



**SAINIK SCHOOL REWARI**  
**DIWALI VACATION HOMEWORK (2019-20)**  
**CLASS – XII**

**Instructions to be followed by Cadets:**

1. Do all the Vacation Work in one Notebook only. In case of Computer Science, do the homework in a separate practical file.
2. Do the work in notebook in a sequence as mentioned below:-
  - (a) English, Hindi, Maths, Science, Social Studies for classes VI –X
  - (b) English, Maths, Physics, Chemistry Bio/Computer for classes XI-XII
3. Vacation Work should be done neatly and efficiently. It will be duly marked as a part Of your assessment.
4. Any additional chart paper/Map /Model if any required in vacation work, should be submitted separately along with vacation work note book.
5. Do not get up late. Rise at the usual time and go for a morning walk, or play a game that interests you. Talk about things you see around. Plan some outdoor and indoor games. Spend some time on a hobby.
6. Read newspaper. Keep yourself updated. Reading from colorful illustrated story books will develop your language skills. Listen to stories from family members and try to narrate the stories you have read from various story books.
7. Assign a permanent workplace and a work-time. This brings in discipline in your life. If there is a subject you are weak in, try and work on improving that weakness. You will be more confident when you go back to school.
8. Inculcate good manners – 4 magic words `Please, Thank you, Excuse me, Sorry` – Use them and see the difference.

## ENGLISH

1. Revise the words given to you for UPSC NDA preparation and add to them by writing 20 additional words with meanings daily.
2. Solve the Previous years' CDS question papers of English by visiting the link given below:  
<https://gradeup.co/cds-question-paper-i>

## MATHEMATICS

1. Project on finding the Coordinate of different points identified in your study room using the concept of Three dimensional geometry and also find distance between the identified points.

### OR

Project on estimation of population of a particular region under the assumption that there is no migration in or out of the existing population in a particular year.

2. Solve the five question papers of UPSC NDA OF MATHEMATICS of following years :-
  - (a) 2017 I
  - (b) 2017 II
  - (c) 2018 I
  - (d) 2018 II
  - (e) 2019 I
3. Learn formulas of Differentiation, Integration and Properties of Matrices and Determinants.

## PHYSICS

1. Solve CBSE -2019 march Exam question paper (include questions up to Ray optics).
2. Do NCERT questions and previous years board questions of the following chapters
  - (a) Electro Magnetic Induction
  - (b) Alternating Current
  - (c) Ray Optics

## CHEMISTRY

1. Prepare project file of any of the investigatory projects given below:
  - (a) Study of common food adulterants in fat, oil, butter, sugar, turmeric powder, chili powder and pepper.
  - (b) Study the foaming capacity of different samples of soap.
  - (c) Preparation of soap.
  - (d) Study rate of evaporation of different volatile liquids.
  - (e) Study effect of electrolyte on rate of rusting.
2. Solve previous years' questions of NDA (Chemistry).

## **COMPUTER SCIENCE**

1. Prepare a Practical file based on given below criteria:-
  - (a) Must have minimum 20 programs from the following topics
  - (b) Arrays (One dimensional and two dimensional, sorting, searching, merging, deletion & insertion of elements)
  - (c) Class(es) and objects
  - (d) Stacks using arrays and linked implementation
  - (e) Queue using arrays & linked implementation (circular also).
  - (f) File (Binary and Text) operations (Creation, Updation, Query)
  - (g) Any computational Based problems
  - (h) 5 SQL commands along with the output based on any table/relation.

## **BIOLOGY**

1. Each student will solve at least 03 Sample Question Papers of previous Years and practise in class Note book.
2. Each student will solve two NDA (UPSC) Mock test Question Papers.
3. Each student will prepare a project report on the given topics giveb in the class and submit in a file.