HOLIDAYS HOMEWORK (2025-26)

Class: XIIB

SUBJECT	HOME WORK
ENGLISH	Notice writing 1. You are Raghav/Ragini, Head Boy/Girl of Green Valley Public School, Lucknow. Your school is organizing a "Career Guidance Workshop" for Class 12 students. Write a notice informing students about the event and asking them to register their names. 2. You are Aarti, the Secretary of the Cultural Club of St. Mary's School, Delhi. Your school is organizing an Inter-School Dance Competition. Draft a notice giving details about the date, time, venue, and registration procedure. 3. As the librarian of Sunshine International School, Jaipur, draft a notice requesting students to return all library books before the commencement of the summer vacation. Sign as Priya/Pranav, School Librarian. 4. You are Rahul/Ria, the Sports Captain of Modern Convent School, Agra. Draft a notice informing students about the upcoming trials for the school football team. Mention eligibility, date, and venue of the trials. 5. As the President of the Environment Club of DPS, Bhopal, you are organizing a Tree Plantation Drive on World Environment Day. Write a notice inviting students to participate and contribute to the event. Invitation Writing (Formal and informal) Formal Invitations (5 questions) 1. You are Anuj/Anita, Secretary of the Drama Club of your school. Draft a formal invitation to be sent to the Principal of a nearby school to attend the Annual Play organized by your club. 2. As the Cultural Secretary of St. Xavier's School, Mumbai, draft a formal invitation to be sent to parents and dignitaries for the Annual Day celebration.

	3. You are organizing a Book Launch event on behalf of your school library. Prepare a formal invitation to be sent to an eminent author as the Chief Guest. 4. You are the President of the Rotary Club of your locality. Draft a formal invitation for a Blood Donation Camp being organized in collaboration with a local hospital. 5. You are the Head Boy/Head Girl of Greenfield Public School. Your school is hosting a farewell party for the outgoing batch of Class 12. Draft a formal invitation for the Principal to preside over the function. Informal Invitations (5 questions) 6. Your parents are celebrating their 25th wedding anniversary. Invite your friend to the celebration through an informal invitation. 7. You have recently moved into a new house. Invite your cousin to the housewarming party by writing an informal invitation. 8. You are throwing a surprise birthday party for your younger sister. Invite your close friend to join the celebration. 9. Your elder brother is getting married next month. Write an informal invitation to your school friend inviting them to the wedding ceremony. 10. You have planned a get-together for your school friends during the holidays. Draft an informal invitation to your best friend. 2 Project files 1. Ppt file for first term exams 2. Final board exam submission file which should contain. Cover page Index Acknowledged Certificate Content of the file Conclusion Bibliography Letter to editor writing :- 1. Write a letter to the Editor of The Times of India, expressing concern over the increasing cases of cyberbullying among teenagers. Suggest preventive measures and the need for awareness. 2. You are Aman/Amrita, a resident of Green Park, Delhi. Write a letter to the Editor of The Hindustan Times highlighting the rising pollution levels in your area due to unchecked construction activities. Suggest possible solutions. 3. Write a letter to the Editor of The Hindu expressing your views on the excessive use of mobile phones by students and how it affects their academic performance and mental health. 4. You are Suresh/Sunita, a Class 12 student. Write a letter to the Editor of a national daily expressing your opinion on the growing trend of junk food consumption among schoolchildren and its impact on health.

5. Write a letter to the Editor of The Indian Express regarding poor public transport facilities in your city. Mention the problems faced by daily commuters and suggest improvements.

Job application writing :-

1. You are Ankit/Ankita, a resident of 24, Model Town, Lucknow. You have seen an advertisement in The Times of India for the post of a Sales Executive in a reputed company. Write an application with a detailed resume.

2. You are Priya/Pranav of 44, Rani Bagh, New Delhi. You came across an advertisement for the post of an English teacher in Green Valley Public School. Write a job application in response to the advertisement, attaching your bio-data.

3. You are Nitin/Nita of 17, MG Road, Pune. You saw an advertisement in a national daily regarding a vacancy for the post of Graphic Designer in a private firm. Write a letter applying for the job, with your resume.

