distance of 10 cm from the mirror. If the focal length of the mirror is 20 cm, find the nature of the image formed.
9. An object 10 cm tall is placed on the principal axis of a convex mirror of focal length 30 cm at a distance of 20 cm from the pole. Find the nature, size, position and magnification the image formed on the principal axis (by graphical construction).
10. An object 2 cm high is kept at a distance of 16 cm from a concave mirror which produces a real image 3 cm high.

- (i) What is the focal length of the mirror?
(ii) Find the position of the image.

• **Complete the following questions of the assignment:**

1. What is light? What is its nature?
2. What is the speed of light in vacuum?
3. What is a mirror?
4. What is the focal length of a plane mirror?
5. Differentiate between real and virtual image.
6. What type of image is formed on a cinema screen?
7. A concave mirror is a part of sphere of radius 40 cm. What is the focal length of the mirror?
8. Radius of curvature of a mirror is 20 cm. What type of mirror is it?
9. Magnification of a mirror is $+2/3$. What type of mirror is it?
10. Draw ray diagram when light falls normally in case of plane and concave mirror.
11. Magnification of a mirror is -1 . What type of mirror is it? What is the position of object and image? Give the nature of image.
12. Name the type of mirror used:-
 - (i) as a reflector in search light (iii) by the dentist
 - (ii) as side view mirror in vehicles. (iv) as a shaving mirror
13. Wherever you may stand in front of mirror, your image is always erect & same sized, what type of mirror is it?
14. (a) A ray of light strikes the mirror at an angle of 20° . What is the angle of reflection?
(b) Give the angle of incidence and reflection for normal incidence.
15. A candle is kept in front of plane mirror at distance of 15 cm. What is distance between candle & its image?

Chemistry

1. Complete your lab manual.
2. Do the following activities with the help of household materials? Students will maintain a small notebook to record observations and share pictures related to experiments.
 - a) Combination reaction
Material required: steel wool or iron nail, vinegar.
 - b) Exothermic reaction
Reaction of baking soda (sodium hydrogen carbonate) with acid (lemon juice).
Perform the above experiment and write your observations along with pictures.
3. Prepare a project report on different types of salts and relate these salts with real life applications. (bleaching powder, baking soda, washing soda, plaster of Paris)

Biology

NOTE: Do Holiday's Home Work on **A4 sheet** and keep it in a folder with the name
"Science Portfolio".

I. Project: lesson- Our Environment: Collect information regarding any one of the Given project which includes Aim and objectives, line of action, outcomes, at least five photographs)

***Namami Gange Programme*:** Launched in 2014 to conserve and rejuvenate the river Ganga. (Roll no. 1-10)

***Green India Mission (GIM)*:** Aims to enhance ecosystem services, promote afforestation, improve livelihoods of forest-dependent communities. (Roll no. 11-20)

***Swachh Bharat Abhiyan*:** A national cleanliness drive launched in 2014 to promote cleanliness and sanitation. (Rollno.21-30)

***Project Cheetah*:** Involves the translocation of cheetahs from Namibia and South Africa to Kuno National Park in Madhya Pradesh, marking the first inter-continental wild carnivore Trans location project. (Roll no.31 onward)

II. Diagram: (Art Integration):

(a) Open and Closed Stomata, Human digestive system, Human Respiratory system (all odd roll no.)

(b) Human Heart, Human Excretory system, Nephron (all even Roll no.)

III. Complete Lab Manual. Experiments to be written in Lab manual are:

(a) Preparing a temporary mount of a leaf peel to show stomata.

(b) Experimentally show that carbon dioxide is given out during respiration.

(c) Studying (i) binary fission in Amoeba, and (ii) budding in yeast and Hydra with the help prepared slides.

(d) Identification of the different parts of an embryo of a dicot seed (pea, gram or red kidney bean).

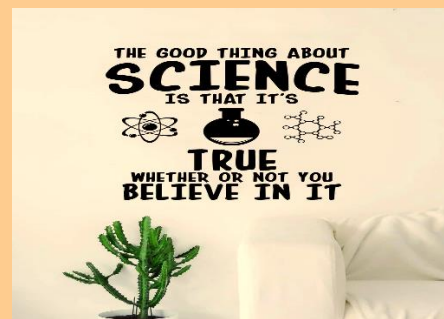
IV. Solve this Assignment of Ch-5.

Biology Assignment

CH- Life processes

1. Why is double circulation more efficient than single circulation? Explain by comparing oxygen supply in fish and humans.
2. If xylem vessels in a tall tree are damaged at the base, what impact will it have on water transport? Justify your answer with scientific reasoning.
3. A person's blood pressure remains consistently high. Analyze the physiological effects this could have on the circulatory system over time.
4. Explain how transpiration indirectly helps in mineral absorption. What would happen to a plant if transpiration completely stops?

5. Compare the roles of arteries and veins in maintaining homeostasis during physical exertion.
6. Why is the structure of the human heart considered well-adapted for its function? Justify with structural-functional correlations.
7. If the lymphatic system fails, what effects might be seen in the human body? How would this affect transport of substances?
8. Predict the consequence of blockage in the phloem of a plant. How will it affect the source and sink relationship?
9. Evaluate the importance of valves in veins. What would be the result if these valves were absent?
10. Suggest reasons why aquatic plants may have different mechanisms for transport compared to terrestrial plants.
11. Why is excretion essential for maintaining homeostasis in multicellular organisms? Support your answer with examples from both plants and animals.
12. Design an artificial system to mimic the function of nephrons. What processes must it include to be effective?
13. Compare and contrast the excretory products in plants and animals. How do their modes of life influence the method of excretion?
14. A patient has damaged glomeruli. Predict the effects on the process of urine formation and its composition.
15. Why do desert animals produce highly concentrated urine? Explain in relation to their habitat and excretory adaptations.
16. Analyze how kidney failure can affect other systems of the body. Suggest medical interventions used in such conditions.
17. How does the plant excretory mechanism differ from animals in terms of energy requirement? Evaluate its significance.
18. A person with diabetes mellitus often has glucose in their urine. Explain the underlying biological mechanism and its consequences.
19. Plants often store excretory products in vacuoles or leaves that eventually fall off. Is this truly excretion? Debate with reasoning.
20. If a plant is grown in a sealed environment with no outlet for gaseous exchange, predict and justify the effects on its excretion and overall survival.



