

NORTH-EX PUBLIC SCHOOL
(SENIOR SECONDARY, AFFILIATED TO CBSE)
SCHOOL BLOCK, JAIN NAGAR, SECTOR-38, ROHINI, DELHI-81
SUMMER HOLIDAY HOMEWORK

MATHS

1. $A = \{1, 2, 3, 5\}$ and $B = \{4, 6, 9\}$. Define a relation R from A to B by $R = \{(x, y) : \text{the difference between } x \text{ and } y \text{ is odd, } x \in A, y \in B\}$. Write R in Roster form.
2. If $f: R \rightarrow R$ is defined by $f(x) = [x]$, the greatest integer function, find its domain, range and draw the graph.
3. Find the values of $\sin 15^\circ$, $\operatorname{cosec} 390^\circ$, $\cot 570^\circ$, $\sin(-11\pi/3)$, $\cot(-15\pi/4)$.
4. Prove that : $\tan 3A \tan 2A \tan A = \tan 3A - \tan 2A - \tan A$.
5. Prove that : $\cos 20^\circ \cos 40^\circ \cos 60^\circ \cos 80^\circ = 1/16$
6. Do all maths activities in practical files as given in your class.

PHYSICAL EDUCATION

- Q1. Define physical education and explain its aim and objective.
- Q2. Explain the different career options in the field of physical education.
- Q3. When was khelo India program started write in detail.
- Q4. Explain the working of National Olympic Committee (NOC)
- Q5. Write a short note on:
 - a. Olympic flag
 - b. Olympic symbol
 - c. Olympic flame

ENGLISH CORE

- Q1. Design a poster on the topic –‘How CNG can be the best alternative to diesel and petrol.’ [50 words]
- Q2. Your grandfather is very upset about the rising prices and keeps thinking of his olden times when things were very cheap. You are convinced that inflation has made life difficult for common man. Write a letter in 100-120 words to the editor of a national daily describing the difficulties faced by poor families.
- Q3. You are Raghav /Raghni. Write an article on importance of breakfast as a healthy food habit.
- Q4. Ankit, a class XI student was asked by his teacher to deliver a speech in the morning assembly of his school on “World Environment Day”-5th June. Using ideas given below, together with your own, write the speech in not more than 120 words.
 - a. Let’s not pollute the air we breathe!
 - b. Wake up in fresh air and maintain cleanliness
 - c. Plant trees and see them growing
 - d. Fight vehicular pollution
- Q5. Learn and revise all the syllabus of PERIODIC TEST-I.

ACCOUNTANCY

- Q1. Distinguish between financial accounting, cost accounting, and management accounting.
- Q2. Distinguish between book-keeping, accounting, and accountancy.
- Q3. Basic objective of accounting is to provide useful information to various users. Besides these, there are many other objectives of these, there are many other objectives of accounting. Explain any four of them.
- Q4. What is the basic accounting equation?
- Q5. 'Only financial transactions are recorded in accounting'. Explain the statement.
- Q6. What is matching concept? Why should a business concern follow this concept? Discuss which principle states that the accounting data should be definite, verifiable and free from the personal bias?
- Q7. The cost of a small calculator is accounted as an expense and not shown as an asset in financial statements of a business entity due to which concept?

BUSINESS STUDIES

- Q1. Which type of business risk involves both the possibility of gain as well as the possibility of loss?
- Q2. Mining of iron ore is an example of which industry?
- Q3. Distinguish between Business and Profession on the following basis:
Risk
- a) Mode of Establishment
 - b) Qualification
 - c) Nature of work
- Q4. How is the risk of loss spread over a large number of shareholders?
- Q5. Discuss whether a company's existence is affected by the death of one of its member

ECONOMICS

- Q1 Explain the concepts of positive and normative economics with illustration.
- Q2 What is meant by an economy? What are its different types?
- Q3 Draw a production possibility curve. Illustrate the central problem of what to produce using the curve.
- Q4 Explain the main limitations of statistics?
- Q5 What are primary data? Enumerate the various methods of collecting primary data .discuss the merits and demerits of anyone of them .