4. You are Rohan/Ruchi, a graduate in Mass Communication. You find a vacancy in a newspaper for a content writer in an advertising agency. Write a job application with bio-data for the same.

5. You are Tanya/Tarun, living at 8, Tagore Nagar, Bhopal. You have a B.Ed. degree and saw an advertisement in The Hindustan Times for the post of a Social Science teacher. Write an application with bio-data for the same.

Report writing

1. Your school recently organized a Science Exhibition. As the Cultural Secretary, write a report for the school magazine highlighting the key events and response from students and visitors.

2. You are a student reporter for your school newspaper. Write a report on a Road Safety Awareness Programme conducted in your school in collaboration with the local traffic police.

3. Write a report for a national daily on the increasing problem of waterlogging in your city during the monsoon season, its impact on daily life, and possible solutions.

4. You attended a workshop on "Mental Health and Wellness" conducted by a reputed NGO in your school. Write a report on the event for your school magazine.

5. As a reporter for The Indian Express, write a report on the Annual Cultural Fest held at Delhi University, mentioning the highlights, chief guests, and overall student participation.

Debate writing

1. You are participating in a debate on the topic: "Social Media Has Done More Harm Than Good." Write a debate either for or against the motion.

2. Prepare a debate on the topic: "Board Examinations Should Be Abolished." Write your arguments either in favour of or against the motion.

3. You are taking part in a school debate on the topic: "Online Education is Better than Traditional Classroom

	Learning." Write the debate speech for one side of the argument.
	
	  4. Write a debate for or against the motion: "Celebrities Should Not Be Role Models for the Youth."
	
	  5. Prepare a debate on the topic: "Technology Is Replacing Human Intelligence." Write the debate either in support of or against the motion.
	Note: Holiday homework should be done in fair notebooks only.

ACCOUNTANCY	Your Project must Contain 1. Acknowledgment 2. Certificate 3. name of Company (Company must be a public company. 4. Introduction of Company 5. Financial statement of Company 6. Meaning, Objective advantages and Limitations of financial Statement analysis 7. Meaning, Objective advantages and Limitations of Ratio analysis 8. Ratio Analysis which must contain all the Ratios (Liquidity , Solvency , Activity and Profitability) (you can a fix following along with Ratio analysis A. Bar Graph B. Line Graph C. Pie Chart etc 9. cash Flow Statement For further Reference you can follow the links given below https://youtu.be/ZBH6Gg_Y6Zw https://youtu.be/nfx94AiFAql https://youtu.be/Rt6TDTux1k8 https://youtu.be/VIusu9avQVQ Important Note :All calculation must be done on basis of Current year (2024-25) financial statement
MATHEMATICS	1. Write Activity 1 to 5 in practical file. 2. Revise examples and Exercise questions given in NCERT textbooks of Chapter- 1(Relations and Functions) , Chapter-3(Matrices) , Chapter-4(Determinants). 3. Solve Miscellaneous examples and Exercise questions in fair notebooks of Chapter- 1 (Relations and Functions) , Chapter-3(Matrices) , Chapter-4(Determinants)
BUSINESS STUDIES	You are required to Prepare Business studies Project, along with case studies on following topics : Project 1 Elements of Business Environment R.No. 1, 6 , 9 15 19 22 27 31 Project 2 : Principles of Management 2 5 11 14 18 23 26 30 34 Project 3 : stock Exchange 3 8 19 13 17 21 24 29 33 Project 4 : Marketing

