INDIAN CONVENT SCHOOL

HOLIDAY HOMEWORK

CLASS IX

SUBJECT: ENGLISH

AS PER THE ROLL NUMBERS, **PREPARE A PROJECT ON:**

- 20 interesting facts on English language. (Roll No. 1 to 10)
- One short inspirational story   (Roll No. 11 to 20)
- Important Poetic Devices.(minimum 8)   (Roll No. 21 onwards)

NOTE: Make your project beautiful and presentable.

SUBJECT : HINDI

1. विज्ञापन तैयार करें-

   - सौंदर्य उत्पाद
   - दक्षिण भारतीय खाद्य पदार्थ
   - डेंगू से बचाव
   - आयुर्वेदिक टूथब्रश

2. ग्रीष्मावकाश में भ्रमण के लिए गए स्थान के किन्ही तीन दृश्यो का चित्र वर्णन करें

3. समाचार पत्र से चुनाव सम्बन्धी जानकारी एकत्रित करें

SUBJECT : MATHS

Q1. Let x and y be rational and irrational numbers respectively. Are x+y and xy irrational? Justify your answer by an example for each.

Q2. Give an example of two irrational numbers whose: (a) Sum is rational (b) Product is rational (c) quotient is rational.

Q3.Express 1.32222…..+0.353535……. as a fraction in simplest form.

Q4. Find two rational and irrational numbers between and 3 and 4.

Q5. Simplify: $[5(5^{\frac{8}{3}}+ 27^{\frac{1}{3}}]^{\frac{1}{4}}$

Q6. Simplify:$(3+\sqrt{3})(2+\sqrt{2})$

Q7.which of the following is irrational:

0.14   (b) 0.1416   (c)0.40140014000……….

Q8. Express $\sqrt{5}$ on number line.

Q9.find the value of a and b,when $a+b\sqrt{15} = \sqrt{\dfrac{5+\sqrt{\frac{3}{3}}}{5-}}$

Q10. find three irrational number between $\frac{5}{7}$ and $\frac{9}{11}$.

Q11. factorise:$-27x^3+ 125y^3$.

Q12. Without actually calculating he cubes, find the value of $20^3 + 10^3 - 30^3$.

Q13.Factorise $2y^3 + y^2 - 2y - 1$.

Q14. Find the value of $x^3 + y^3 - 12xy + 64$ when $x + y = -4$

Q15.If $x = 2$ and $x = 0$ are zeroes of the polynomial $2x^3 - 5x^3 + px + b$, then find the value of p and b.

Q16.if $a + b + c = 6$ and $ab + bc + ca = 11$, find the value of $a^3 + b^3 + c^3 - 3abc$.

Q17.The polynomial $bx^3 + 3x^3 - 3$ and $2x^3 - 5x + b$ when divided by x-4 leave the remainder R1 and R2 respectively find the value of b if 2R1- R2=0..

Q18. If $f(x) = x^4 - 4x^3 + 3x^2 - 2x + 1$, then find whether $f(0) \times f(-1) = f(2)$.

Q19.verify if $\frac{1}{2}$ and -3/2 are zero of the polynomial $8x^3 - 4x^2 - 18x + 9$. if yes , then factorise the polynomial.

Q20. using long division method show that the polynomial $p(x) = x^3 + 1$ is divisible by $q(x) = x + 1$.verify your result using factor theorem.

* Do all the examples of N.C.E.R.T and R.D Sharma in a seperate notebook.
*Learn square roots till 20.

SUBJECT : SCIENCE
CHEMISTRY

Chapter 1 matter in our surroundings write the following activities
In PRACTICAL FILE from NCERT science book
Activity1.1
Activity1.2
Activity 1.13
Activity 1.14

    Write the summary of the chapter in your own words in science notebook
    Read the chapters and learn question-answers

PHYICS
Motion

Peg. No- 100, in text question:- 1,2,3
Peg. No- 101, Ex. 8.1
Peg No. 102-103, Ex. 8.2 to 8.4, in text question:- 1 to 5 (peg 102), peg 103(in text Q1 to 3)
Peg. No- 108-109, Ex. 8.5, 8.6, 8.7, in text Q1 to 5
Peg No- 112, Q1 to 5

Note-notebook Fully completed + project

BIOLOGY
Assignment
The fundamental unit of life (IX)

Q.1 Why does the skin of your finger shrink when you wash clothes for a long time?

Q.2 Why is endocytosis found in animals only?

Q.3 If you are provided with some vegetables to cook.You generally add salt into the veget
bles during cooking process.After adding salt, vegetables release water.What mechanism
is responsible for this?

Q.4 If cells of onion peel and RBC are separately kept in hypotonic solution,what will happen?

Q.5 Which cell organelle controls most of the activities of the cell?

Q.6 What is the function of aleuroplast, amyloplast and elaioplast?

Q.7 Define chromatin.What is the significance of packaging of DNA?

Q.8 What do you understand by karyoplasmic index?

Q.9 Why do plant cells possess large sized vacuole?

Q.10 What is the correlation between chromatin,chromatid and chromosome?

Q.11 What is a plasmid DNA?

Q 12 Define ploidy.

Q.14 What do you understand by homologous chromosomes?

Q.15 What leads to plasmolysis?

- Prepare a project report on the topic & quot; biofuels & quot;.
- Complete the given assignments.
- Revise the syllabus completed so far.

SUBJECT : SOCIAL STUDIES

ECONOMICS

Prepare a simple, neat folder using eco-friendly and handmade things only. The details for the same are given below:

a) Front Side: The theme should be depicted using illustrations, cuttings and drawings.

b) Inner Side: A quotation regarding the topic should be highlighted and a flap should be made on the right inner side to keep A4 size sheets.

c) Name, class & section and roll no. of student should be mentioned at the back.

Roll No. Topic

1 – 10	Agriculture condition of India
11 – 20	Women Safety in India
21 – 30	Pollution free India
31 – onwards	Education system in India

HISTORY

Prepare an assignment with following details:

- The total length of the assignment should not be more than 15 pages of (A4 size) sheet.
- The assignment should be handwritten.
- The assignment should be developed and presented in this order

i) Cover page showing assignment details, student information, school, and year.

ii) Chapters with relevant headings.

iii) Summary and conclusions based on findings.

SUGGESTED TOPICS {Choose any two topics out of these}
- Clothing – a social history.
- History and sports- the story of cricket.
- Condition of peasants and farmers in European countries.
- Summary of French revolution and role of women's in this time period.

POLITICAL SCIENCE

1. Read chapters- 3, 4, 5 and 6 (Constitutional Design, Electoral Politics,
2. Working of Institutions and Democratic Rights).
   o Learn and revise the complete work as done in school notebook.
   o Collect news on General Election which is being held in India from any
3. News paper or news channel daily and write in a thin register with date.

SUBJECT : INFORMATION TECHNOLOGY

- Write a short note on the followings terms-
  - Application Software
  - Operating System/ Language Story
  - Compiler & Interpreter
  - Need of computer Networks
  - Characteristics of a Computer (any three points)
- Collect information about any four operating systems. This should contain the company Name, the operating system Logo, its features and strengths.
- Make a beautiful and creative chart on Pastel sheet on different digital teachnologies and media devices by explaining merits and demerits.