

BIRLA BALIKA VIDYAPEETH PILANI (RAJ)

Class 11

Holiday Home Work for Summer Vacations

GAMES & SPORTS

CLASS V & XII Classes

1. Diagram /Layout Of 400 Meter Track

- List of track and field events
- Stagers (400m Track) From Lane no.2 to 8.

2. Any one game of your choice from the below list.

Basketball, Taekwondo, Volleyball, Football, Handball, Swimming, Hockey, Lawn tennis, Badminton,

Table tennis, Kho-Kho, kabaddi

3. Draw Labelled Diagram of Field /Ground /Court and Equipment's

- History of the game
- Rules and regulation
- Skills
- Terminologies

PHYSICAL EDUCATION

CLASS XI & XII

PREPARE THE PROJECT ON VARIOUS PRACTICALS.

1.Practical-1 (fitness and test administration off all terms)

SAI Khelo India fitness test

- Body mass index
- Plate tapping test
- Flamingo Balance Test

- Partial curl up Test (30 second)
- Push-up (Boys) Modified for girls
- Sit and Reach test
- 600-meter Run/ walk
- 50 Meter speed test (Standing start)

For above tests write purpose, procedure, equipment and support with pictures

- NOTE: Refer to chapter –6 (Test, measurement, in sports)

2. Practical –2 (Procedure for asanas, Benefits and contraindications for any two asanas for each

lifestyle disease.

- Diabetes, Asthma, Hypertension, Backpain & Arthritis

Note: Refer to chapter –3 (Yoga as Preventives measures for lifestyle diseases)

Practical-3 (Procedure for administrating senior citizen fitness test

Rikli Jones Senior citizen fitness test

- Chair stand test, Arm curl test, Chair sit and reach test, Back scratch test, Eight foot up and go test, six minutes' walk test

- Write: purpose, procedure, scoring, support with Pictures

NOTE: Refer to chapter-6

Practical-4 (Any one game of your choice from the given below list)

1. Basketball 2. Football 3. Kabaddi 4. Kho-kho 5. Volleyball 6. Handball 7. Cricket 8. Hockey

- History of the game, Rules and Regulation of the game, Skills, Draw the labelled diagram of field, Ground/ Court/ and equipment, Terminologies. Support with pictures

YOGA

CLASS XI & XII

Project File work

- Surya namaskar

- Write importance of Surya namaskar, explain 12 steps, with pictures

PRACTICAL FILE WORK

- Mudra (hand Gesture during Yoga practice) 1. Prana Mudra 2. Gyan Mudra 3. Surya Mudra 4. Vayu Mudra 5. Shaanya Mudra 6. Apan Mudra 7. Prithvi Mudra (write importance of mudra, procedure, Benefits) with pictures.

- Balance Diet Role of major and minor nutrients in the diet.

- Basic types of asanas. 1. Standing Asanas 2. Sitting Asanas 3. Meditative Asanas 4. Supine line Asanas 5. Prone line Asanas 6. Balancing Asanas 7. Relaxative Asanas

PPT ON SATKARMA, CONCEPT OF HATH YOGA, BHAGWAT GEETA & ASTANG YOGA

Explain any two asanas for each. (Technique, benefits, contraindication)

With pictures. (Write origin of yoga, History of yoga, Importance of yoga)

ENGLISH XI C, D

1. Read any one of the following plays of Shakespeare(abridged version) and write a summary of the play with focus on tragic flaws of the characters and universal values. Identify the literary devices used in the play. Also the archaic vocabulary with its usages.
2. Read the play Mother's day from snapshots. Prepare a presentation with voice over highlighting the Universal theme, sub themes, characterization. Include pics with bubble space(dialogue box) highlighting the central climax in the plot where the social issues are resolved. The dialogues can be hilarious and humorous.