	4 7 10 12 16 20 25 28 32
ECONOMICS	**General Instructions:** I. Submit the work on the given date II.Assignment to be done in register. III.Refer to NCERT or Reference book. 1. **Revise all the chapters** which have been covered in the class. 2. **Research Based Project-** To prepare PROJECT REPORT as per the following guidelines: The expectations of the project work are that: Learners will complete only ONE project in each academic session. Project should be of 3500-4000 words (excluding diagrams & graphs), preferably handwritten. It will be an independent self-directed piece of study. **TOPIC As discussed in class** **Expected Checklist:** ●Introduction of topic/title ●Identifying the causes, consequences and /or remedies ●Various stakeholders and effect on each of them ● Advantages and disadvantages of situations or issues identified ● Short term and long term implications of economic strategies suggested in the course of research ● Validity & reliability, appropriateness and relevance of data used for research work and for presentation in the project file. ● Presentation and writing that is succinct and coherent in project file ● Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc. ·3. **Art Integrated Project** (Pairing State Delhi and Andaman Nicobar, Lakshadweep)Prepare a project on the comparative study between Delhi and Andaman Nicobar island on the basis of macroeconomic indicators of both the states as subtopics and represent them in form of explanation, diagram, mind map, pie chart, graphs and make wise use of map and pictures related to topic. In this project you can show all your Art skills, drawing, colouring and designing etc. (To be done on A4 size sheets bound in a drawing file with beautiful cover) 4 .**ASSIGNMENT** –UNIT -1: Methods to Estimate National Income –Solve Numericals from Book –Q41 to Q82 (Pg-4.118 to Pg.- 4.133)
PHE	1. Prepare a physical education practical file 2. This will be your board's practical file so make it creatively and presentable. 3. The Topic which you have to write is a. Khelo India Fitness test school version in detail

	b. Yogic practice (15 Asanas / 3 for each life style disease) c.Proficiency in Games and Sports (Skill of any one IOA recognized Sport/ Basketball, Cricket, Swimming, Volleyball) 1. Prepare a physical education practical file 2. This will be your board's practical file so make it creatively and presentable. 3. The Topic which you have to write is a. Khelo India Fitness test school version in detail b. Yogic practice (15 Asanas / 3 for each life style disease) c.Proficiency in Games and Sports (Skill of any one IOA recognized Sport/ Basketball, Cricket, Swimming, Volleyball)
INFORMATIC PRACTICES	• DO ALL THIS IN YOUR I,P NOTEBOOK. MULTIPLE CHOICE QUESTIONS 1. Important data structure of pandas are : a)- Series b)- Data Frame c)- Both of the above d)- None of the above 2. Pandas series can have _____data types a)-float b)- Integer c)- String d)- All of the above 3. _____is one dimensional array a)- Series b)- Data Frame c)- Both of the above d)- None of the above 4. A series By default have numeric data labels start from a)-0 b)- 1 c)- 3 d)- 2 5. Data labels associated to the particular value of series is called its _____ a)- data value b)- index c)- value d)- None of the above 6. Which of the following module is to be imported to create Series a)- Numpy b)- Panda c)- Matplotlib d)- None of the above 7. Which of the following statement is used to create empty series a)- s1=pd.Series(None) b)- s1=pd.Series() c)- All of the above d)- None of the above 8. Pandas data frame is size_____ and Value_____. a)- mutable, mutable b)-Immutable , Immutable c)- Immutable , mutable d)- mutable, Immutable 9. In Pandas _____are used to store data in multiple columns a)- Series b)- Data Frame c)- Both of the above d)- None of the above 10. Which of the following function is used to create data frame a)- DataFrame() b)- NewFrame() c)- Create DataFrame() d)-None of the above

