# DELHI PUBLIC SCHOOL ALIGARH
## CLASS-XII
## HOLIDAY HOME WORK-2023-24

**Dear students,**

**This summer vacation let the waves hit your feel, and the sand be your seal. Summer vacation is always meant for fun, frolic and rejuvenation. However, it also means enhancing our skills, becoming more polished and productive at the same time. To ensure we are keeping ourselves creative and innovative, and not just intelligent, our team of teachers have created some mind-blowing activities for you to enjoy and learn from!**

**Please read through the instructions carefully before completing the tasks.**

**Wishing you a vacation full of tanning, memories and creative vigor!**
**Happy holidays!**

## SUBJECT-ENGLISH

**1. <u>MARKING SCHEME:</u>**
- The project consists of 20 MARKS.
- 10 MARKS will be allotted for the PROJECT FILE, and remaining 10 MARKS for the VIVA based on the file.
- The viva will be conducted according to the date sheet issued by the Examination Department for Board Practical.
- Project file needs to be submitted on 3rd July.

**2. <u>INSTRUCTIONS</u>:**
- Refer to the links of the podcasts attached according to your Roll No.
- All these podcasts are available on **SPOTIFY**.
- Listen carefully two to three times to these podcasts, documentaries, interviews etc.
- Do a thorough research on the topic.
- Prepare a report/essay in about 800-1000 words describing the topic/issue/giving your own opinion/suggestions/measures/viewpoints/its impact on people/your learning experience.
- You can also state the name of various speakers/people (in the given documentaries/video links), quote them and express their viewpoints.
- The project should be neat, legible, with an emphasis on quality of content, accuracy of information, creative expression, proper sequencing and should be relevant as per your assigned topic.
- Project to be submitted handwritten on ruled worksheets or A4 size paper.
- **Plagiarism is a serious offence and no two scripts should be found same. Candidate will be penalised if found sharing research work with anyone.**
- There are 20 topics. Topics are distributed Roll-No Wise. Adhere to your topic only.

**3. <u>CONTENT OF THE PROJECT FILE:</u>**
- Cover page, with the title of the project, school details and details of the student.
- Certificate of Completion under the guidance of the teacher.
- Objectives of the topic.
- Action Plan for the completion of assigned tasks (steps involved in doing the project).
- The 800-1000 word essay/report.
- Student reflections (what new learning experience/outcome you have achieved after completing the project).

- If possible, photographs that capture positive learning experience of the students (collages/pics from various online sources).
- List of Resources/Bibliography/ Citation (Last page of the project file)

**4. LINKS**:
**ROLL NO. 1, 21**
https://open.spotify.com/episode/663nzLafAS6Fdlu2gPgMyH?si=rFfQmFkMSW2T7ThG-E2Waw
**ROLL NO. 2, 22**
https://open.spotify.com/episode/48OiPO38GaqmZ8rWwOLqRo?si=Pbb8WbRBQdihyifSwr85kQ
**ROLL NO. 3, 23**
https://open.spotify.com/episode/73AOqg9kiUjgX935HKhi3p?si=ZHae7oZ_QUKKFGqAJhWjhg
**ROLL NO. 4, 24**
https://open.spotify.com/episode/4xF18kwQgFqi2TRFU1hPRa?si=xP0kUErTSeSbdCAmKxoBCw
**ROLL NO. 5, 25**
https://open.spotify.com/episode/3Zt5Y3IQKNWcaMk4WrtBEk?si=AvuPoWYhQF6a4_l4jci2xw
**ROLL NO. 6, 26**
https://open.spotify.com/episode/1fB4WATlC4BZcrUAwKgjEd?si=KNZq6sW4T16jXAS2pNSp1A
**ROLL NO. 7, 27**
https://open.spotify.com/episode/2xep5fwJB5K17m2CzbMadD?si=sJgtga74QdCPFhzn-TKzuQ
**ROLL NO. 8, 28**
https://open.spotify.com/episode/6AZUnzTJ83CyBX7BkMJvoS?si=kO5j7de_Q36-XI5XiXSspQ
**ROLL NO. 9, 29**
https://open.spotify.com/episode/48JzZ2cAdd368wqHZYdlBM?si=WIYlbCRlRReSYEoJJhSHWQ
**ROLL NO. 10, 30**
https://open.spotify.com/episode/5OdHs5CNckSKurHDaxLmmB?si=jB69HgYWQF-BetlGTXwM4g
**ROLL NO. 11, 31**
https://open.spotify.com/episode/4Hq2SQ2wdgq2nuQxuG15Ie?si=sSOuQRAoSwmp1zmPFmn6Jg
**ROLL NO. 12, 32**
https://open.spotify.com/episode/6E2aJ3yMpc3T8PwklFCQIo?si=jp3LLuYfRWK4s1hQwedjjA
**ROLL NO. 13, 33**
https://open.spotify.com/episode/2cqk8qdsDmpCdx3euVcW15?si=eb4okGvdR7i_aAQ54XrUHw
**ROLL NO. 14, 34**
https://open.spotify.com/episode/6FLi6X8gJPUi7nsBzp8bmz?si=ERDJ8LgVQ7OnyuF-t1vGiw&context=spotify:show:1VXcH8QHkjRcTCEd88U3ti
**ROLL NO. 15, 35**
https://open.spotify.com/episode/3UFge17oFTCcmVypkREESA?si=hhFOk2tcTiqnEYEASw1naQ
**ROLL NO. 16, 36**
https://youtu.be/kcW4ABcY3zI
**ROLL NO. 17, 37**
https://open.spotify.com/episode/1bJQYdZs7FhHTYAer5b2Xw?si=9eeGJwHERz6v1NYzR56eow
**ROLL NO. 18, 38**
https://open.spotify.com/episode/4hojmoJXBlm9smhZxmRk9d?si=muU-swAORsCHZT5W3dIaNw
**ROLL NO. 19, 39**
https://open.spotify.com/episode/4di420eWl4AvNSYoizvRll?si=Uw9Lf02NSBSE59GWNBHrEw
**ROLL NO. 20, 40**
https://open.spotify.com/episode/1j5irY0ilygxvsWSGqTnsA?si=8QK8YaUWRxG62QeORC6Mnw

