

# **BIRLA BALIKA VIDYAPEETH PILANI (RAJ)**

Class 12

Holiday Home Work for Summer Vacations

## **ENGLISH PROJECT: XII A & D**

Languages: A Window to the world

Why No Indian Language is an International Language?

Add in relevant points, photographs wherever required

## **GENERAL STUDIES : XII A & D**

### **PROJECT**

Child Labour

Why is it Child Labour for BPL Children & Talent for Affluent Children?

Add in relevant points, photographs wherever required.

### **IP**

Solve the questions of Python pandas and MySQL shared on your email and write down the answers in practical file as per format shared.

### **NCC**

1. How did the life experiences and leadership qualities of Field Marshals K. M. Cariappa, OBE, and Sam Manekshaw, MC, influence their contributions to military history and India's role in global affairs? Elaborate
2. Write a short note on the recipients of the Param Vir Chakra, highlighting their exceptional acts of bravery and their significance in India's military legacy
3. Revise all the lessons that have been covered in class so far.

### **FINANCIAL MARKETS MANAGEMENT**

Prepare project work as discussed in the class

Learn chapter 1 and write 50 MCQ based on the same chapter.

Learn abbreviation of chapter one and write

## **INSTRUMENTAL MUSIC**

1. Write and practice the bandish in raga bageshree
2. Write and practice of the tal notation of tal rupak and jhap tal.

## **BUSINESS STUDIES**

Project 1 Principles of Management

Project 2 Scientific techniques of management.

Project 3 Stock Exchange

Project 4 Marketing.

## **LEGAL STUDIES**

### **Task 1: Debate/Discussion on a Legal Topic (10 marks)**

Instructions:

1. Choose a controversial legal topic for a debate or discussion. Possible topics include:
  - Should India abolish the death penalty?
  - Is the age of criminal responsibility too low in India?
  - Should sedition laws be repealed in India?
  - Are Indian laws effective in protecting women's rights?
2. Prepare arguments for and against the topic:
  - Gather relevant legal provisions, case laws, and statistics to support your arguments.
  - Present the arguments logically, clearly, and respectfully. If possible, record your debate or discussion session (audio or video).
3. Write a reflection (150-200 words) about the debate:
  - What did you learn from the topic?
  - How did it help you better understand the legal system?
  - What legal principles were most important in the debate? (5 marks)

### **Task: 2 (Case – laws, File Preparation) 10 marks**

: Prepare a case study on a constitutional, civil and criminal one each as discussed in the classroom.

: Write the facts, background and judgment of each case.

: Paste pictures wherever required.

: Make it very neatly and an in an organised manner.

## **MATHEMATICS**

1. Revise chapter 1, 3, 4 and 12 from NCERT and 50 extra questions (25 short answer and 25 long answer) from any reference/NCERT Exemplar book in a separate copy.
2. Revise Class 11<sup>th</sup> syllabus for competitive exams.

## **BIOLOGY**

### **Instructions:**

- All work must be done neatly in the Biology notebook or as instructed.
- Practical files must be updated, labelled, and covered properly.
- Maintain an index page in all notebooks and files.
- Submit the homework on the first day after summer vacation.

### **Holiday Homework Tasks:**

#### **1. Revision Work**

- Revise and make crisp notes on the following chapters:
  - Sexual Reproduction in Flowering Plants
  - Human Reproduction
  - Reproductive Health
- Prepare flowcharts, diagrams, and mind maps to simplify concepts.

#### **2. NCERT Practice**

- Solve all NCERT back exercise questions and exemplar problems for the above chapters in your homework notebook.

#### **3. Investigatory Project**

- Select one investigatory project topic (individually or in pairs).
- Prepare a synopsis (1–2 pages) including:

 \*Project File Format:

1. Title Page
2. Certificate
3. Acknowledgment
4. Introduction)

5. Objective
6. Methodology
7. Survey Design & Sample Questions
8. Results (Tables/Charts)
9. Conclusion
10. Bibliography

#### **4. Practical File Completion**

Update the Biology practical file with the following Practical:

- Prepare a temporary mount to observe pollen germination.
- Flowers adapted to pollination by different agencies (wind, insects, birds).
- Pollen germination on stigma through a permanent slide or scanning electron micrograph.
- Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
- Meiosis in onion bud cell or grasshopper testis through permanent slides.
- T.S. of blastula through permanent slides (Mammalian).

Mandatory elements of Practical required in Files:

- Labelled diagrams
- Observations
- Results and conclusions

Cover and index the file properly.

#### **5. Creative Assignment**

- Prepare a poster or infographic on the topic:  
“Role of Reproductive Health in Adolescent Well-being” (A4 or A3 size)

## **ACCOUNTANCY**

1. Prepare comprehensive project of original data for Board Examination.
2. Revise the topics which are taught in the month of April and May.