REASON – ASSERTION BASED QUESTIONS
Mark the correct choice as
i. Both A and R are true and R is the correct explanation for A
ii. Both A and R are true and R is not the correct explanation for A
iii. A is True but R is False
iv. A is false but R is True
1. Assertion (A):- A DataFrame can be created by importing pandas library.
Reasoning (R): - A DataFrame is a two-dimensional labelled data structure.
2. Assertion (A):-To delete a column from Pandas DataFrame,drop() method is used.
Reasoning (R): - Columns are deleted by dropping columns with index label.3. Assertion (A):- DataFrame has both a row and column index.
Reasoning (R): - A DataFrame is a two-dimensional labelled data structure like a table of MySQL.
4. Assertion (A):- DataFrame is a two dimensional labelled array. Its column type can be heterogeneous i.e.,of varying types Reasoning (R): - We need a DataFrame with a Boolean index to use the Boolean indexing.
CASE BASED QUESTION
Q.1. Mr. Ankit is working in an organisation as data analyst. He uses Python Pandas and Matplotlib for the same.
He got a dataset of the passengers for the year 2010 to 2012 for January, March and December. His manager wants certain information from him, but he is facing some problems.
YEAR MONTH PASSENGER
0 2010 JAN 25
1 2010 MAR 50
2 2012 JAN 35
3 2010 DEC 55
4 2012 DEC 65
Help him by filling the blanks with correct code to create the above data frame:

```
import pandas as _____ #Statement 1
data={"Year":[2010,2010,2012,2010,2012],"Month":["Jan","Mar","Jan","Dec","Dec"],Passengers":[25,50,35,55,65]}
df=pd._____(data) #Statement 2
print(df)
```
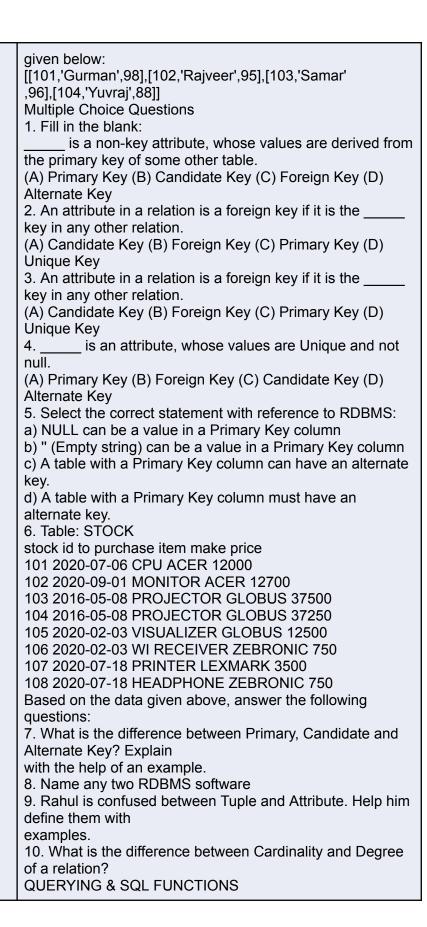
2. Mr. Puneet is working in an organisation as data analyst. He uses Python Pandas and Matplotlib for the same.
He got a dataset of rain for the year 2010 to 2014 for January, February, March and December. Help him by filling the blanks with correct code to create the above data frame:

```
import pandas as _____ #Statement 1
data={"Year":[2010,2011,2012,2013,2014],"Month":["Jan","Feb","Mar","Dec","Dec"],"rain"
:[25,50,35,55,65]}
df=pd._____(data) #Statement 2print(df)
```

3. Ekam, a Data Analyst with a multinational brand has designed the DataFrame df
that contains the four quarter's sales data of different stores as shown below:
Write code to create the data frame

```
Store Qtr1 Qtr2 Qtr3 Qtr4
0 Store1 300 230 450 230
1 Store2 350 340 403 210
2 Store3 250 180 145 160
```

VERY SHORT ANSWER TYPE QUESTIONS

1. Write a program to create a series object using a dictionary that stores the number of
students in each class from 9 to 12 of your school.
Note: Assume 9, 10, 11 and 12 having 45, 50, 43, 35 students respectively and pandas library
has been imported as pd.

2. What will be the output of the following code:
```
>>>import pandas as pd
>>>A=pd.Series(data=[35,45,55,40])
>>>print(A[-1:])
```

3. Carefully observe the following code and give output :
```
import pandas as pd
x=[[100,200,300],[10,20]]
df=pd.DataFrame(x)
print(df)
```

Short Answer Type Questions

1. What will be the output of the following code:
```
>>>import pandas as pd
>>>A=pd.Series(data=[25,45,70,40])
>>>print(A<=40)
```

2. Write a program to create a series from dictionary that stores classes (6,7,8,9,10) as keys
and number of students as values.

