

**B.C.M SCHOOL, BASANT CITY, PAKHOWAL ROAD, LUDHIANA**

**Std: - IX**

**Session: 2026-27**

**Holidays Homework**

**Subject - Social Science**

**1. CURRICULUM RELATED ACTIVITIES:**

- Create a slogan on carbon footprint. (Roll no. 1-10)
- Prepare a flowchart on the Stone Age. (Roll no. 11-20)
- Prepare a Collage to show “How were the Harappan and Mesopotamian civilizations similar and different” (Roll no. 21-30)
- Make flash cards on Mesopotamian Civilization. (Roll no. 30 onwards)

**2. MAP WORK (common for all the students)**

- On an outline map of India, locate and label major Harappan sites.
- On a world map, identify major tectonic plates.

**3. ART-INTEGRATED PROJECT (common for all the students)**

- Comparison of Punjab and Odisha on basis of the following points:

- River
- Crops
- Soil
- Climate

**4. Complete the provided ASSIGNMENT on Chapter: Elections In Indian Democracy (common for all the students)**

**5. Topics for PROJECT WORK:**

- Students will choose the topic according to their Roll No., those not according to the roll numbers will not be accepted.

➤ **NATURAL DISASTER**

1. Floods (R. No- 1-4)
2. Landslide (5-8)
3. Earthquake (9-12)
4. Volcanic eruption (13-16)
5. Cloud burst (17-20)
6. Forest fire (21-24)

➤ **MAN-MADE DISASTER**

7. Nuclear explosion (25-28)
8. Industrial accident (29-32)
9. Pollution (33-36)
10. Cyber attack (37-onwards)

**B.C.M SCHOOL, BASANT CITY, PAKHOWAL ROAD, LUDHIANA**

**SOCIAL SCIENCE**

**PROJECT REPORT**

**SESSION : 2026 - 2027**

**'NAME OF THE TOPIC'**

**SUBMITTED TO:**

**SUBMITTED BY: (NAME)**

**GRADE:**

**ROLL NO.**

**B.C.M SCHOOL, PAKHOWAL ROAD, BASANT CITY, LUDHIANA**

**DEPARTMENT OF SOCIAL SCIENCE**

**CERTIFICATE**

This is to certify that \_\_\_\_\_(name of student), a student of class IX has successfully conducted the report on the project \_\_\_\_\_(topic of Project) under the guidance of \_\_\_\_\_(Subject Teacher) during the year 2026- 2027.

Name of Examiner

\_\_\_\_\_

Name of Subject Teacher

\_\_\_\_\_

Signature of Examiner

\_\_\_\_\_

Signature of Subject Teacher

\_\_\_\_\_

## ACKNOWLEDGEMENT

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

I wish to express my sincere thanks to **Ms. Nidhi Jain** of B.C.M School, Basant City, Pakhowal Road, Ludhiana for providing me with all necessary facilities.

I place on record, my sincere gratitude to \_\_\_\_\_(**Co-Ordinator**) for her constant encouragement.

I also thank \_\_\_\_\_(Social Science Teacher), Department of Social Science. I am extremely grateful and indebted to her for her 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 have lent their helping in this venture.

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### **Page No 5 - 18**

- Introduction
- Subject Matter
- Add Pictures, Maps and Graph

### **Page No 19**

- Summary

### **Page No 20**

- Bibliography

### **SPECIAL NOTE: -**

- ✓ The project should have a good presentation and creativity.
- ✓ Use single line assignment sheets for your project report.
- ✓ Use colored/ glitter pens.
- ✓ Decorate your file cover also.