ARTIFICIAL INTELLIGENCE

Choose **any 3 future jobs** which you wish to become that use AI (from the list below or your own research) and answer the following questions for each:

- What is the job title?
- What does a person in this job do?
- Which domain of AI is used?
- How does it help people or the world? (SDG Goal covered)

Examples of Future AI Jobs:

- AI Data Analyst, Robotics Engineer, AI Artist, Self-driving Car Engineer, AI Teacher Assistant, Virtual Reality Designer, Chatbot Developer, Smart Healthcare Advisor

COMPUTER SCIENCE

1. Do book back questions of python fundamentals and data handling
2. Understand real life applications of logic used in programming

MULTI-MEDIA

As a part of your portfolio, create a word document for 15 different types of shots. It should include:

1. Small description of the shot
2. 1 image of the shot clicked by you.
3. 1 image of the shot from your favourite series/film.

You are supposed to bring this printed in portrait form on A4 sheet

POLITICAL SCIENCE

CLASS 11 E

1. Prepare a hand written project Report of 30 pages on the topics as discussed in the class.
2. Prepare a handwritten project of 10 pages on the suggested topic by CBSE.

PYSCHOLOGY

1. Prepare a word search from chapter 1, comprising of 10 one-word answers, as discussed.
2. Prepare a crossword from chapter 2, comprising of 10 one-word answers, as discussed.
3. Watch and review a movie on a psychological theme. Prepare the review as discussed.
4. Learn chapters 1 and 2.

PHYSICS

1. Revise chapter-1 (Units and Measurements) and chapter-1(Motion in a straight line)
2. Based on an innovative concept prepare a model.

MATHS

1. Revise chapter 1, 4 and 5 from NCERT and 50 extra questions (25 short answer and 25 long answer) from any reference/NCERT Exemplar book in a separate copy **for core maths students.**
2. Revise chapters (Numbers, Indices and logarithms, Sets and Relations, Logical Reasoning) from M. L. Agarwal book **for applied maths students**
3. Project: Statistical survey on water consumption Pattern in your community.

SDG Link – Clean water and sanitization

Maths Concepts – Statistics, mean, median, data collection.

Description: Conduct a survey of 20-30 households in your locality about their daily water uses.

- Collect data on litres used per day, water saving methods, etc.
- Represent the data using bar graphs and pie charts.
- Calculate measures of central tendency.
- Suggest strategies for reducing water consumption.

ACCOUNTANCY

Revise two topics:-

1. Accounting concept, meaning as a source of information, objective, advantage and limitations, types of accounting information, users of accounting information and qualitative characteristics of Accounting information.
2. Basic Accounting Terms

ENTREPRENEURSHIP

TOPICS FOR THE PROJECT:

1. Visit of the District Industries Centre and prepare a report of activities and programs

undertaken by them

2. Conduct a case study of any entrepreneurial venture in your nearby area.

3. Field Visit: Visit any business firm near your locality; interact with the owner of the business

firm and prepare a field report on parameters like: type of business, scale of business,

product/service dealing in, target customer, problems faced and measures to solve the faced challenges.

4. Learn to Earn

5. Know your State Handicraft and Handlooms as a means of economic activity for the livelihood of people and intellectual property rights attached to them for the promotion of local specific skills.

LEGAL STUDIES

Task 1: Case Study Analysis (10 marks)

Instructions:

1. **Select a landmark case** related to Indian or international law. It can be a Supreme Court case, a High Court case, or an international case like those from the International Court of Justice or the United Nations.
 2. **Research and analyze the case:**
 - **Brief Summary of the Case** (2 marks)
 - **Key Legal Issues Involved** (4 marks)
 - **Judgment and Its Impact:** How did the judgment affect society, and why is it significant? (5 marks)
 - **Personal Opinion:** What do you think about the case and its judgment? Do you agree or disagree with the ruling? Why or why not? (5 marks)
 3. **Create a visual representation:** Make a flowchart, mind map, or infographic summarizing the case details and its consequences. This can be hand-drawn or made digitally. (5 marks)
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Task 2: Law in Media (10 marks)

Instructions:

1. **Pick a movie, TV show, or news article** related to legal issues (for example, a legal drama, documentary, or news story about a recent court case). You may also choose an article discussing a particular law or legal concept in current events.
2. **Write a report** (300-500 words) on the portrayal of legal principles or the real-life application of law in the selected media. You should answer the following:
 - What legal concept or principle was discussed or demonstrated? (5 marks)
 - How accurately was the legal principle portrayed? (5 marks)
 - Did it have any educational value? How did it help you understand law better? (5 marks)
 - Critique the representation. What were the strengths and weaknesses in the way law was presented? (5 marks)
 - Discuss any real-life examples or cases that reflect the issues presented in the media. (5 marks)

BIOTECHNOLOGY

Class: XI C

A. Write detailed answers of following topics / questions:

Chapter	S. No	Question / Topic
Chapter I: Biotech: An Over view & Chapter II Cell: Unit of Life	1	What is Biotechnology? Define according to
	2	Define the term fermentation with the description of lactic acid and alcoholic fermentation.
	3	Describe the industrial lactic acid fermented product formation by taking the example of curd making.
	4	What is plant and animal tissue culture? Explain recombinant DNA technology concept.
	5	What is the function of mesosomeal membrane folds in prokaryotes?
	6	Write two basic differences between plant and animal cells.
	7	What is the function of Fo-F1 particles in mitochondria?
	8	Why mitochondrion is termed as power house of cell? Explain.
	9	Why mitochondria and chloroplast place in semiautonomous category of cell organelles, explain with suitable structure.
	10	Draw the well labeled structure of plant cell.
	11	Give only classification of different types of plastids of plant cell.
	12	Differentiate between prokaryotic and eukaryotic cell.
	13	Write the applications of study and research in cell biology

B: Project on any topic of Biotechnology and complete writing part of practical record.

MEDICAL DIAGNOSTICS

Subjective Questions

- 1) Define the term diagnosis with its importance.
- 2) What is the difference between diagnosis and prognosis?
- 3) Explain the general steps of the diagnostic process.
- 4) Explain the diagnostics process of COVID-19 with suitable diagram.
- 5) Explain the term Phlebotomy with its importance.
- 6) Define the term antibody and antigen.
- 7) Which diagnosis test is used for the screening of the following infection:

(a) Coronavirus (b) HIV

- 8) What is Excretion? Explain the significance of excretion.
- 9) What is specific gravity? Explain the measurement of urine-specific gravity using a urinometer.
- 10) Explain the diagnostic test used for the Ketone bodies in urine sample,

Project and PPT Work

1. **Student should prepare a handwritten art integrated project of Medical Diagnostics related topics (Pages of project 20 to 25).**
2. **Prepare PPT on the following topics:**
 - Prevention of infectious diseases to create awareness.
 - Diagnosis of lung diseases
 - Career scopes in Medical/ Medical Diagnostics

CHEMISTRY

Class XI Holiday Homework

TASK -1: Students are expected to develop an investigatory project aligning with modern day issues correlating with chemistry. The ideas for reference in a few key areas are mentioned below for your reference. The project can be aligned with a valuable , significant idea outside the listed topics as well.

● **Chemistry in Everyday Life:** Explore the chemical composition, properties, and applications of common household substances (e.g., soaps, detergents, food preservatives, cosmetics).

Possible Project Ideas:

Analyzing the pH levels of different brands of shampoos and their effect on hair.

Investigating the effectiveness of different natural substances as antacids.

Studying the presence of adulterants in common food items like milk or spices (using simple qualitative tests).

● **Environmental Chemistry:** Investigate a local environmental issue related to chemistry.

Possible Project Ideas:

Analyzing the quality of groundwater in your locality for common contaminants (e.g., nitrates, chlorides).

Studying the effect of different types of fertilizers on plant growth and soil composition.

Investigating the levels of air pollutants (like particulate matter) in a specific area.

- **Natural Resources and Chemistry:** Explore the chemical aspects of locally available natural resources.

Possible Project Ideas:

Investigating the chemical properties of locally found medicinal plants and their traditional uses.

Analyzing the mineral content of different types of soil found in your state.