3. Write a program to create a series from a given Tuple data data=(100,"Aavya
Verma",96.3,"A").

LONG ANSWER TYPE QUESTIONS

1. Write python code to create a dataframe df (runs scored by batsman in last three years)
from the dictionary given below:
{'Virat':[1000,962,1035],'Rohit':[635,580,602],'Surya':[1200,1008,1258]}

2. Create a DataFrame in Python from the given list:
[['Divya','HR',95000],['Mamta','Marketing',97000],['Payal','IT',980000],
['Deepak','Sales',79000]] Also give appropriate column headings3. Write a Python code to create a DataFrame with
appropriate column headings from the list

given below:

[[101,'Gurman',98],[102,'Rajveer',95],[103,'Samar' ,96],[104,'Yuvraj',88]]

Multiple Choice Questions

1. Fill in the blank:

_____ is a non-key attribute, whose values are derived from the primary key of some other table.

(A) Primary Key (B) Candidate Key (C) Foreign Key (D) Alternate Key

2. An attribute in a relation is a foreign key if it is the _____ key in any other relation.

(A) Candidate Key (B) Foreign Key (C) Primary Key (D) Unique Key

3. An attribute in a relation is a foreign key if it is the _____ key in any other relation.

(A) Candidate Key (B) Foreign Key (C) Primary Key (D) Unique Key

4. _____ is an attribute, whose values are Unique and not null.

(A) Primary Key (B) Foreign Key (C) Candidate Key (D) Alternate Key

5. Select the correct statement with reference to RDBMS:

a) NULL can be a value in a Primary Key column

b) '' (Empty string) can be a value in a Primary Key column

c) A table with a Primary Key column can have an alternate key.

d) A table with a Primary Key column must have an alternate key.

6. Table: STOCK

stock id to purchase item make price

101 2020-07-06 CPU ACER 12000

102 2020-09-01 MONITOR ACER 12700

103 2016-05-08 PROJECTOR GLOBUS 37500

104 2016-05-08 PROJECTOR GLOBUS 37250

105 2020-02-03 VISUALIZER GLOBUS 12500

106 2020-02-03 WI RECEIVER ZEBRONIC 750

107 2020-07-18 PRINTER LEXMARK 3500

108 2020-07-18 HEADPHONE ZEBRONIC 750

Based on the data given above, answer the following questions:

7. What is the difference between Primary, Candidate and Alternate Key? Explain

with the help of an example.

8. Name any two RDBMS software

9. Rahul is confused between Tuple and Attribute. Help him define them with

examples.

10. What is the difference between Cardinality and Degree of a relation?

QUERYING & SQL FUNCTIONS

Exercise

1. Answer the following questions:
   a) Define RDBMS. Name any two RDBMS software.
   b) What is the purpose of the following clauses in a select statement?
      i) ORDER BY
      ii) HAVING
   c) Site any two differences between Single_row functions and Aggregate functions.
   d) What do you understand by Cartesian Product?
   e) Write the name of the functions to perform the following operations:
      i) To display the day like "Monday", "Tuesday", from the date when India got independence.
      ii) To display the specified number of characters from a particular position of the given string.
      iii) To display the name of the month in which you were born.
      iv) To display your name in capital letters.

2. Write the output produced by the following SQL commands:
   a) SELECT POW(2,3);
   b) SELECT ROUND(123.2345, 2), ROUND(342.9234,-1);
   c) SELECT LENGTH("Informatics Practices");
   d) SELECT YEAR("1979/11/26"), MONTH("1979/11/26"), DAY("1979/11/26"),

MONTHNAME("1979/11/26");

e) SELECT LEFT("INDIA",3), RIGHT("Computer Science",4);

f) SELECT MID("Informatics",3,4), SUBSTR("Practices",3);

3. Consider the following table named "Product", showing details of products being sold in a grocery shop.

PCode	PName	UPrice	Manufacturer
P01	Washing Powder	120	Surf
P02	Tooth Paste	54	Colgate
P03	Soap	25	Lux
P04	Tooth Paste	65	Pepsodant
P05	Soap	38	Dove
F06	Shampoo	245	Dove

a) Write SQL queries for the following:

   i. Create the table Product with appropriate data types and constraints.

   ii. Identify the primary key in Product.

   iii. List the Product Code, Product name and price in descending order of their product name. If PName is the same then display the data in ascending order of price.