**B.C.M SCHOOL, BASANT CITY, PAKHOWAL ROAD, LUDHIANA**

**Session: 2026-27**

**Worksheet**

**1. Who conducts elections in India?**

- A) Parliament
- B) Supreme Court
- C) Election Commission of India
- D) President

**2. Which system is used in Indian elections?**

- A) Direct Democracy
- B) First-Past-The-Post system
- C) Dictatorship system
- D) Proportional monarchy

**3. In the First-Past-The-Post system, a candidate wins when they:**

- A) Get more than 50% of total votes
- B) Get the highest number of votes, even if not majority
- C) Are nominated by the ruling party
- D) Win all constituencies

**4. The main purpose of delimitation is to ensure:**

- A) More political parties
- B) Equal representation based on population
- C) More voting machines
- D) Permanent constituencies

**5. In India Rajya Sabha member are elected through:**

- A) Direct voting by citizens
- B) Nomination by the Prime Minister
- C) PR with STV
- D) FPTP

**6. Which of the following statements about the Anti-Defection Law are correct?**

- 1. It was added to the Constitution by the 52nd Amendment Act, 1985.
- 2. It deals with disqualification of elected members for changing political parties.
- 3. It allows members to freely switch parties without any consequences.
- 4. It applies to both Parliament and State Legislatures.

- A) 1, 2 and 4 only
- B) 1 and 3 only
- C) 2 and 3 only
- D) 1, 2, 3 and 4

**7. Which of the following are correct criteria for a party to be recognized as a National Political Party?**

1. It must win at least 2% of seats in the Lok Sabha from at least 3 different states.
2. It must be recognized as a State Party in at least four states.
3. It must win only one Lok Sabha seat.
4. Its candidates must secure a minimum percentage of valid votes in a general election (as per Election Commission rules).

- A) 1, 2 and 4 only  
B) 1 and 3 only  
C) 2 and 3 only  
D) 1, 2, 3 and 4

**8. Which of the following is a regional party?**

- A) BJP  
B) Congress  
C) DMK  
D) United Nations

**9. A government formed by two or more parties due to lack of a majority is called:**

- A) Presidential government  
B) Coalition government  
C) Federal government  
D) Caretaker government
10. If at least two-third of members agree to merge with another party, disqualification does NOT apply.

This is:

- A) Split  
B) Coalition  
C) Exception Under Anti Defection Law  
D) PR System

11. Identify the Party based on the given symbol.



- A) Bharatiya Janata Party  
B) Indian Nation Congress  
C) Aam Admi Party  
D) Communist Party of India

Answer the following Questions briefly.

1. What is meant by an election in a democratic country?
2. Why is delimitation necessary in a democracy?
3. If an independent MLA joins a political party after the election, what will happen?
4. How does the Anti-Defection Law promote political stability?
5. Why is the Election Commission considered an independent body?
6. Do you think coalition governments strengthen democracy? Give one reason.

Answer the following Questions in about 300 words each.

1. Explain the role of the Election Commission of India in conducting elections.
2. Discuss the significance of the electoral roll in elections.
3. What are the main provisions of the Anti-Defection Law?
4. Explain the concept of a coalition government.
5. Why was the Anti-Defection Law introduced in India?
6. If electoral rolls are not updated regularly, what consequences might arise in elections?
7. Why was the Anti-Defection Law introduced in India?

Answer the following Questions in detail.

1. Describe the powers and functions of the Election Commission of India in maintaining free and fair elections.
2. Explain the provisions of the Anti-Defection Law in India.
3. Explain the features of India's multi-party system and the role of coalition governments.
4. Explain how elections in India reflect both ancient democratic traditions and modern constitutional principles.
5. Mention the criteria for recognition of National and State Parties in India and explain their significance.

## Subject - Mathematics

### Do the following activities in Practical Notebook:-

#### Activities:

1. To make a square root spiral by using paper folding.
2. To verify the algebraic identity  $(a+b)^3 = a^3 + b^3 + 3a^2b + 3ab^2$  geometrically by using sets of unit cubes.
3. To obtain the mirror image of a given geometrical figure with respect to x-axis and y-axis.
4. To obtain a linear equation and draw a graph which represents the linear equation ( $ax+by+c=0$ )
5. To verify that the angle subtended by an arc at the centre of circle is double the angle subtended at any point on the remaining part of the circle ,experimentally.
6. To show that the angles subtended the chord of a circle in the same segment are equal, experimentally.
7. To verify that angle in a semicircle is a right angle.

