Class- IX

ENGLISH –
1. This year during the coming winter vacations your parents have decided to skip the family holiday. To spend your time usefully, you decide to take up gardening as a hobby. Write an article in 100-150 words on what you perceive are the benefits of taking up such a hobby.
2. Write interesting stories in 200 words each on any two of the following themes.
   a) comedy   b) tragedy   c) courage and heroism   d) good vs evil
3. Design and make one greeting card for the following occasions.
   - birthday of your friend
   -birthday of your teacher
   -best wishes to your sister for her exams
   - invitation card for your birthday party
   And write at least four line message for each.
4. Make a video clipping of advertisement on any product.

MATHEMATICS –
1. State and prove Mid point theorem.
2. If the non-parallel sides of a trapezium are equal, prove that it is cyclic.
3. In a hot water heating system, there is a cylindrical pipe of length 28 m and diameter 5 cm. Find the total radiating surface in the system
4. In a parallelogram ABCD find the measure of all the angles if one its angles is $15°$ less than twice the smallest angle.
5. The diameter of a road roller, 120 cm long is 84 cm. If it takes 500 complete revolutions to level a playground, find the cost of levelling it at Rs. 2 per square metre.
6. The exterior angles obtained on producing the base of a triangle both ways are $100°$ and $120°$. Find all the angles.
7. If two intersecting chords of a circle make equal angles with the diameter passing through their point of intersection, prove that the chords are equal.
8. Write at least 5 algebraic identities.

SCIENCE–
1. Represent different forms of energies like kinetic energy, gravitational potential energy, elastic potential energy, chemical energy, solar energy by collecting pictures from various situations of day to day life activities(five pictures each of every form of energy).
2. What is gold foil experiment ? Name the scientist who performed this experiment. Write the conclusions and shortcoming of Rutherford's Model of atom.
3. If the Organisation of a cell is destroyed due to some physical or chemical influence, what will happen?
4. Why does the percentage of gases like oxygen, nitrogen, and carbon dioxide remain almost the same in the atmosphere?
5. What is law of conservation of energy ? Derive an expression to prove the low when a stone is dropped from some height ?
6. Why is it advised to tie any luggage kept on the roof of a bus with a rope?

SOCIAL SCIENCE–
1. Prepare a project on Public Distribution System- a solution to poverty and hunger.
2. Define the terms
   a) Blandongdiensten system   b) Reserved Forest   c) Booth Capturing
3. On a map of India mark population density of all the states and highlight the states having highest and lowest density of population.
4. With the help of flow chart show the divisions in French society before the French revolution. Describe the role of each section.
5. Make a Interdisciplinary project on Types of vegetation - Tropical Evergreen Forest , Deciduous Forest , Thorns Forest and Shrubs , Mountain Forest , Mangrove forest .

HINDI –

1 'साक्षरता अभियान' पर A4 सीट में एक पोस्टर बनाइए

2 त्योहारों का हमारे जीवन में महत्व व उनके संदेश पर बातचीत करते हुए दादा जी और पोते के संवाद को लगभग 100 शब्दों में लिखिए

3 छात्रावास में रह रहे छोटे भाई के द्वारा की गई मोबाइल फोन की मांग पर अभी इसका उपयोग न करने की सलाह देते हुए एक पत्र लिखिए

4 "करत करत अभ्यास के जड़मति होत सुजान, लोकोक्ति का अर्थ स्पष्ट करते हुए छोटे भाई को पत्र द्वारा अभ्यास का महत्व बताइए

COMPUTER –

1 What is the default name of the worksheet ? How can it be renamed ?
2 Cell A1 contains the number 10 and B1 contains 5 .What will be the contents of cell C1 , if the formula =A1+B1 *2^3 is entered in cell C1 ?
3 Cell D5 contains the formula =B5 + C5 and this formula is copied to cell E5, what will be the formula in cell E5?
4 Give the syntax and example of any three mathematical functions in a spreadsheet.
5 How do we perform Relative and Mixed referencing in Open office calc?
6