   iv. Add a new column Discount to the table Product.

   v. Calculate the value of the discount in the table Product as 10 per cent of the UPrice for all those products where the UPrice is more than 100, otherwise the discount will be 0.

   vi. Increase the price by 12 per cent for all the products manufactured by Dove.

   vii. Display the total number of products manufactured by each manufacturer.

b) Write the output(s) produced by executing the following queries on the basis of the information given above in the table Product:

   i. SELECT PName, Average(UPrice) FROM Product GROUP BY Pname;

   ii. SELECT DISTINCT Manufacturer FROM Product;

b) Create the table Student by choosing appropriate data types based on the data given in the table.

c) Identify the Primary keys from tables Student and Stream. Also, identify the foreign key from the table Stream.

d) Jay has now changed his stream to Humanities. Write an appropriate SQL query to reflect this change.

e) Display the names of students whose names end with the character 'a'. Also, arrange the students in alphabetical order.

f) Display the names of students enrolled in Science and Humanities stream, ordered by student name in alphabetical order, then by admission number in ascending order (for duplicating names).

g) List the number of students in each stream having more than 1 student.

h) Display the names of students enrolled in different streams, where students are arranged in descending order of admission number.

i) Show the Cartesian product on the Student and Stream table. Also mention the degree and cardinality produced after applying the Cartesian product.

j) Add a new column 'TeacherIncharge" in the Stream table. Insert appropriate data in each row.

k) List the names of teachers and students.

l) If Cartesian product is again applied on Student and Stream tables, what will be the degree and cardinality of this modified table?

iii. SELECT COUNT(DISTINCT PName) FROM Product;

iv. SELECT PName, MAX(UPrice), MIN(UPrice) FROM Product GROUP BY PName;

4. Using the CARSHOWROOM database given in the chapter, write the SQL queries for the following:

a) Add a new column Discount in the INVENTORY table.

b) Set appropriate discount values for all cars keeping in mind the following:

   (i) No discount is available on the LXI model.

   (ii) VXI model gives a 10% discount.

   (iii) A 12% discount is given on cars other than LXI model and VXI model.

c) Display the name of the costliest car with fuel type "Petrol".

d) Calculate the average discount and total discount available on Car4.

e) List the total number of cars having no discount.

5. Consider the following tables Student and Stream in the Streams_of_Students database. The primary key of the Stream table is StCode (stream code) which is the foreign key in the Student table. The primary key of the Student table is AdmNo (admission number).

AdmNo	Name	StCode
211	Jay	NULL
241	Aditya	S03
290	Diksha	S01
333	Jasqueen	S02
356	Vedika	S01
380	Ashpreet	S03

StCode	Stream
S01	Science
S02	Commerce
S03	Humanities

Write SQL queries for the following:

a) Create the database Streams_Of_Students.

iii. SELECT COUNT(DISTINCT PName) FROM Product;

iv. SELECT PName, MAX(UPrice), MIN(UPrice) FROM Product GROUP BY PName;

4. Using the CARSHOWROOM database given in the chapter, write the SQL queries for the following:

   a) Add a new column Discount in the INVENTORY table.

   b) Set appropriate discount values for all cars keeping in mind the following:

   (i) No discount is available on the LXI model.

   (ii) VXI model gives a 10% discount.

   (iii) A 12% discount is given on cars other than LXI model and VXI model.

   c) Display the name of the costliest car with fuel type "Petrol".

   d) Calculate the average discount and total discount available on Car4.

   e) List the total number of cars having no discount.

5. Consider the following tables Student and Stream in the Streams_of_Students database. The primary key of the Stream table is StCode (stream code) which is the foreign key in the Student table. The primary key of the Student table is AdmNo (admission number).

AdmNo	Name	StCode
211	Jay	NULL
241	Aditya	S03
290	Diksha	S01
333	Jasqueen	S02
356	Vedika	S01
380	Ashpreet	S03

StCode	Stream
S01	Science
S02	Commerce
S03	Humanities

Write SQL queries for the following:

a) Create the database Streams_Of_Students.