### Solve the Following assignment in your note book:

#### Assignment

1. Solve the following decimals in the form  $\frac{p}{q}$ .  
(a) 0.32            (b) 0.123
2. Insert ten rational numbers between  $\frac{-3}{11}$  and  $\frac{8}{11}$ .
3. Represent  $\sqrt{6}, \sqrt{7}, \sqrt{8}$  on the number line.
4. Evaluate:  
(a)  $(\frac{2}{11})^4 \times (\frac{11}{3})^2 \times (\frac{3}{2})^3$   
(b)  $(\frac{64}{25})^{\frac{-3}{2}}$
5. Simplify:  $25^{\frac{-1}{3}} \times \sqrt[3]{16}$
6. If both 'a' and 'b' are rational numbers, find the values of a and b.  
(a)  $\frac{3+\sqrt{7}}{3-\sqrt{7}} = a + b\sqrt{7}$   
(b)  $\frac{5+\sqrt{3}}{7-4\sqrt{3}} = 47a + \sqrt{3}b$
7. If  $x = 2 + \sqrt{3}$ , find the value of  $x^2 + \frac{1}{x^2}$ .
8. Find a linear pattern for the perimeter of a square whose side is increased by 2 units when start from 1 cm. Also calculate its perimeter when side of length is 51 cm.
9. Which of the following points lies on X-axis? Which on Y-axis?  
A(0,2), B(5,6), C(-3,0), D(0,-3), E(0,4), F(6,0), G(3,0).

10. In which quadrant do the following points lie? (a) (2,-1) (b) (-1,7) (c) (-2,-3) (d) (4,5)
11. Plot the points A(0,3), B(5,3), C(4,0) and D(-1,0) on the graph paper. Identify the figure ABCD

and find whether the point (2,2) lies inside the figure or not?

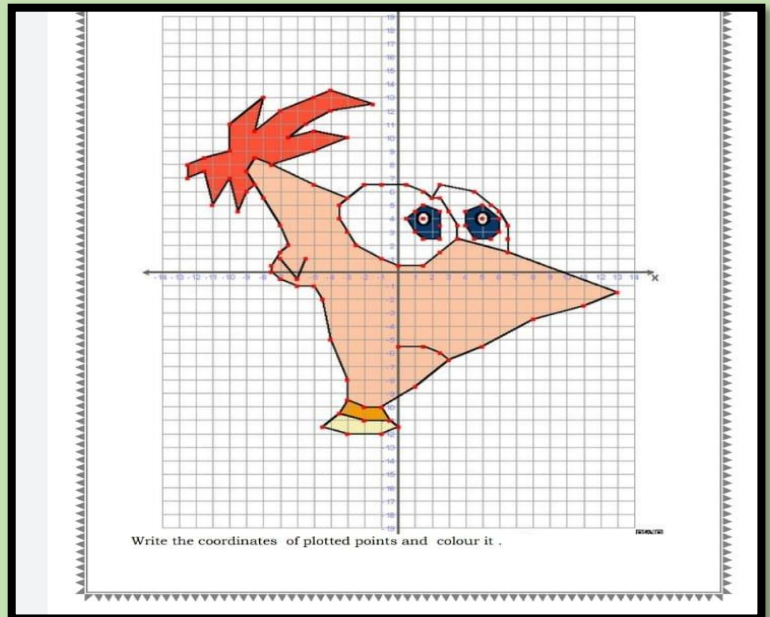
12. Three vertices of rectangle are (-1,1), (5,1) and (5,3). Plot these points and find the coordinates of

the fourth vertex.

13. Draw the graphs of following linear equations:

$$y=4x-2, y=4x+2$$

14. Write the coordinates of the plotted points used in the figure.



15. Identify rational and irrational numbers in the following figure.

### Rational or Irrational?!?!?

Directions

- Color all rational numbers blue
- Leave all irrational numbers white

Rationals include:

Irrationals include:

$\sqrt{7}$	$\sqrt{64}$	$1/2$	-7.165	$2/\sqrt{7}$	$2\pi$	$-2.5$	$\sqrt{100}$	0.5	$-1/8$	$\sqrt{15}$		
9.712	7.284...	$\sqrt{4}/2$	-5.5	0	$-\pi$	$\pi$	8	1.933	$3/11$	$-10\pi$	100.22	
0.75	$\sqrt{49}$	$-10\pi$	$\sqrt{5}$	$2\sqrt{3}$	$-\sqrt{5}$	$\sqrt{18}$	$6\pi$	$2/3$	1.274...	$-3/16$	$\sqrt{144}$	
$1/4$	10.2	$1/\sqrt{3}$	$-2\pi$	$3\sqrt{3}$	$\sqrt{40}$	$14\pi$	1	$\sqrt{17}$	$\pi/4$	$0.25$	$5/16$	-4.5
$-2.1$	$\sqrt{25}$	4.271...	-55	1.75	$-4\pi$	$\sqrt{11}$	$\sqrt{2}$	$2\sqrt{9}$	$\sqrt{1/2}$	$\sqrt{81}$	2.7	
$-2\pi$	$\sqrt{6}$	$\sqrt{3/4}$	$3/2$	$2\sqrt{5}$	$\sqrt{9}$	$5\pi$	$-\sqrt{1}$	14.1	$\sqrt{11}\pi$	4.517...	$2\pi$	
$-7\pi$	$\sqrt{2}$	$\sqrt{36}$	$\pi$	$\sqrt{15}$	$0.3$	$3\sqrt{8}$	$-10$	$\sqrt{1/6}$	$-3\pi$	$3/4$	5.96	
9.999	7.165	$2/5$	$\sqrt{15}$	$0.3$	$3\sqrt{8}$	$-10$	$\sqrt{1/6}$	$-3\pi$	$3/4$	5.96		
$11/2$	$\sqrt{64}$	2.523...	$\sqrt{10}$	3.128...	$\sqrt{2}/2$	$\sqrt{8}$	-4.5	-7 $\pi$	0.44...	-3.999		
1,000	$\sqrt{6}$	$-1/8$	$\sqrt{225}$	6	$\pi$	$-\pi$	-7	$\sqrt{169}$	$\sqrt{1/4}$	$\sqrt{\pi}/3$	0.328	
$-3\pi$	2.662	-0.25	$1/4$	$9\pi$	$2/3$	$12.97$	$-1/2$	$\sqrt{121}$	$\sqrt{11}$			

**Prepare a working model according to your Roll no.**

Roll No.	Model
1 - 10	<b>Angle and Parallel Line Finder:</b> Create a working model with cardboard strips and a protractor dial. By moving one strip, you can visually demonstrate how corresponding angles, alternate interior angles, and vertically opposite angles remain equal.
11-20	Build a movable model to demonstrate Circle Theorems :The angle subtended by an arc at the center is double the angle subtended at the remaining part of the circle)
21-30	<b>Congruence of Triangles:</b> Cut out two sets of triangles from color-coded foam. Use a hinged pin for the angles, allowing you to demonstrate (SAS) (Side-Angle-Side) or (ASA) (Angle-Side-Angle) by physically proving the triangles overlap perfectly.
30 Onwards	Create a 3D spiral on a wooden board. Use colored threads to represent the number line and the successive right-angled triangles to visually prove how to represent $\sqrt{2}, \sqrt{3}, \sqrt{4}$ etc., geometrically.

## Subject- Hindi

1.व्याकरण: 'उपसर्ग और प्रत्यय' का कलात्मक वृक्ष (Tree Activity)

कार्य: छात्र अपनी ड्राइंग शीट पर एक बड़ा पेड़ (Tree) बनाएंगे।

पेड़ की जड़ों या तने पर 'मूल शब्द' लिखा होगा। बाईं ओर की शाखाओं (Branches) पर उपसर्ग की पत्तियाँ और दाईं ओर की शाखाओं पर प्रत्यय की रंग-बिरंगी पत्तियाँ बनाकर नए शब्द विकसित करें।

2.(Creative Writing)

विषय: पंजाब का एक किसान (जो बैसाखी मना रहा है) और ओडिशा का एक बुनकर या कलाकार (जो रथयात्रा/नुआखाई मना रहा है) आपस में मिलते हैं और अपने राज्यों की कला और त्योहारों पर चर्चा करते हैं।

दोनों पात्रों के बीच कम से कम 6-8 आकर्षक और उद्देश्यपूर्ण संवाद लिखें।

3.कला समेकित गतिविधि(Art Integrated Activity)विषय: पंजाब की 'फुल्कारी' बनाम ओडिशा की