## SUBJECT-PHYSICS
➢ Students of class XII are instructed to prepare a project report on below mentioned topics and submit the same in first week of July positively.

**TOPICS FOR PROJECT REPORT: -**
1. SEMICONDUCTOR

2. RAIN ALARM
3. AC GENERATOR
4. AUTOMATIC ELECTRIC TRAIN BARRIER
5. TRANSFORMER
6. RECTIFIER
7. CAPACITOR
8. CYCLOTRON
9. PHOTOELECTRIC EFFECT
10. ASTRONOMICAL TELESCOPE
11. ELECTROMAGNETIC INDUCTION
12. INTERFERENCE OF LIGHT
13. POLARISATION OF LIGHT
14. DIFFRACTION OF LIGHT
15. FACTORS AFFECTING INTERNAL RESISTANCE OF CELL

Students having Class roll.no from 1 to 15, from 16 to 30 will follow the above sequence of topics.

## SUBJECT-CHEMISTRY

**1.** Prepare an investigatory project assigned to you involving laboratory testing and collecting information from other sources.
**2.** Revise the following chapters:
  a) Solutions
  b) Electrochemistry

## SUBJECT-BIOLOGY

Q. Prepare an investigatory project on the given topics.
i) DNA Fingerprinting.
ii) Recombinant DNA technology in technology in todays medicine.
iii) Human genome project
iv) Antibiotics
v) Effects of cannbis on human body.
vi) Human cloning
vii) Fermentation process
viii) Pedigree analysis
ix) Effects of Diet on blood glucose
x) AIDS
xi) Cancer
xii) Drug addiction
xiii) Malaria
xiv) Pollination
xv) Spermatogenesis
xvi) Microbes in human welfare
xvii) Detailed study on infertility its causes and treatment.
xviii) Biotechnology and its application.
Note: If any wants to prepare on some other topic than acknowledge me before preparation.

## SUBJECT- MATHEMATICS

1. Prepare your Mathematics activities file. (MATHEMATICS LABORATORY ACTIVITY BOOK PRACHI PUBLICATION) cover with yellow colour chart paper
2. Write down five activities from syllabus.
Five activities are as follows
Activity1: To verify that the relation R in the set L of all lines in a plane, defined by R ={ (l,m): l || m } is an equivalence relation

Activity2: To identify whether the given function is many one or one one, into or onto by considering domains and codomains.

Activity3: To verify that angle in a semicircle is right angle, using vector algebra

Activity4: To measure the shortest distance between two skew lines and verify it analytically.

Activity5: To explain the computation of conditional probability of a given event A when event B has already occurred, through an example of throwing a pair of dice.

Submit it positively 1st week of July 2023 positively.