Studying the process of extracting dyes or pigments from natural sources. Deliverables of the Investigatory Project will be as follows:

- You will submit a detailed project report that includes:

- Title of the project
- Introduction and background information
- Objectives of the project
- Materials and methods used
- Observations and data collected (tables, graphs, etc.)
- Analysis and interpretation of results
- Conclusion
- Bibliography

- **Presentation:** Be prepared to present your project findings to the class after the holidays.

Task - 2 : Look at chapter 1 from your NCERT- XI (part 1) and create detailed concept maps illustrating the relationships between different concepts within those chapters and with the chapters studied in NCERT - IX and X. This will help you visualize the interconnectedness of ideas across different grades.

Deliverables of Task 2 are as follows:

- A detailed concept map at A3 sheet
- A personalised reflective note on how the concepts have traversed over the three classes.

Task - 3 : Every week, keep track of news articles related to chemistry (e.g., new discoveries, environmental issues, industrial applications, health-related chemistry). For each article, write

a brief summary (just around 100 words) explaining the chemical concepts involved and their significance in the context of the news.

Deliverables of the task 3 are as follows:

- Minimum number of articles : 4
- Cut outs/ printouts of the articles
- Short summary on the pointers mentioned above

ECONOMICS

1. Read all the chapters.
2. Prepare a project Report (20- 25) pages
3. Do survey of your locality or any market and present the analysis report in ppt .

BIOLOGY

1. Build Your Own Bio-Journal (Scrapbook/Handmade Notebook)

- Objective: Explore “Biology in Daily Life”
- Instructions: Record 10 biological observations from your environment (plants, animals, human behaviour, health trends, environment etc.).
- Add: - Photos/drawings, Scientific name/classification, interesting facts

2. Microbiome Study at Home* Submit short video (1-2 min) explaining the microbiome.

- Activity: Swab different surfaces (refrigerator handle, phone screen, wash basin, etc.) and grow cultures in homemade petri dishes using gelatine.
- Record: Growth patterns over time (with photos), Differences in microbial presence, Hypothesize why some areas had more/less growth

Note: Follow hygiene and safety guidelines as discussed in the Class

3. Biology Reels / Short Videos*

Create *1-minute videos* on any 2 of the following in decent outfit (jeans & Top) in natural surroundings. Be creative: include animations, voiceovers, or demonstrations

S. No.	Topic	S. No.	Topic
1	Why Do We Yawn?	7	Why Do We Get Goosebumps?
2	Why Do Onions Make Us Cry?	8	Why Does Our Skin Tan in the Sun?
3	The Science of Sneezing.	9	Why Do Leaves Change Colour in Autumn?

4	Camouflage in animals	10	Why is climate change considered a global threat?
5	Why is reducing plastic usage critical for the planet?	11	Why is the ozone layer important?
6	Why Do Birds Migrate Long Distances?	12	Why Do Some Animals Hibernate in Winter?

4. Virtual Herbarium

Collect & press 5 local medicinal plant leaves

Document: Local and scientific name, Medicinal uses, Morphological features, Habitat

Present it digitally as a PowerPoint

5. **Research-Based Presentation** Submit as a PPT (8–10 slides) with images, graphs, and one real-life case study

S. No.	Topic	S. No.	Topic
1	Impact of climate change on biodiversity	5	Ozone Layer Depletion: Past, Present & Future
2	Plastic Pollution and the Path to a Plastic-Free Future	6	Green Energy vs Fossil Fuels: The Future of Power
3	The Role of Youth in Sustainable Development	7	Water Crisis in India: Causes and Conservation Strategies
4	Deforestation and Its Impact on Biodiversity	8	Carbon Footprint: What It Is and How to Reduce It

6. Art Meets Science

- Create a *biological comic strip* on any topic (example: “A Day in the Life of a Red Blood Cell” or “A Day in the life of Food in alimentary canal”)

4. Know your State Handicraft and Handlooms as a means of economic activity for the livelihood of people and intellectual property rights attached to them for the promotion of local specific skills.

ENGLISH CORE

Holiday Homework for class 11A, 12 C, and 12 E

Make TWO Project portfolios.

