

O.P. JINDAL SCHOOL

BALKUDRA, PATRATU



Diwali Holiday Homework

 **CLASS - XI**



ENGLISH

Instructions for Students:

1. Complete the project according to your assigned topic and roll number.
2. Use A4 sheets, chart paper, or a scrapbook — no plastic files allowed.
3. Include drawings, diagrams, pictures, or collages wherever suitable.
4. Maintain neatness, creativity, and originality in presentation.
5. Write the following clearly on the cover page: Name, Class, Section, Roll Number, Project Title.
6. Submit the project by 03-11-2025.
7. Late submissions will not be accepted.

1. Literature & Creative Writing (Roll No. 01–10)

- a. Write a short story, poem, or article based on a social or environmental theme. Suggested topics:

Climate change / environmental conservation

Gender equality / women empowerment

Kindness, empathy, or social harmony

- b. Illustrate your story or poem with pictures, sketches, or a storyboard.

- c. Include a reflection: What did you learn while writing this piece? How does it relate to real-life society?

- d. Compare your story with a short story from the Hornbill or Snapshots textbook and explain similarities in theme or moral.

2. Science & Technology (Roll No. 11–20)

- a. Choose a topic such as:

Renewable energy sources (solar, wind, hydro)

Eco-friendly innovations in daily life

Robotics, AI, or technology in healthcare

- b. Prepare a model, chart, or digital presentation showing:

How it works (working principle or mechanism)

Advantages and impact on society/environment

Any challenges or limitations

- c. Include experiments, diagrams, or observations if applicable.

- d. Suggest ways to implement these technologies in your school, community, or home.

3. History & Culture (Roll No. 21–30)

- a. Research a historical figure, movement, or festival in India. Possible choices:

Leaders, freedom fighters, or reformers

Cultural movements or heritage festivals

Local traditions and their historical significance

- b. Present your findings as:

A timeline of important events, or

A scrapbook/collage with pictures, drawings, or maps

- c. Discuss the impact on society and culture, highlighting changes over time.

- d. Reflect on how lessons from history can be applied today.



4. Economics & Commerce (Roll No. 31–40)

a. Choose a topic such as:

A study of a local market, shop, or e-commerce trend

Budget planning for a small event or festival

Analysis of consumer behaviour or business strategies

b. Create a report, chart, or presentation including:

Key observations and analysis

Practical applications or recommendations

c. Include graphs, tables, or diagrams for clarity.

d. Optional: Add a reflection on what you learned and how it relates to everyday life.

5. Environmental Studies (Commerce Roll 01–07)

a. Choose a project topic such as:

“Plastic-Free India” campaign

Local biodiversity and wildlife

Pollution control and sustainable living

b. Present your findings using photos, drawings, diagrams, or charts.

c. Suggest practical steps for sustainable living at home or in the community.

d. Include research from books, articles, or interviews — cite your sources.

e. Share a personal reflection on how your habits affect the environment and what changes you will implement.

6. Art & Personal Development (Commerce Roll 08–13)

a. Choose a project such as:

DIY craft or recycled art with a social/environmental message

Creative poster or visual presentation on life skills, personality development, or a social theme

b. Include a short reflection: What skills did you develop while creating this project? How does it help in personal growth or creative thinking?

c. Document your step-by-step process with photos or sketches.

Note: Use a clear, legible handwriting or type-print neatly.

Number pages and include a contents page

MATHEMATICS

➤ Prepare a **model** using eco-friendly or waste materials on any one of the following topics:

1. **Conic Sections** – Demonstrate the formation of parabola, ellipse, and hyperbola using thread, pins, and cardboard.
2. **Trigonometric Identities Wheel** – Prepare a rotating model to illustrate the relationship between trigonometric ratios.
3. **3D Geometry Model** – Show line and plane representation in 3D using straws and threads.



PHYSICS

1. To make a paper scale of given least count, e.g., 0.2cm, 0.5 cm.
2. To study variation of time period of a simple pendulum of a given Length by taking bobs of same size but different masses and interpret the result.

CHEMISTRY

1. Make project on
Dalton's Atomic Theory – assumptions and significance.
Thomson's Model – discovery of electrons, “plum pudding model”, limitations.
Rutherford's Model – gold foil experiment, nuclear atom, limitations.

BIOLOGY

Prepare a investigatory project on (Any one) -

1. Topic - Stress and Its Physiological Impact on Adolescents.
Focusing on : Survey-based project correlating stress levels with sleep patterns, appetite, and academic performance etc.
2. Amniocentesis leading to Female foeticide.
Focusing on - declining sex ratio, as diagnostic test, gender equity, illegal sex determination etc.

INFORMATICS PRACTICES

ANSWER THE FOLLOWING QUESTIONS:

1. What is the difference between appending a list and extending a list?
2. Start with the list [8, 9, 10].
do the following using list functions:
(a) Set the second entry (index 1) to 17
(b) Add 4, 5 and 6 to the end of the list
(c) Remove the first entry from the list
(d) Sort the list
(e) Double the list
(f) Insert 25 at index 3
3. What does each of the following expressions evaluate to? suppose that l is the list ['THESE', ['ARE', 'A', 'FEW', 'WORDS'], 'THAT', 'WE', 'WILL', 'USE'].
(A) L[1][0::2]
(B) 'A' IN L[1][0]
(C) L[:1] + L[1]
(D) L[2::2]
(E) L[2][2] IN L[1]



WRITE PYTHON PROGRAMS:

4. Ask the user to enter a list containing numbers between 1 and 12. Then replace all of the entries in the list that are greater than 10 with 10.
5. Write a program to check if a number is present in the list or not. If the number is present, print the position of the number. Print an appropriate message if the number is not present in the list.
6. Complete the practical file till last lab assignment.

ECONOMICS			
1,2	Effect on PPC due to various government policies	9,10	Effect of Price Change on a Substitute Good (taking prices from real life visiting local market)
3,4	Opportunity Cost as an Economic Tool (taking real life situations)	11,12	Effect of Price Change on a Complementary Good (taking prices from real life visiting local market)
5,6	Effect on Equilibrium Prices in Local Market (taking real life situation or recent news)	13	Bumper Production- Boon or Bane for the Farmer
7,8	Solar Energy, a Cost-Effective Comparison with Conventional Energy Sources		

BUSINESS STUDIES			
Roll No.	Project		
1,2	Principles of Insurance.	9,10	Visit to a Departmental store.
3,4	Benefits of crop, orchards, animal and poultry insurance to the farmers.	11,12	Oranges from Nagpur
5,6	Guavas from Allahabad	13	Import /Export procedure
7,8	Visit to a Mall.		

ACCOUNTANCY	
Make a One Comprehensive project of any sole proprietorship business. This may state with journal entries and their ledgering, preparation of Trial balance. Trading and Profit and Loss Account and Balance Sheet. Expenses, incomes and profit (loss), assets and liabilities are to be depicted using pie chart / bar diagram. This may include simple GST related transactions	

PHYSICAL EDUCATION

- *Select any one Olympic or Indigenous sport (e.g., Kabaddi, Hockey, Badminton).
- *Prepare a report on:
 - *History and rules of the game
 - *Skills and techniques
 - *Major tournaments and Indian achievers
 - *Benefits of playing the sport