'पटचित्र' कला। गतिविधि: पंजाब की पारंपरिक कढ़ाई फुल्कारी (Phulkari) और ओडिशा की पारंपरिक

हस्तकला पटचित्र (Pata Chitra) पर एक तुलनात्मक प्रोजेक्ट फाइल तैयार करें। इसमें दोनों कलाओं के

इतिहास, उपयोग किए जाने वाले रंगों (प्राकृतिक बनाम कृत्रिम) और उनके रूपांकनों (Motifs) को चित्रों के माध्यम से दर्शाना होगा।

4.पोर्टफोलियो तैयार करें।

## SUBJECT: ENGLISH

### 1. Art-Integrated Activity: Ek Bharat Shreshtha Bharat

Prepare an attractive art-integrated collage on the theme “**Gifts of Grace: Honouring Our Vocations**” showing the different occupations of people of Punjab and Odisha such as farming, weaving, handicrafts, fishing, teaching, and folk arts. Decorate it creatively using Phulkari and Pattachitra designs and add a meaningful slogan on dignity of labour and unity in diversity.

2. With the increasing pollution and environmental degradation in your city, write a magazine article ‘**Save Environment, Save Future**’ on the need for climate awareness, water conservation, and building a clean and pollution-free community. Include practical steps that both citizens and authorities can take to protect the environment and ensure a sustainable future.

### 3. ENGLISH ASSIGNMENT


#### I. Short Questions (40-50 words):

1. Why did the grandmother identify so strongly with the protagonist of Kashi Yatre?
2. How did the grandmother beautifully justify touching the feet of a young child?
3. What is the profound significance of the story’s conclusion for the village?
4. Describe the unique craftsmanship of hand fans originating from the royal state of Rajasthan.
5. How does geographical availability of materials influence the fan-making craft in Kerala?
6. What does the mention of “divinest music” reveal about the country’s cultural landscape?
7. How does the poet describe the role of the cook in bringing people together?
8. What is the significance of the title “Canvas of Soil”?

#### II. Descriptive Questions(100-120 words) :

1. Analyze Arenla’s character in the story. Why did she initially oppose her daughter’s passion, and how did her approach affect Sentila?(The Pot Maker)
2. How does Grandpa’s birthday tradition of gifting others reflect his values and impact his relationship with his family?(Vitamin- M)

