**NORTH-EX PUBLIC SCHOOL**

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

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

Winter Holiday Homework

**Class - IX**

**Subject -English**

Q1.You are Mehak /Mohan , you participated in a play at the National School of Drama. It was recorded and will be telecast next week. Make a diary entry in 100-120 words.

Q2. Complete the story in 100-120 words.

"Two friends were passing through a dense forest. Suddenly,they heard some animals screaming..."

Q3. Write a descriptive paragraph on 'International Yoga Day'.

Q4. Write an application to the Principal requesting her to organize a 'Tree Plantation Drive'.

Q5. Write five sentences on each tense.

**Subject- Hindi**

प्रश्न 1. 'शिक्षक व शिक्षार्थी' संबंध विषय पर एक अनुच्छेद लिखिए।

प्रश्न 2. आपने अपनी सर्दियों की छुट्टियां किस प्रकार बिताईं? का वर्णन करते हुए अपने मित्र को पत्र लिखिए।

प्रश्न 3. 'जलियांवाला बाग'की घटना का वर्णन संक्षेप में कीजिए।

प्रश्न 4. विराम चिन्ह तालिका बनाइए तथा अभ्यास कीजिए।

प्रश्न 5. उपसर्ग व प्रत्यय युक्त दस शब्द लिखिए।

प्रश्न 6. सौर मंडल में कितने ग्रह हैं? उनके विषय में संक्षेप में लिखिए व चित्र बनाइए।

**Subject -Social Science**

Q1. Write in detail the role of PDS including the defines of MSP, issue price, buffer stock and fair price shops.

Q2. Make a flow chart explaining the three components/elements of Food Security.

Q3. What do you mean by Population growth? Explain the factors responsible for it.

Q4. Make a list of states of India according to the population of the states. (**Descending order**) Also mention their recent population in numbers.

Q5. Make a beautiful **project** on **Disaster Management**(**compulsory**) on the basis of which Viva will be taken up for internal marks in final term.

\***All work to be done in Test registers and Submit your project file separately as creative as you can**.

**Subject - Computer**

Do the following questions in Notebook:-

(1) Write any five components of worksheet. Explain each type.

(2) Write the steps to saving a workbook.

(3) Write the steps using Autofill feature.

(4) Write the steps to sort data in Excel.

(5) How can we use Filtering Data in Excel?

Activity

\* Designed the Periodic table of elements. Give a catchy style for the heading, The Periodic Table. All empty cells should be filled with a black colour apply table style to it.

\* Prepare a score chart of the Indian cricket team players including the score of extras. Add complete border with a style of 1.00 pt to the table. Calculate the sum of all the runs at the end. When you have finished with all the task, rotate the text vertically in cells to the right side.

**Subject -Mathematics**

1. A joker’s cap is in the form of a right circular cone of base radius 7cm and height 24cm. Find the area of the sheet required to make 10 such caps.
2. A heap of rice is in the form of a cone where diameter is 48m and height 10m. The heap is to be covered by a canvas to protect it from rain .Find the cost of canvas required at Rs 70 per m2.
3. The circumference of the base of a 9m high wooden solid cone is 44m.Find the volume of air contained in it.
4. The volume of a conical tent is 1232m3 and the area of the base floor is 154 m2. Calculate the length of canvas required to cover this conical tent if its widths is 2m.
5. The height and the base diameter of conical tomb are 24m and 14m respectively. Find the cost of white washing its curved surface at the rate of Rs 210 per 100sq m.Also find volume of air inside the tomb.
6. **Activity –** Do activities no. 19, 27, 33, 34, 35 and complete the previous activities too(Activity no.- 1, 3, 4, 9, 36)

**Subject - Science**

1. (a) What is sound ? What type of waves are sound waves in air?

(b) Describe an experiment to show that sound cannot pass through vacuum.

2. (a)Explain the terms ‘compressions’ and ‘rarefactions’ of a wave. What type of waves consist of compressions and rare factions?

(b)A worker lives at a distance of 1.32 km from the factory. If the speed of sound in air be 330 m/s, how much time will the sound of factory siren take to reach the worker ?

3. (a)Define the terms ‘frequency’, ‘wavelength’ and ‘velocity’ of a sound wave. What is the relation between them ?

(b)A body vibrating with a time-period of 1/256 second produces a sound wave which travels in air with a velocity of 350 m/s. Calculate the wave length.

4. The longitudinal waves travel in a coiled spring at a rate of 4 m/s. The distance between two consecutive compressions is 20 cm. Find: (i) Wavelength of the wave (ii) Frequency of the wave

5. Complete pratical records.

6. (i) Explain, why the number of atoms in one mole of hydrogen gas is double the number of atoms in one mole of helium gas?

(ii) Explain atomic mass unit.

(iii) How many atoms are present in (a) MnO2 molecule (b) CO molecule?

7. Write the molecular formulae of all the compounds that can be formed by the combination of the following ions:

Cu2+, Na+, Fe3+, Cl -,SO42-,PO43-

8. Differentiate between pathogens and pests. How does an insect-pest attack the plants?

9. Mention any two desirable agronomic characters for crop improvement. Explain how farmers get desired characters incorporated into the new varieties produced. List two conditions necessary for the new varieties to be accepted.

10. A farmer is advised to use manure instead of fertilizer in his fields. List any two advantages that the farmer will get if he accepts this advice. How is the use of manure particularly useful for clayey and sandy soil?