# BIOTECHNOLOGY

## Subjective Questions

1. Define the following:

- Plasmid Restriction site
- Transformation

2. What are restriction enzymes and why are they so important in rDNA technology?

3. Enlist the various steps involved in a rDNA experiment.

4. What are the essential features of a vector?

5. What does PCR stand for? Name the different steps in a PCR reaction.

6. Explain 'Insertional Inactivation'.

7. What are the disadvantages of using *E. coli* for production of eukaryotic proteins?

8. Distinguish between:

- Blunt ends vs sticky ends
- YAC vs BAC
- Microinjection vs Electroporation

9. Write a short note on RFLP and indicate one of its important applications.

10. Explain protein fingerprinting technique with suitable diagram.

## Project Work

1. Student should prepare a handwritten art integrated investigatory project of Biotechnology related topics (Pages of project 20 to 25).

## CHEMISTRY

**Task -1:** Prepare an Investigatory project based on guidelines for class XII.

Deliverables of Task-1 are -

- A detailed report on the investigatory project
- A presentation on the project chosen

**Task-2:** Look at chapter 1,2 from your NCERT- XII (part 1) and create detailed concept maps illustrating the relationships between different concepts within those chapters and with the chapters studied in NCERT - IX, X and XI. 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 classes.

**Task-3:** Solve the worksheet provided for your practice.

Deliverables of Task-3 are as follows:

- Detailed and step by step solutions of the problems given in the worksheet as per CBSE Board Answering Strategy discussed in class.

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**Task - 4:** 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

## **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.

## **PSYCHOLOGY**

1. Learn chapters 1 and 2.
2. Complete the practical file as discussed in class.
3. Create the case profile as discussed. Also collect relevant certificates and photos.
4. Prepare 5 mind maps each from chapters 1 & 2, (total 10) as discussed.

## **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)**

## ARTIFICIAL INTELLIGENCE

Create 100 multiple-choice questions based on the chapters *Data Science Methodology: An Analytic Approach to the Capstone Project* and *Data Storytelling*.

## COMPUTER SCIENCE

1. Solve last 10 years CBSE paper for SQL topic
2. Read computer networking chapter prepare notes and create list for full forms

## ENGLISH CORE

For class 11A, 12 C, and 12 E

Make TWO Project portfolios.

- Visit CBSE Academic website on [cbse.nic.in](http://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**

For class 11A, 12 C, and 12 E

Make TWO Project portfolios.

- Visit CBSE Academic website on [cbse.nic.in](http://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.

## **ENGLISH XII - B**

Read the National newspaper cut out the classified advertisements. Analyse the key features and highlight them.

2. Read 10 editorial pieces of leading National daily and highlight the new vocabulary, idioms and the usages. 3. Read classic/international lit prize winning fiction. Write a synopsis or summary. Write your critical review of the fiction.

## **ECONOMICS**

1. Prepare a hand written project Report of 40 pages on the topics as discussed in the class.
2. Learn and prepare all chapters done during the month of April & May for test in July.

3. Read all chapters of IED.

## **POLITICAL SCIENCE**

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.
3. Take Political maps and locate the following:
  - a) Axis Powers and Allied Powers
  - b) NATO countries
  - c) Warsaw countries (Any Five)
  - d) Countries which were affected after disintegration of USSR.
  - e) State formation after independence along with the year.
4. Read newspaper daily.

## **ENTREPRENEURSHIP**

Prepare project on market survey.

## **FINE ARTS**

Draw 7 compositions on an A3 size sheet about daily life.

## **MULTI MEDIA**

Create a portfolio for the subject Multimedia as per format shared on student email.

## **MEDICAL DIAGNOSTICS**

Holiday Homework

### **Subjective Questions**

1. What is Haematology? Define in your words.
2. What is the role of clinical haematology laboratory in hospital?
3. What is the use of Auto-analyser in haematology laboratory?
4. Write a short note on Haematology laboratory analysis with definition examples of test.

5. What is the role of Immersion oil and DPX in microscopy study?
6. What precautions are required to consider while using a centrifuge?
7. Explain the difference between the term Pellet and Supernatant.
8. Draw the labelled diagram of following:
  - (a) Compound microscope
  - (b) Blood clotting process
9. Explain the role of Automated cell counter with its working principle.
10. What is the use of 'Coagulation analyser' in diagnosis?
11. What is the mode of action of EDTA as anticoagulant?
12. Which anticoagulant is most suitable for estimation of Erythrocyte Sedimentation Rate (ESR) by Westergren method?
13. Explain the advantages and disadvantages of Heparin as anticoagulants.
14. What is the advantage of use ammonium oxalate and potassium oxalate are combined as double oxalate?

### **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 anaemia
  - Blood cancer and its types
  - Career goals