



MATA JAI KAUR PUBLIC SCHOOL

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CLASS 12 (SCIENCE STREAM) HOLIDAYS HW

ENGLISH

READ

Q1) Read the chapters 'Indigo' and 'The Rat-trap'. Identify the theme of both the chapters and write it in your own words (Word Limit: 100 words).

Q2) Complete the practice assignment on Reading Comprehension.

ART INTEGRATED ACTIVITY

Q3) Taking ideas from the chapter, 'Lost Spring: Stories of Stolen Childhood', create a poster spreading awareness against child labour. Research and try to find out more about the legal measures that can be adopted in the battle against 'Child Labour'. The poster has to be pasted in your register.

Q4) Explore the following concepts and draw a brief mind map for each of these concepts/ words. Note that all these concepts will be helpful in understanding the chapters/poems.

- Socialism
- Romanticism
- Feminism
- Racism
- Satire
- Patriarchy

EXPLORE

Q5) ALS PROJECT

Utilize the vacations to choose a topic and decide the type of project you would like to research on. You may research briefly on the project. The list of topics will be included in the assignment. This will be followed by a discussion in the class.

MATHEMATICS

1. Revise chapter 1,2, 3, 4, 5.
2. Assignments of chapters 1,2 3, 4, 5.
3. Write 10 activities in Maths practical file from Maths Lab Manual of class 12.
4. Make MIND MAPS of Chapters 1 to 5.

Physics

1. Complete the practical file work, 8 experiments and 6 activities.
2. Finalize the aim of the project, discuss and prepare the report(hand written only) to be submitted during HY practical exam.It can be done by an individual or in a group of 2 students.
3. Complete NCERT back exercises of chapter 1, 2 and 3.Additional exercise of chapter 2 and 3 also.
4. Derive an expression for an electric field due to a uniformly charged ring at a point on its axial line.
5. Derive an expression for the electric potential due to an electric dipole at a general point.
6. Derive Ohm's Law in vector form.

7. Derive relation between drift velocity and current density.
8. Derive an expression for net e.m.f. when 2 cells of emf E1 and E2 are connected in parallel to each other.
9. Practice numericals and conceptual problems from PYQ's.

Chemistry

1. Complete NCERT back exercise of chapters 1, 6 and 7 and MCQ based assignment in the class notebook.
2. Write any 5 complete salts in your Chemistry practical files.
3. Poster on any one topic on A3 size sheet(Landscape or Portrait mode)
 - a) Biodegradable fuels
 - b) Materials for the future.

Computer Science

Write programs to

- a) Replace all 'a' with '@' in the text file 'story.txt. (Clue :use string function replace like `d=d.replace('a','@')` where d is the string in which 'a' is present.
- b) Read lines from story.txt. Count the number of lines that start with 'A'
- c) To count those words in story.txt that end with 'e'. Clue : use `read()` to read contents, split so that words are separated. then see `if word[-1]=='m'`

Psychology

1. CASE PROFILE

- You are required to choose a person on whom you want to do your case study. The person should be from 14-18 years of age and willing to cooperate with you.

FILE WORK (Refer to Notes Shared and Discussions)

- INDEX (leave it blank as of now)
- INTRODUCTION (Explain case study method; advantages and disadvantages of this method)
- TOOLS USED FOR COLLECTING DATA:
 - o Observation method
 - o Interview method
 - o Psychological test
- REASONS FOR CHOOSING THE SUBJECT (disability/special case)
- AIM (Intelligence/personality/attitude/self-concept - ANY 2)
- DATA COLLECTION
- INTERVIEW
- INTERVIEW ANALYSIS
 - o subject interview analysis
 - o subject's mother interview analysis
 - o subject's father interview analysis
- OBSERVATION METHOD
- REPORT OF SUBJECT'S OBSERVATION (share how he /she is in school / with friends /with parents i.e. according to your observation)

REST OF THE FILE WORK WILL BE DONE AFTER SUMMER HOLIDAYS

2. PRACTICAL FILE

Practical 2: Maudsley Personality Inventory

Practical 3: Sentence Completion Questionnaire

3. **POSTER (A3)** on any one of the topics
COGNITIVE DISTORTIONS
POSITIVE PSYCHOLOGY
OR ANY PSYCHOLOGICAL THEORY/ SYNDROME (that you find interesting)

Economics

1.Documentary Reflections:

Watch the recommended documentaries:

- DEMONETIZATION - Broken History
- PLASTICS - History 101
- THE RISE OF CHINA - History 101
- FAST FOOD - History 101

Summarize key learnings from each documentary in the form of a brief reflection.

2.Mind Maps Creation:

Prepare mind maps for the following chapters:

- Money and Banking
- Government Budget
- Balance of Payments and Foreign Exchange
- Indian Economy on the Eve of Independence
- Indian Economy (1950 - 1990)
- Economic Reforms since 1991

3.Research Work for Project:

- Conduct research on selected topics for the project and collect news articles that provide insights and data relevant to the chosen themes.

4.Historical Evolution Analysis:

- Research and document the history of the Planning Commission in India, highlighting its establishment, objectives, and key functions.
- Analyze the factors that led to the decision to replace the Planning Commission with NITI Aayog.
- Compare and contrast the organizational structure, mandate, and approach of the Planning Commission and NITI Aayog.

5.Assignment Completion:

- Ensure the completion of the assignment shared in class, adhering to guidelines and submitting it on time.

Please approach each task with diligence and curiosity, and feel free to reach out for assistance if needed.

Biology

1. Complete the assignment of chapter 1,2 and 6 in Biology notebook. (To be submitted on 3rd July'24).
2. Read,research and frame an investigatory project on the suggested topics. The project work should consist of:
 - Index
 - History or epidemiology

- Introduction
- Main content
- Supporting content like real data, comparative analysis, present and future trends, diagnostics, treatment etc. (Based on the selected topic of your project)
- Case studies or observations
- Followup, Results and Interpretation.
- Bibliography

Physical Education

1. Make a project File using a punch sheet of the following topic.
2. Physical fitness tests administration for all items:
 - Fitness test - (Page 6.3)
 - Rikli and jones : Senior citizen fitness test - (Page 6.12)
 - Battery test for the age group 9 to 18 years - (Page 6.6)
 - Measurement of BMI - (Page 6.4)
3. Labelled diagram of field & equipment of any one game of your choice out of the above list: Football, Basketball, Volleyball.
4. Write any 3 aasan which prevent Asthma,Diabetes,Hypertension and obesity with their procedure,Benefits and contradictions - (Page 3.2 to 3.39)
5. Prepare study notes for Unit 1 (Management of sporting events)