## ਜਮਾਤ ਨੌਵੀਂ ( ਵਿਸ਼ਾ ਪੰਜਾਬੀ)

1. **ਰਚਨਾਤਮਕ ਸਾਹਿਤ ਮਾਲਾ (Comic strip)** ਕਹਾਣੀਆਂ ਜਨਮ -ਦਿਨ ਜਾਂ ਸਾਂਝੀ ਕੰਧ ਦੇ ਕਿਸੇ ਇੱਕ ਮੁੱਖ ਦ੍ਰਿਸ਼ ਜਾਂ ਪਾਤਰ ਨੂੰ ਚੁਣ ਕੇ A4 ਸ਼ੀਟ ਉੱਪਰ ਚਾਰ ਤੋਂ ਛੇ ਖਾਕੇ(Box) ਬਣਾ ਕੇ ਉਸ ਕਹਾਣੀ ਨੂੰ ਕਾਰਟੂਨ/ ਚਿੱਤਰਾਂ ਰਾਹੀਂ ਦਰਸਾਓ ਤੇ ਪਾਤਰਾਂ ਦੀ ਵਾਰਤਾਲਾਪ ਵੀ ਲਿਖੋ।
2. 1 ਤੋਂ 50 ਤੱਕ ਗੁਰਮੁਖੀ, ਪੰਜਾਬੀ ਤੇ ਅੰਕਾਂ ਵਿੱਚ ਗਿਣਤੀ ਲਿਖੋ।
3. **ਪ੍ਰਿੰਸੀਪਲ ਸੁਜਾਨ ਸਿੰਘ** ਦੇ ਜੀਵਨ ਬਿਓਰੇ ਬਾਰੇ ਦੱਸਦੇ ਹੋਏ ਉਸਦੀਆਂ ਰਚਨਾਵਾਂ ਬਾਰੇ ਲਿਖੋ ਤੇ ਸਾਹਿਤਕਾਰ ਦੀ ਤਸਵੀਰ ਵੀ ਲਗਾਓ।
4. **ਮੁਹਾਵਰਾ ਚਿੱਤਰ ਕੋਸ਼:-** ਵਿਆਕਰਨ ਪੁਸਤਕ ਵਿੱਚੋਂ **ੳ ਤੋਂ ਹ** ਤੱਕ ਕੋਈ ਪੰਜ ਮੁਹਾਵਰੇ ਚੁਣੋ ਤੇ ਹਰੇਕ ਮੁਹਾਵਰੇ ਦੀ ਹਾਸੋਹੀਣੀ ਜਾਂ ਸਿੱਧਾ ਅਰਥ ਦਰਸਾਉਂਦੀ ਤਸਵੀਰ ਬਣਾਓ ਉਦਾਹਰਨ ਵਜੋਂ ਕੰਨ ਭਰਨੇ ਮੁਹਾਵਰੇ ਅਨੁਸਾਰ ਕੰਨ ਵਿੱਚ ਕੁਝ ਪਾਉਂਦੇ ਦਿਖਾਇਆ ਜਾ ਸਕਦਾ ਹੈ।
5. **ਪੰਜਾਬ ਅਤੇ ਉੜੀਸਾ** ਰਾਜਾਂ ਦਾ ਇੱਕ ਚਾਰਟ ਤਿਆਰ ਕਰੋ ਜਿਸ ਵਿੱਚ ਪੰਜਾਬੀ ਅਤੇ ਉੜੀਸਾ ਦੇ ਪਹਿਰਾਵੇ ਵਿੱਚ ਦੋ ਬੱਚਿਆਂ ਦੇ ਚਿੱਤਰ ਬਣਾਓ (ਜਾਂ ਪੇਸਟ ਕਰੋ) ਅਤੇ ਸਪੀਚ ਬਬਲਜ਼ (Speech Bubbles ) ਦੀ ਵਰਤੋਂ ਕਰਕੇ ਉਹਨਾਂ ਦੇ ਆਪਸੀ ਗੱਲਬਾਤ ਦੇ ਕੋਈ 5 ਵਾਕ ਪੰਜਾਬੀ ਅਤੇ ਉੜੀਆ ਭਾਸ਼ਾ ਵਿੱਚ ਲਿਖੋ।
6. **ਪੀ.ਏ.** ਸਾਈਕਲ ੨ ਦੀ ਤਿਆਰੀ ਕਰੋ।

## SUBJECT: SCIENCE

### CHEMISTRY

1. Do the given Assignment in your notebooks.
2. Read Ch 8 Journey Inside Atom and find extra questions at least 20 and write in notebook.
3. Complete your Chemistry Practical file.
4. Prepare a concept map of ch 5 and ch 8 chapters.

#### 5. Art Integrated Activity:

Students make:

A 3D exhibition/model on the topic Separation techniques

Punjab Section

Lassi → colloid

Butter extraction → centrifugation

Wheat cleaning → separation technique

Odisha Section

Sea salt preparation at Odisha coast → evaporation

Natural colors in Pattachitra → solutions

Rice-water mixtures → sedimentation

Add:

1. Labels
2. Diagrams
3. Report on above mentioned techniques.

### BIOLOGY

#### 1. Assignment Work

Complete the assignment of the chapter "Cell: The Building block of life" in your Biology notebook.

#### 2. Diagrams:

##### For Odd Roll Numbers:

1. Plant Cell (Labelled Diagram)
2. Parenchyma Tissue
3. Xylem Tissue
4. Neuron (Nerve Cell)

##### For Even Roll Numbers

1. Animal cells
2. Nucleus
3. Phloem Tissue
4. Muscle Tissue

#### 3. Art Integrated Project

**Topic: Punjab-Odisha Biodiversity Comparison Project (Chapter: Diversity)**

Prepare an Art Integrated Project showing comparison and integration between the biodiversity of Punjab and Odisha.