Social Science

1. Make a poster of Bharat Mata on A4 size sheet. (From Roll No 1 to 8)
2. Draw National Flag used during Swadeshi Movement on A4 size sheet. (From Roll No 9- 14)
3. Prepare the chart on classification of Economic Sectors with the help of pictures. (From Roll No 15 to 21)
4. Compare the Organized and Unorganized sectors with the help of pictures. (From Roll No 22 to 30)
5. Compare the employment opportunities in three sectors in the form of Bar Graph. (From Roll No 31 onwards)
6. Map Work: (Common for all the students)
 - (i) Types of soils (use colours for different soils) Chapter-1
 - (ii) Major Dams Chapter-3 (Water Resources)

Dams:

a. Salal	b. Bhakra Nangal	c. Tehri
d. Rana Pratap Sagar	e. Sardar Sarovar	f. Hirakud
g. Nagarjuna Sagar	h. Tungabhadra	
7. Slogan Writing on 'Disaster Management' (R.N.1 to 18)
8. Prepare a poster on 'Disaster Management' (R.N.19 Onwards)
9. Art Integrated Activity: (common for all students)

Compare the soil type, Climate, Rivers and Crops of Punjab and Andhra Pradesh
10. Project Work (List is attached)

TOPICS FOR PROJECT SESSION –2024–25

- ✓ Students will choose the topic according to their Roll No.
- ✓ Any project submitted that is not according to the roll Number will not be accepted.

Roll No	Topic for Project
1	CONSUMER RIGHTS
2	SUSTAINABLE DEVELOPMENT – NEED OF THE HOUR
3	DRUG ADDICTION
4	CHILD LABOUR
5	ILLEGAL IMMIGRATION
6	HUMAN RIGHTS VIOLATION
7	TERRORISM
8	INEQUALITY ON THE BASIS OF GENDER
9	COMMUNALISM
10	ECOLOGICAL CRISIS
11	ILLITERACY – LACK OF EDUCATIONAL FACILITY
12	CONQUERING DISEASES
13	CRIME AGAINST WOMEN
14	REVERSING POVERTY
15	NATURAL DISASTER
16	MANMADE DISASTERS
17	STANDARDIZATION OF PRODUCT
18	CONSUMER RIGHTS
19	SUSTAINABLE DEVELOPMENT – NEED OF THE HOUR
20	DRUG ADDICTION
21	CHILD LABOUR
22	ILLEGAL IMMIGRATION
23	HUMAN RIGHTS VIOLATION
24	TERRORISM
25	INEQUALITY ON THE BASIS OF GENDER
26	COMMUNALISM
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28	ILLITERACY – LACK OF EDUCATIONAL FACILITY
29	CONQUERING DISEASES
30	CRIME AGAINST WOMEN
31	REVERSING POVERTY
32	NATURAL DISASTER
33	MANMADE DISASTERS
34	ECOLOGICAL CRISIS
35	TERRORISM
36	IMPACT OF COVID 19
37	CHILD LABOUR

FORMAT OF PROJECT:



BCM SEN. SEC. SCHOOL, BASANT CITY, LUDHIANA

SOCIAL SCIENCE PROJECT REPORT

SESSION – 2025 – 2026

TOPIC

Submitted To:

SubmittedBy:

Name :-

Class:-

RollNo:-

BCM SEN.SEC.SCHOOL,BASANT CITY,LUDHIANA

DEPARTMENT OF SOCIAL SCIENCE

CERTIFICATE

This is to certify that _____(name of student), a student of class X has successfully conducted the report on the project _____(topic of Project) under the guidance of _____(Subject Teacher) during the year 2025 – 2026 in partial fulfillment of Social Science practical examination conducted by AISSE, New Delhi.

Name of Examiner

Signature of Examiner

Name of Subject Teacher

Signature of Subject Teacher

AKNOWLEDGEMENT

In the present world of competition there is a race of existence in which those who are having will to come forward , succeed. Project is like a bridge between theoretical and practical working. With this willingness I joined this particular project.

First of all ,I am grateful to The Almighty for establishing me to complete this project. I wish to express my sincere thanks to **Ms. Nidhi Jain (Principal) of BCM Sen. Sec. School, Basant City, Ludhiana)** for providing me with all necessary facilities.

I place on record, my sincere gratitude to **Ms. Aseem Sahota (Co- coordinator)** for her constant encouragement.

I also thank Ms. _____, Department of Social Science. I am extremely grateful and in debted to her for the expert, sincere and valuable guidance and encouragement extended to me.

I take this opportunity to record my sincere thanks to all the faculty members for their help and encouragement. I also thank my parents for their unceasing encouragement and support.

I also place on record my sense of gratitude to one and all who directly or indirectly helped me in this venture.

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INTRODUCTION AND SUBECT MATTER ALONG WITH PICTURES,

MAPS AND GRAPH Page No 19 – SUMMARY

PageNo20–BIBLIOGRAPHY

Special Note:-

- ✓ The project should have a good presentation and creativity.
- ✓ Use single line assignment sheets for your project report.
- ✓ Use glitter pens if necessary.
- ✓ Decorate your file in well manner.

