

DAV PUBLIC SCHOOL, BISTUPUR  
JAMSHEDPUR, JHARKHAND ZONE-E  
HOLIDAY HOMEWORK

STD XI

SESSION: 2024-25

**SUBJECT: APPLIED MATHEMATICS**

1. COMPLETE ALL THE 3 CHAPTERS(SET & RELATIONS , SEQUENCES & SERIES , PERMUTATIONS & COMBINATIONS ) IN MATHS NOTE BOOK WITH PROPER RIVISION .
2. **PROJECT WORK / CASE STUDIES**

Class will be divided into different groups with four/five students in each group.

**TOPIC ALLOTED :- SETS , RELATION AND FUNCTION**

**Note : - Students can useany one of below mentioned sub topics or any sub topic of their choice to make a project on sets, relation and functions .**

**INTEGRATION WITH OTHER SUBJECTS :**

The concept of sets, relations and functions can be integrated into various other disciplines such as economics, business studies, accounts, geography, history . Students can be courage to explore the connections and apply their understanding of sets, relations and functions in the contexts. Students will learn about the applications of set relations and functions in various fields.

**REAL -LIFE LINKAGE :**

The concept of sets, relations and functions can be linked to real-life situations such as income & expenditure, population growth, and demand and supply in economics. Students will explore these connections and apply their understanding of topic in the contexts .

**ART INTEGRATION :**

The concept of sets, relations and functions can be integrated with art by exploring the graphical representation of functions. Students will create their own graphs and identify the characteristics of different types of functions. This can help them develop their creativity and **visualization skills** .

**SUSTAINABLE DEVELOPMENT GOALS :**

The concept of sets, relations and functions can be linked to Sustainable Development Goals such as Goal 8 : Decent Works and Economic Growth, Goal 10 : Reduced Inequalities and Goal 16 : Peace, Justice and Strong Institutions. Students will explore these connections and apply their understandings of the topic in the contexts.

**GENERAL GUIDELINES :-**

- The project is to be done on inter – leaf sheets.
- The total length of the project will be 15 – 20 pages.
- Students have to preserve the initial drafts of the project as well as any research papers that they may have used.
- Students have to be prepared to give a presentation of the project in the class.

- A summary / synopsis (one page) of the project has to be prepared covering : The objective statement Their observations and findings The learning outcomes.
- Any other learning from this exercise such as skills of team work, problem solving, time management, information collection, processing, analysing and synthesizing relevant information to derive meaningful conclusions.
- The project must be neat and well-presented and must be completely hand-written.
- No whiteners to be used or written matter to be crossed out. In case of any mistakes, redo the sheet .
- Do not number sheets or write dates unless so instructed .
- Colour illustrations, graphs may be hand drawn or printed ( if it is relevant for any aspect of your project) are welcome to make them look attractive .

### **SUBJECT: ACCOUNTANCY**

1) Write the steps to open a bank account. Also write about the documents required to open an account in a bank.

2) Answer the following questions in your notebook.

a. Classify the following into Assets, Liabilities, Capital, Revenue and Expenses:

- i. Plant and Machinery
- ii. Bank loan
- iii. Sales
- iv. Rent
- v. Discount received
- vi. Carriage inward
- vii. Carriage outward
- viii. Purchases
- ix. Bills Payable
- x. Wages
- xi. Advance Income
- xii. Accrued income
- xiii. Goodwill
- xiv. Furniture
- xv. Outstanding expenses
- xvi. Capital

b. Mr. Abhinav started a business of buying and selling of mobile phones and invested Rs. 2,00,000 on 01.04.2016. On 20.04.2016 he paid Rs.1,00,000 for the purchase of mobile phones and Rs. 50,000 for furniture. On 01.05.2016, he purchased some stationery for Rs.5,000 in cash and sold some mobile phones for Rs.50,000 on credit to Mr. Akash. After a period of one month, he purchased mobile phones for Rs.60,000 from Mr. Satish. Expenses during the same period were Rs.10,000. On 31.07.2016 mobile phones worth Rs.20,000 were lost by fire. During September 2016 to December 2016, a part of stock of mobile phones which costed Rs.30,000 was sold for Rs. 40,000.

With the help of the above information, answer the following questions:-

- 1) What is the amount of capital with which Mr. Abhinav started the business?
  - 2) What is the total amount of expenses?
  - 3) Who is the debtor for the business and what is the amount receivable from him?
  - 4) Who is the creditor and what is the amount payable to him?
  - 5) What is the total value of goods purchased?
- 3) Sunrise started a business for buying and selling of stationery with 5,00,000 as an initial investment. Of which, he paid 1,00,000 for furniture, 2,00,000 for buying stationery items. He employed a sales person and clerk. At the end of the month he paid 5,000 as their salaries. Out of the stationery bought, he sold some stationery for 1,50,000 for cash and some other stationery for 1,00,000 on credit basis to Mr. Ravi. Subsequently, he bought stationery items of 1.50,000 from Mr. Peace. In the first week of next month, there was a fire accident and he lost 30,000 worth of stationery. A part of the furniture, which cost 40,000, was sold for 45,000. From the above, answer the following:
- a) What is the amount of capital with which Mr. Sunrise started business.
  - b) What are the fixed assets he bought?
  - c) What is the value of the goods purchased?
  - d) Who is the creditor and state the amount payable to him?
  - e) What are the expenses?
  - f) What is the gain he earned?
  - g) What is the loss he incurred?
  - h) Who is the debtor? What is the amount receivable from him?
  - i) What is the total amount of expenses and losses incurred?
  - j) Determine if the following are assets, liabilities, revenues, expenses or none of the these: sales, debtors, creditors, salary to manager, discount to debtors, capital of the owner.
- 4) Identify the accounting term highlighted in each of the following cases:
- a) A person to whom goods have been sold on credit.
  - b) It refers to the amount of goods bought by a business for resale or for use in the production.
  - c) It refers to the products in which the business unit is dealing
  - d) It is the rebate allowed to the buyer for making prompt payment.
  - e) A person from whom goods have been purchased on credit.
  - f) It is documentary evidence in support of a business transaction.
- 5) Match the items given under 'A' with the correct items under 'B':