# SUBJECT-ACCOUNTANCY

**Project File (Comprehensive Project)**

Formation of Journal entry, Ledger Account, Trail balance and Financial Statement

# SUBJECT-BUSINESS STUDIES

Students are required to submit the Data Analysis and interpretation on the project (already assigned) given below:

I. Project One: Elements of Business Environment

II. Project Two: Stock Exchange

III. Project Three: Marketing

IV. Project Four: Principles of Management

NOTE: The project work had already been discussed in the class moreover the detailed guidelines and project allotment list are uploaded on Entab as well as on the class Whatsapp Group.

Good Luck!

# SUBJECT-ECONOMICS

With reference to the concept of positive/negative externality under the heading GDP and welfare, prepare a project report of 5-6 pages on any of the following topics:

1-"Vision of Aligarh as a SMART CITY"

(Details to be covered: what changes do you expect and how will it affect the quality of life of people of Aligarh and its neighbouring areas)

2-Aligarh got a project named "DEFENCE CORRIDOR"

(Details to be covered: how will this project affect the employment situation and welfare part of the people of Aligarh)

NOTE: Submit your project by July, 07, 2023

# SUBJECT-HISTORY

1. Analyse and interpret the meaning of any three unseen passages displayed in the following chapters of history text book.
   (A) The Harappan Civilization.
   (B) Kings, farmers and towns.
   (C) Kingship, caste and class.
   (D) Thinkers, beliefs and buildings.

**NOTE: -** Write answer in your class note book of history.

# SUBJECT-POLITICAL SCIENCE

1. Analyse and interpret the meaning of cartoons/pictures displayed in the following chapters of Political science text book.
   (A) Challenges of nation building.
   (B) Era of one Party dominance.
   (C) Politics of planned development.
   (D) The end of bipolarity.
   (E) Alternative centres of power.

**NOTE: -** Write answer in your class note book of Political science.

# SUBJECT-GEOGRAPHY

A. **Prepare cartographic maps for the following:**
1. The largest country in each continent in terms of area.
2. Areas of subsistence gathering.
3. Areas of nomadic herding.
4. Areas of commercial livestock rearing.
5. Areas of extensive commercial grain faming.
6. Areas of mixed farming.
7. Areas of Mediterranean agriculture.
   *Note: Use political outline map of the world and pencil colours and black pen.*

B. **Complete the class work note copy for chapters 1 to 6 including all maps and figures**

# SUBJECT-PHYSICAL EDUCATION

1) Write down about game the of Cricket: History of the game, Ten Terminologies, Five Skills, Five Tournaments, 10 Players name, Play Field diagram.

2) BMI of Four family members.

3) Rikli & Johns Test (Sr. Citizen Fitness Test)

4) Khelo India Fitness Test for 5 to 8 yrs & 9 to 18 yrs.

Note: Holiday home works have to be completed in Lab manual and to be submitted by 10th July 2023.

# SUBJECT-COMPUTER SCIENCE

Practical File : Prepare practical file with minimum 22 python programs. List of suggested programs are given below:

COMPUTER SCIENCE RECOMMENDED PRACTICAL LIST FOR CLASS XII

1. Write a python program to search an element in a list and display the frequency of element present in list and their location using Linear search by using user defined function. [List and search element should be entered by user]

2. Write a python program to search an element in a list and display the frequency of element present in list and their location using binary search by using user defined function. [List and search element should be entered by user]

3. Write a python program to pass list to a function and double the odd values and half even values of a list and display list element after changing.

4. Write a Python program input n numbers in tuple and pass it to function to count how many even and odd numbers are entered.

5. Write a Python program to function with key and value, and update value at that key in dictionary entered by user.

6. Write a Python program to pass a string to a function and count how many vowels present in the string.

7. Write a python program to implement python mathematical functions.

8. Write a python program to implement python string functions.

9. Write a python program to read and display file content line by line with each word separated by #.

10. Write a python program to remove all the lines that contain the character 'a' in a file and write it to another file.

11. Write a python program to read characters from keyboard one by one, all lower case letters gets stored inside a file "LOWER", all uppercase letters gets stored inside a file "UPPER", and all other characters get stored inside "OTHERS"

12. Write a python program to create a binary file with name and roll number. Search for a given roll number and display name, if not found display appropriate message.

13. Write a python program to create a binary file with roll number, name and marks, input a roll number and update the marks.

14. Write a python program to create a CSV file with empid, name and mobile no. and search empid, update the record and display the records.