➤ **Roll Number Wise Project Allotment**

**Roll No. 1-10 : Diversity of Birds**

Compare:

- Common birds found in Punjab
- Common birds found in Odisha

Include:

- Names and pictures of birds
- Habitat and food habits
- Similarities and differences
- Importance in ecosystem
- At least 5 photographs/pictures

**Roll No. 11-20 : Diversity of Plants**

Compare:

- Important plants/trees of Punjab
- Important plants/trees of Odisha

Include:

- Types of plants
- Climatic adaptations
- Uses of plants
- Similarities and differences
- At least 5 photographs/pictures

**Roll No. 21-30: Aquatic Organisms Diversity**

Compare:

- Aquatic organisms found in Punjab rivers/wetlands
- Aquatic organisms found in Odisha coastal regions/lakes

Include:

- Types of aquatic organisms
- Adaptations for aquatic life
- Food chains
- Importance in biodiversity
- At least 5 photographs/pictures

**Roll No. 31 Onwards: Animal Diversity**

Compare:

- Animals commonly found in Punjab
- Animals commonly found in Odisha

Include:

- Classification of animals
- Habitat and adaptations
- Herbivores/carnivores/omnivores
- Role in ecosystem
- At least 5 photographs/pictures

➤ **Project Guidelines**

The project must include:

- Cover Page
- Index
- Aim and Objectives
- Introduction
- Punjab–Odisha Comparison
- Conclusion
- Bibliography
- Minimum 5 relevant photographs/pictures

**PHYSICS:**

1. Draw the **Position-Time Graphs** and **Velocity-Time Graphs** for:

- Body at Rest
- Uniform Motion
- Non-Uniform Motion
- Uniform Accelerated Motion
- Uniform Retarded Motion
- Non-Uniform Accelerated Motion
- Non-Uniform Retarded Motion

2. Write all **six activities of Physics** in the practical file.

Instructions for writing and activities contents will be shared in the respective class groups.

3. Do **20 numerical** from the chapter "Motion".

4. Revise the complete chapter "Motion".

## Subject: AI (417)

1. Define AI in your own words.
2. List and describe any 5 AI applications you have interacted with.
3. Mention which domain of AI each application belongs to:

- Natural Language Processing (NLP)
- Computer Vision (CV)
- Statistical Data for AI

Play the following three AI-based games and answer the questions:

**Game 1: Rock, Paper, Scissors** - <https://next.rockpaperscissors.ai/>

- a) What strategy did AI use?
- b) What did you learn about Data for AI from this game?

**Game 2: Semantris** - <https://research.google.com/semantris/>

- a) How does AI understand your words?
- b) What did you learn about Natural Language Processing?

**Game 3: Quick, Draw** - <https://quickdraw.withgoogle.com/>

- a) Was the AI able to guess your drawings?
- b) What did you learn about Computer Vision?

4. Task: Choose one problem you observe around you and plan an AI project to solve it.

- Write your project title.
- Explain briefly all stages of AI Project cycle of your problem.

Example Project: "Detecting food waste in school cafeteria using AI cameras."

### 5. Read the Scenario:

You are a teacher and want to save time checking essays. You find an AI tool that automatically grades and gives feedback. You are unsure whether to use it.

#### Answer the following:

- Would you use the AI tool? Why or why not?
- What are two advantages and two disadvantages of using AI in this case?
- How can we ensure the AI grading tool is fair and ethical?

1. Complete the table below based on the domains of AI:

Application	AI Domain	Reason
Chatbot in an e-commerce app		
Face Unlock in smartphones		
Google Maps suggestions		

7. Aman wants to buy a new computer. What components should he look for, and how will ICT tools help in his studies?

8. WAP in python :

- To calculate Area and Perimeter of a rectangle
- To calculate Area of a triangle with Base and Height
- To calculating average marks of 3 subjects
- To calculate discounted amount with discount %
- To calculate Surface Area and Volume of a Cuboid

**SUBJECT: ART**



**(HAND PAINTED POT SUBMISSION)**

**SUBMIT ONLY 1**

**MATERIAL REQUIRED**

- Earthen Pot
- Acrylic colors
- Water bowl
- Brushes