

# XI Class Holiday Home Work Science

## English

**I can... I will An endeavor to bring a positive change in the current social scenario**

History speaks its own legends. If we explore our glorious past we will come to know that without the participation of our young „soldiers“ we would definitely have been a in a captive India even today. All the slogans and freedom calls would have been in vain without the support of the youth of the nation.

This world demands the qualities of youth: a temper of will, a quality of imagination, a predominance of courage over timidity, an appetite for adventure over the life of ease.

**Prepare a presentation as per your section given below:**

**The presentation should be of 3 min duration and should include**

- 1.Aim/ Objective of the presentation.
- 2.Current scenario / Details of the social problem.
- 3.Steps taken by the government to eradicate the problem (IF REQUIRED)
- 4.Steps / Action/ Solution that you think should be implemented and your contribution in implementing it.

**This presentation will be shown after the summer vacations to all sections of XI.**

So best of luck to all of us and lets get started. The topic of presentation for each section are

CLASS & SECTION	TOPIC
XI - A	THINKING BEYOND ONESELF
XI – B	SELF DISCIPLINE
XI – C	RESPONSIBLE USE OF SOCIAL MEDIA

**Q2 & Q3 On a separate file**

**2. Research the new additions from Indian Languages to the Oxford English Dictionary. Write one such words daily, its source and meaning.**

Q3.TYPES OF WRITING STYLES				
	EXPOSITORY	NARRATIVE	DESCRIPTIVE	PERSUASIVE
<b>What is it?</b>	Expository means to explain or describe something. It is the most common genre	Narrative writing is used in both fiction and non-fiction.	Descriptive writing helps the reader visualize a character, an	The aim of persuasive writing is to influence the

	of writing. In an expository piece, a topic is introduced and laid out in a logical order without reference to the writer's personal opinions.	When writer writes in a narrative style, he is not just trying to impart information, but also trying to construct and communicate a story, complete with characters, conflict, and settings. It can be found in fiction, poetry, biographies, human interest stories, and anecdotes. Narrative writing can also include dialogue	event or a place in great detail. The writer often employs literary devices to describe something in terms of all five senses.	reader and to convince him to agree with the writer's point of view. Persuasive writing contains the writer's opinions and biases, as well as justifications and reasons to support his stand.
<b>Uses</b>	Reports and articles Textbook writing. Recipes. Business, technical, or scientific writing.	Novels Short stories Novellas Poetry Autobiographies or biographies Anecdotes	Poetry Journal or diary writing Nature writing Descriptive passages in fiction	Speech and debates Advertisements. Reviews (of books, music, movie, restaurants, etc.). Letter of recommendation, complaint, letter to the editor and cover letters
<b>Assignm ent</b>	Research on the Kashmiri pandit style of cuisine. Find a recipe for any one of the following and write/paste it in your copy with a picture. 1.Dum Aloo 2.Haak	Imagine if you could time travel, where would you like to travel (into the past or to the future) and why? Write in 80-100 words.	Write a description of any memorable place you have visited. Use (80-100 words)	Write a review of a movie that you have watched and liked.(50-60 words) Or Write a review of your favourite restaurant. (50-60 words)

**4.Read at least two work soffiction from the list given below.**

- a. The Alchemist- Paulo Coelho
- b. Jonathan Livingston Seagull- Richard Bach
- c. The flight of the pigeons- Ruskin Bond
- d. City of Djinns- William Dalrymple
- e. The Hitchhiker's guide to the galaxy- Douglas Adams
- f. Fangirl- Rainbow Rowell
- g. From Heaven's Lake- Vikram Seth
- h. The Catcher in the Rye- J.D. Salinger
- i. The Book Thief- Markus Zusak
- j. The Chariots of Gods- Erich Von Daniken
- k. I know why the caged birds sing- Maya Angelou

**5. Watch at least 3 English films from the list given below.**

- a. Harry Potter and the prisoner of Azkaban
- b. Top Gun
- c. Life of Pi
- d. Interstellar
- e. Hugo
- f. The Mummy
- g. Schindler's List.
- h. A Beautiful Mind
- i. Day after tomorrow
- j. The Groundhog day
- k. Forrest Gump
- l. Castaway
- m. Inception
- n. Gravity

## Maths

All the solved and unsolved questions (objective questions, short type questions, and long type questions) from exemplar of the chapters 1, 2 and 4 to be done in a separate register.

Prepare a math dictionary on all the topics of chapters 1, 2 and 4 of at least 15 pages taught to you. It should be handwritten and it must be presented in a neatly bound simple folder.