15. (i)Write a Python program to create Lpush( ) and Lpop( ) function to do push and pop operation on a stack using a list e.g. take a student information and push and pop the details.(ii)stack using flight details(iii)stack using bank details

17. Create a student table and insert data. Implement the following SQL commands on the student table: ALTER table to add new attributes / modify data type / drop attribute, UPDATE table to modify data ORDER By to display data in ascending / descending order DELETE to remove tuple(s) GROUP BY and find the min, max, sum, count and average(ii) bank table (iii) flight table(iv) hospital table

18. Integrate SQL with Python by importing the MySQL module record of employee and display the record.

19. Integrate SQL with Python by importing the MySQL module to search an employee using empno and if present in table display the record, if not display appropriate method.

20. Integrate SQL with Python by importing the MySQL module to search a student using rollno, update the record.

21. Integrate SQL with Python by importing the MySQL module to search a student using rollno, delete the record.

22. Take a sample of ten phishing e-mails (or any text file) and find most commonly occurring word(s)
NOTE:- Kindly make one copy one side blank and one side line. Paste output on left hand side of each question in copy.

## SUBJECT-INFORMATICS PRACTICES

**Practical File :** Practical file (minimum of 15 programs based on Pandas, 4 based on Matplotlib and 15 SQL queries must be included) :

**Data Handling**: 1. Create a panda's series from a dictionary of values and a ndarray

2. Given a Series, print all the elements that are above the 75th percentile.

3. Create a Data Frame quarterly sales where each row contains the item category, item name, and expenditure. Group the rows by the category and print the total expenditure per category.

4. Create a data frame for examination result and display row labels, column labels data types of each column and the dimensions

5. Filter out rows based on different criteria such as duplicate rows.

6. Importing and exporting data between pandas and CSV file

**Visualization** :

1. Given the school result data, analyses the performance of the students on different parameters, e.g subject wise or class wise.

2. For the Data frames created above, analyze, and plot appropriate charts with title and legend.

3. Take data of your interest from an open source (e.g. data.gov.in), aggregate and summarize it. Then plot it using different plotting functions of the Matplotlib library.

**Data Management**

1. Create a student table with the student id, name, and marks as attributes where the student id is the primary key.

2. Insert the details of a new student in the above table.

3. Delete the details of a student in the above table.

4. Use the select command to get the details of the students with marks more than 80.

5. Find the min, max, sum, and average of the marks in a student marks table.

6. Find the total number of customers from each country in the table (customer ID, customer Name, country) using group by.

7. Write a SQL query to order the (student ID, marks) table in descending order of the marks.

## SUBJECT-PAINTING

Prepare at least 5 imaginative paintings/ composition based on subjects from life in water and poster colours.

1. Affair of family, friends and daily life.

2. Games and Sports Activities.

3. National/ Religious/ Cultural/ Historical/ Social events and celebration.

## SUBJECT-DANCE

Q. Prepare a project on Oddisi dance history

Q. Prepare a project on Chhau dance history (all three types).

Q. Prepare a project on hand gesture in avinay darpan.

## SUBJECT-ENTREPRENEURSHIP

Analyse the business plan of the following start ups and submit a report in about 10 to 15 pages.

| S. NO. | Name of the Students | Class/Sec | Start ups Allotted |
|---|---|---|---|
| 1 | ADBHUT AGARWAL | XI B | Meesho |
| 2 | ANANYA YADAV | XI B | **PharmEasy** |
| 3 | ANMOL VARSHNEY | XI B | **CRED** |
| 4 | ANSHIT RAWAL | XI B | **Groww** |
| 5 | JAGRAT BHANSALI | XI B | Urban Company |
| 6 | NIKHIL AGRAWAL | XI B | Licious |
| 7 | PRANAV JAIN | XI B | upGrad |
| 8 | PRANAV MITTAL | XI B | Grofers |
| 9 | SANSKAR SAKET VARSHNEY | XI B | Vedantu |
| 10 | SARTHAK CHAUDHARY | XI B | MyGlamm |
| 11 | SHASHANK SHARMA | XI B | Mamaearth |
| 12 | SURVGUN GUPTA | XI B | BharatPe |
| 13 | TAKSH YOG KAUSHAL | XI C | Paymatrix |
| 14 | TANUSHKA  RAGHAV | XI C | Stellapps |
| 15 | YASH  RANA | XI C | ftcash |
| 16 | KHYATI  MIDDHA | XI C | Chakr Innovation |
| 17 | PARTH  JADAUN | XI C | Charge Zone |
| 18 | PRABHAT  YADAV | XI C | Meesho |
| 19 | UTKARSH SINGH SENGAR | XI C | **PharmEasy** |

A business plan is **a document that defines in detail a company's objectives and how it plans to achieve its goals**. A business plan lays out a written roadmap for the firm from marketing, financial, and operational standpoints. Both startups and established companies use business plans.