SAINIK SCHOOL KUNJPURA, KARNAL

WINTER VACATION TASK FOR CLASS XI

Subject	Home Work
English	Students are to prepare a Project Work / script / essay etc. The ideas / issues highlighted in the chapters / poems / drama given in the prescribed books can also be developed in the form of a project. Students can also take up any relevant and age-appropriate theme.
Physics	Solve back exercises (NCERT Text Book) of following chapters: 1. Rotational Motion 2. Gravitation 3.Properties of Bulk Matter * Cadets must complete the practical file and cover it with a brown cover and label it.
Chemistry	Solve back exercises (NCERT Text Book) of following chapters: 1. Thermodynamics 2. Equilibrium 3. Redox Reactions 4. Practice of IUPAC names of organic compounds, Methods of purification * Cadets must complete the practical file and cover it with a brown cover and label it.
Maths	1.Thirty MCQs from each chapter covered so far are to be completed for NDA examination preparation. 2.Cadets must complete the practical file and cover it with a brown cover and label it.
Computer Science	Write Python programs for the following problems in the practical file. 1. Input two numbers from the user and perform basic operations like addition, subtraction, multiplication, division – quotient (real and integer), remainder. 2. Input 4 values from the user a, b, c, d and display the value of the expression – F = (a + b/2) * (c – 2) + d // 3 3. Input the coefficients of a Quadratic equation and find the roots. 4. Find maximum among 3 numbers entered by user. 5. Input an integer from user and check whether it is divisible by 3 or 7. 6. Input a month from user (in number) and display the number of days in the month. 7. Input a year from the user and check whether it is leap year or not. 8. Find the sum of all the natural numbers upto a given limit. 9. Find factorial of a given positive integer. 10.Display the Fibonacci series upto a given number of terms. 11. Input a string and determine whether it is a palindrome or not. 12. Find the largest/smallest number in a list/tuple. 13. Input a list/tuple of elements, search for a given element in the list/tuple. 14. Create a dictionary with the roll number, name and marks of n students in a class and display the names of students who have marks above 75. 15. Generate the following pattern using nested loops: * ** *** **** *****
Biology	1. Prepare notes of following chapters: a) Breathing and exchange of gases. b) Body fluids and circulation. c) Excretory products and their elimination.