## Physics

Q. 1 Submit a write-up on a noble prize winner in Physics along with his/her photograph

Q. 2 Prepare an Investigatory Project on any topic from NCERT

Q. 1. Define fundamental forces in nature. Arrange these forces in their order of increasing strength.

Q. 2. How is physics related to society?

Q. 3. Write down some advanced inventions in physics. Who discovered the following (i)

Absolute temperature (ii) Quantum theory of radiation

- Q.4. Which of these is largest astronomical unit, light year and parsec.
- Q.5. Name various systems of units and discuss them briefly.
- Q.6. The Sun's angular diameter is measured to be  $1920''$ . The distance of the sun from the earth is  $1.496 \times 10^{11}$  m. What is the diameter of the Sun?
- Q.7. Explain the applications and limitations of dimensional analysis.
- Q.8. Convert 1 joule into ergs.
- Q.9. Assuming that the mass 'm' of the largest stone that can be measured by a flowing river depends on velocity 'v' of water, its density 'd' and acceleration due to gravity 'g'. Show that the mass varies directly as the sixth power of velocity of flow.
- Q.10. Write the dimensions of a/b in the relation:  $P = (a - t^2)/bx$ . Where 'P' is the pressure, 'x' is the distance and 't' is the time.
- Q.11. The escape velocity from the surface of the earth is given by  $v = \sqrt{2GM/R}$ , where m is the mass, R is the radius of the earth. Check the correctness of the given formulae.
- Q.12. Write the dimensions of stress, universal gravitational constant, surface tension, impulse, thrust, pressure, work, angular momentum, power, coefficient of viscosity.
- Q.13. Draw Position – time graph and Velocity – time graph with positive acceleration, negative acceleration and zero acceleration.
- Q.14. Write the dimension of a and b in the relation  $P = \frac{a}{b}$  where P is power, x is distance and t is time.
- Q.15. Pressure is defined as momentum per unit volume. Is it true?
- Q.16. A person travels along a straight road for the first half length with a velocity  $v_1$  and the second half length with velocity  $v_2$ , what is the mean velocity of the person?
- Q.17. Define relative velocity of an object w.r.t. another. Draw position time graphs of two objects moving along a straight line, when their relative velocity is (i) zero (ii) non-zero.
- Q.18. A ball thrown vertically upwards with a speed of  $19.6$  m/s from the top of a tower returns to the earth in 6 second. Find the height of tower.
- Q.19. Derive the equations of uniformly accelerated motion in one dimension by calculus method.  
 (i)  $v = u + at$       (ii)  $s = ut + at^2$       (iii)  $v^2 = u^2 + 2as$
- Q.20. The position of an object moving along x-axis is given by  $x = a + bt^2$ , where  $a = 8.5$  m and  $b = 2.5$  m/s<sup>2</sup> and t is measured in seconds. What is the velocity at  $t = 0$  sec and  $t = 2$  sec? What is the average velocity between  $t = 2$  sec and  $t = 4$  sec.

## Chemistry

- 1) Prepare an Investigatory project on any topic from NCERT.
- 2) All solved example, intext and text question of chapter 1 and 2 from NCERT book to be done in separate register.
- 3) Solve assignment of chapter 1 and 2.
- 4) Show the positive aspects of Covid-19 on the following
  - a) Environment
  - b) Pollution
  - c) Marine life
  - d) Flora and fauna
  - e) River
  - f) Eating habits

## Biology

1. Prepare all the four chapters taught.

2. Prepare the investigatory project on the suitable topic as discussed.
3. Complete all the given assignments.
4. Prepare a PPT on any topic of Human physiology.
5. Prepare a portfolio on COVID19 which includes your studies and reports.
6. Read all the chapters thoroughly of the unit Human physiology from NCERT books.

## IP

- Create a presentation on “COMPUTER SYSTEM OVERVIEW”.
- Create a presentation on “ONLINE ACCESS AND COMPUTER SECURITY”.

## CS

- Q1. Write a python program to find cube of a number.
- Q2. Write a python program to find square root of a number.
- Q3. WAP to show whether inputted number is positive or negative.
- Q4. WAP to find the sum of natural numbers
- Q5. WAP to swap two variables
- Q6. What is Dynamic Typing feature of Python?
- Q7. WAP to compute compound interest
- Q8. WAP that asks for your height in centimeters and then converts your height to feet and inches (1 foot=12 inches, 1 inch=2.54 cm)
- Q9. Python is a cross-platform language. What do you mean by this?
- Q10. What do you understand by Python Indentation? Why is it important