- Visit CBSE Academic website on cbse.nic.in and refer to the curriculum.
- Select a topic either from book or any topic of your choice and do some research on it.
- Choose an activity to show what you have concluded or researched. Example Interview, documentary, survey, Power point presentation, or 5-minute skit.
- Compile everything. Record the activity or attach proofs in terms of screenshots or photographs.

· In the last write a report in about 800 words about the project as to how you did the entire task.

· All this is mentioned in curriculum (syllabus) under the heading of Internal Assessment and arrange the documents in the order mentioned in the syllabus.

GENERAL STUDIES

Holiday Homework for class 11A, 12 C, and 12 E

Make TWO Project portfolios.

- Visit CBSE Academic website on cbse.nic.in and refer to the curriculum.
- Select a topic either from book or any related topic of your choice and do some research on it.
- Choose an activity to show what you have concluded or researched. Example Interview, documentary, survey, Power point presentation, or 5-minute skit.
- Compile everything. Record the activity or attach proofs in terms of screenshots or photographs.
- In the last write a report in about 800 words about the project as to how you did the entire task.
- All this is mentioned in curriculum (syllabus) under the heading of Internal Assessment and arrange the documents in the order mentioned in the syllabus

FINANCIAL MARKETS MANAGEMENT XI D

Prepare list of mutual funds

Top 20 stocks of nifty 50 (write)

Nifty bank : list of 13 banks.

INSTRUCTIONS

- Read the instructions carefully
- Each question to be prepared on a separate sheet.
- Should be handmade/ in printed form as per the instructions
- Be Creative

ENGLISH XI E

PROJECT: Memories

1. Diary Entry
 - a. About your feelings before the commencement of the activity
2. Theme.
 - a. Write the theme using different colours.
 - b. Find a quote/ make your own related to the theme word.

3. Web chart
 - a. Words related to the theme. (Minimum: 7 words)
 - b. Use different colours, fonts and size of letters
4. Vocabulary
 - a. Write synonyms for each word in the web chart
 - b. Write antonyms for each word in the web chart
5. Poems/ Songs
 - a. Using these words write a poem or song (min 8 lines)
6. Down Memory Lane
 - a. Collect your photographs of various ages
 - b. Describe them in few words (a quote, one liner/ self-composed)
 - c. Make a beautiful border for the photographs
7. The funnier side
 - a. Make a caricature/ emoticons of yourself:
8. Article Writing
 - a. Write an article on the Theme (You can use words and quotes that you have earlier prepared}
9. Hashtags
 - a. For all the activities.
 - b. To be used as Headings of each Page
10. Note Making
 - a. Give a feedback regarding the activity of different stages of the activity.
11. Diary Entry
 - a. Sharing your feelings after the completion of the Project about the activity.

BUSINESS STUDIES

Learn chapter 1. Prepare 30 MCQ of the same chapter .

Prepare project as discussed in the class.

Topics: any one .

1 forms of business. sole proprietorship, partnership, public company.

Visit your local market and prepare project

File of 20-30 pages on the above topic (any one)

IP

As part of their holiday homework, students of Grades XI (Informatics Practices) are required to create a simple, functional app using beginner-friendly platforms like MIT App Inventor, Thinkable, Streamlit, or Replit. The objective is to solve a real-life problem or support a school activity through basic app development. Students should follow a structured process:

identifying a problem, planning features, designing a basic interface, building and testing the app, and documenting their work with screenshots and a short report. Suggested app ideas include habit trackers, quiz apps, expense loggers, and school bulletin boards. Submissions should include the working app link or files, a brief project report, and optionally, a short demo video. Evaluation will be based on creativity, functionality, design, and documentation.

FINE ARTS

Research about the different fields of career opportunities and college branches which involve learning about Painting. Find out about their exams, the collages, and their criteria of admissions, including estimated exam dates.

NCC

Why do you want to join NCC? How does participation in the National Cadet Corps (NCC) contribute to the development of individuals' personalities, skills, and character?