**NORTH-EX PUBLIC SCHOOL**

**(Senior Secondary, Affiliated To CBSE)**

**School Block, Jain Nagar, Sector-38, Rohini, Delhi – 81**

Winter Holiday Homework

**Class XI (Commerce)**

**Subject – MATHS**

1.Find the length of major and minor axis, coordinates of foci, the eccentricity, the length of L.R of the ellipse 16x2+y2=16.

2. Find the length of the axis , the coordinates of the foci, the eccentricity and the length of L.R of hyperbola 25x2-9y2=25.

3. Find the centre and radius of the curve x2+y2-6x+4y-36=0.

4.Find the derivative of cosx ,sinx ,tanx by first principle of derivatives.

5.Find the derivative of (2x2+5x-1-cosx)(x-3-4sinx-c).

6.Complete practical file .

**Subject – English**

Q1. Prepare your project file of 10 marks.

Q2. Prepare your ASL topic .

Q3. Write a debate for and against on the topic, "Are old age homes necessary today?" in 120-150 words.

Q4. Racism is bad. Anyone and everyone can be exposed to racism. Write a speech in 120-150 words on the topic, 'Racism' to be delivered in the morning assembly of your school.

Q5. Design a poster in not more than 50 words urging people to adopt the three R's- Reduce, Reuse and Recycle.

**Subject – ECO**

Q1 How Producer Equilibrium is attained under perfect competition?

Q2- Define market.Differentiate between perfect competitive market and imperfect competitive

market.

Q3-Explain different types of elasticity of supply with the help of diagrams.

Q4- Define supply and factors affecting supply of a product.

Q5-Under perfect competition "Industry is the price maker and firm is price taker\*. Explain.

**Project work**

Do project work according to your topic discussed in Class

**Subject – Accountancy**

Q1.Bank Statement of a customer shows a bank balance of Rs.62,000 on 31 March 2018.

On comparing it with the cash book, the following discrepancies were noted

i)Cheques were paid into the Bank in March but were credited in April.

P - Rs.3,500, Q - Rs.2,500. R - Rs.2,000

ii)Cheques issued in March were Presented in April

X - Rs.4,000, Q - Rs.4,500

iii)Cheque for Rs.1,000 received from a customer entered in the cash book but was not banked

iv)Passbook shows a debt of Rs.1,000 for bank charges and credit of Rs.2,000 as interest

v)Interest on investment Rs.2,500 collected by the bank appeared in the passbook.

Prepare Bank Reconciliation Statement the balance as per cash book on 31 March 2018.

Q2.Prepare Bank Reconciliation statement on 31st March 2018 from the following particulars:

i)R's overdraft as per the Pass Book Rs.12,000 as on 31st March

Ii)On 30th March, Cheques had been issued for Rs.70,000 of which cheques worth Rs.3,000 only had been encashed up to 31st March.

iii)Cheques amounting to Rs.3,500 had been paid into the bank for collection but of this only Rs.500 had been credited in the Pass Book.

iv)Bank has charged Rs.500 as interest on overdraft and the intimation of which has been received on 2nd April 2018.

v)Bank Pass Book shows credit for Rs.1,000 representing Rs.400 Paid by debtor of R direct into the Bank and Rs.600 collected directly by Bank in respect of interest on R's investment. R had no knowledge of these items.

vi)A cheque for Rs.200 has been debited in bank column of Cash Book by R, but it was not sent to Bank at all.

Q3.Which method is approved by income tax authorities for charging depreciation?

Q4.Name the method that assumes that an asset should be depreciated more in the earlier years and less in later years of use.

Q5.A firm purchased on 1st January, 2010 a second-hand machinery for Rs.36,000 and spent Rs.4,000 on its installation.

On 1st July in the same year, another machinery costing Rs.20,000 was purchased. On 1st July, 2012 machinery brought on 1st January, 2010 was sold for Rs.12,000 and a new machine purchased for Rs.64,000 on the same date. Depreciation is provided annually on 31st December @ 10% per annum on the written down value method. Show the machinery account from 2010 to 2012.

**Project Work:** As discuss in Class

**Subject – Business Studies**

Q1. Mahesh was sitting at the shop of his friend Abhishek Chahai. Mahesh observed very carefully his friend's transaction with the customers. He noticed that the customers bought goods on different terms and conditions. One customer, Shalini, was insisting on buying goods on credit. But Abhishek paid no attention to her at all. Ultimately, he ended by saying that he would get nothing in advance from her, but she would have to make the payment the moment goods were delivered to her. Shalini refused to buy goods from him. After this, another customer, Subhash Jaglan, came, who was a resident of another city. He wanted to take the things bought by train. He wanted Abhishek to send goods up to the train. All the rest of the responsibility he would take upon hihimself. Abhishek agreed to do so. Thereafter, Miss Anvi Goyal came to buy goods when Abhishek told her the rate of those goods, she was startled and asked how the rate could be so high. Then, Abhishek pacified her and explained to her that the rate was inclusive of insurance and freight. She became happy and she ordered a large number of goods. There were several documents lying on Abhishek's table, which Mahesh was looking at very attentively. At the bottom of all of them was written a special line. When Mahesh asked about it, he was told that was there about correcting the omission. While sitting at Abhishek's shop, Mahesh learned about several terms of trade.

i)On the basis of the above paragraph identify the terms of trade-related to the different customers.

ii)What Abhishek might have told about the line written in the documents.

Q2.Give two limitations of Chain Stores or Multiple Shops.

Q3.Explain briefly the objective behind the following Institutions:

i)NABARD,

ii)RSBDC,

iii)NSIC,

iv)SIDBI,

v)NCEUS,

vi)DICS.

Q4.Explain different modes of entry into international business?

What are the objectives of the WTO? State.

Q5 Explain the historical perspective of WTO.Write all the functions performed by it giving new dimensions to world trade.

**Project work**

Prepare the project as the topics discussed in class

**Subject - IP**

Q1. Consider the following movie database and answer the SQL queries based on it.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Movie ID | Movie Name | Category | Release Date | Production Cost | Business Cost |
| 001 | Hindi Movie | Musical | 2018/04/23 | 124500 | 130000 |
| 002 | Tamil Movie | Action | 2016/05/17 | 112000 | 118000 |
| 003 | Bengali Movie | Adventure | 2017/06/06 | 245000 | 360000 |
| 004 | English Movie | Horror | 2017/01/04 | 72000 | 100000 |
| 005 | Telugu Movie | Action | - | 100000 | - |
| 006 | Punjabi Movie | Comedy | - | 30500 | - |

1. Retrieve movies information without mentioning their column name.
2. List business done by the movies showing only movie id, movie name and business cost.
3. List the different categories of movies.
4. Find the net profit of each movie showing its ID, Name and Net profit.

Q2. What are constraints? Name two types of Constraints.

Q3. What is Artificial Intelligence? What are some application of AI?

Q4. What is Robotics? How are robots useful?

Q5. Write some characteristics of Big data?

**Note: Project File**

* Topic: Artificial Intelligence , Robotics, Machine Language.

**Subject – Physical Education**

Q1. What is meditation? Explain the types of meditation.

Q2. Define various categories of asanas with example?

Q3. Define test, measurement and evaluation.

Q4. Write in detail about body mass index and waist hip ratio.

Q5. Explain the components of somato types in detail.

**Note:**  Practical file completed on using following topic.

* Physical fitness test
* Proficiency in games and sports.
* Yogic practices.