A	B
1. Amount invested by owner in the Business	a) Liability
2. Amount owed by the business to	b) Capital

outsiders	
3. Excess of total expenses over total revenue	c) Drawings
4. Assets having physical existence	d) Loss
5. Money withdrawn from business for personal use	e) Tangible Assets

6) State with reasons which of the following are business transactions

- i. Ram started business with 2,00,000.
- ii. Received a price list from Karan.
- iii. Placed an order with Manish for supply of goods worth 20,000.
- iv. Took a loan of 50,000 from Tanishq for the marriage of his daughter.
- v. Purchased goods for cash ₹ 30,000.
- vi. Received an order from Roshan for the supply of goods 2,000.
- vii. Executed Roshan's order.
- viii. Received goods from Manish in response to the order placed with him.
- ix. Repaid the loan taken from Tanishq for the marriage of his daughter out of the funds of the business.
- x. Paid his club bill out of his personal funds.
- xi. Appointed Raj as the manager of the business on a monthly salary of 12,000.

**SUBJECT: ENGLISH**

1. Research on sailing terminology and parts of a boat and gather information about Isle Amsterdam.
2. Cut out 5 clippings of Classified Ads under the heads:
  - a) FOR SALE
  - b) TO LET
  - c) SITUATION VACANT
  - d) EDUCATIONAL
3. Prepare a write up on an unforgettable journey you had with your family during your childhood days. Paste a photograph of the same too.
4. Prepare a Thank You Card for your grandmother and in it mention one of her characteristic traits that inspires you the most.

**SUBJECT: ECONOMICS**

1. Unemployment is reduced due the measures taken by the government. State its economic value in the context of Production Possibilities Frontier.

2. Large number of technical training institutions have been started by the government. State its economic value in the context of Production Possibilities Frontier.
3. Take the economic value achieved through the spread of education in the context Of production potential.
4. Define Production Possibility Curve (PPC).
5. Why does an economic problem arise?
6. Give the meaning of opportunity cost.
7. Give two reasons for the problem of choice.
8. What does the rightward shift of Production Possibility Curve indicate?
9. What does the problem for whom to produce refer to?
10. Production in an economy is below its potential due to unemployment. Government starts employment generation schemes. Explain its effect using Production Possibility Curve.
11. Draw a Production Possibility Curve. What does a point below this curve indicate? Explain.
12. What is Marginal Rate of Transformation? Explain With the help of an example
13. Explain the central problem of the choice of products to be produced,
14. Explain properties of Production Possibility Curve (PPC).
15. With the help of suitable example, explain the problem of 'for whom to produce'.

### **SUBJECT: BUSINESS STUDIES**

Answer the following questions.

1. List any five major commercial cities of ancient India?
2. What is Hundi?
3. List the major exports and imports in ancient India.
4. What do you understand by maritime trade?
5. Define (a) sole proprietorship, (b) Partnership and (c) Hindu Undivided Family.
6. Can a minor become the member of a Joint Hindu Family Business? Give reason to support your answer.
7. What do you understand by Limited Liability and Unlimited Liability?
8. Outline the procedure for registration of a partnership firm.
9. Distinguish between Sole Trade, Partnership Organisation and Joint Hindu Family Business on the basis of registration, governing act, formation, liability, no. of members, stability, transfer of ownership, secrecy, suitability and dissolution.
10. "One man control is the best in the world, if that man is big enough to manage the whole show". Comment.

Project

11. Prepare a project report on the development of Trade and Commerce between 1st and 17th AD.
12. Find out the number of sectors Make in India focuses on and write their names. Collect information on any five sectors of the economy that Make in India focuses on. Also find out the amount of investment in these sectors in the past two years.

## **SUBJECT:COMPUTER SCIENCE**

1. Write a Python program to input cost of goods (cgos), revenue generated, operating costs (oc) and prints Gross Profit, net profit and net profit percentage. [Hint: net profit = revenue – cgos – oc]
2. Write a program in Python to input temperatures of 7 days (Monday, Tuesday, .... Sunday) and print the average temperature of the week.
3. Write a program that reads the number of seconds and prints it in the form hours minutes seconds. For example, if the number of seconds are 3940, then the output should be 1 hour 5 minutes 40 seconds.
4. Find the output produced by the following:

a. a,b,c = 2,8,9

```
print(a,b,c)
```

```
c,b,a = a,b,c
```

```
print(a,b,c)
```

b. x=40

```
y=x+1 x=20,y+x print(x,y)
```

c. a,b=12,13

```
c,b=a*2,a/2 print(a,b,c)
```

d. a,b,c=10,20,30

```
p,q,r=c-5,a+3,b-4 print('a,b,c:', a, b, c, end=' ') print('p,q r:', p, q, r)
```