



Modern International School
Sec-19, Dwarka , New Delhi-75
Class-XII (SCIENCE)

SESSION -2020-21
SUMMER HOLIDAYS

Dear Parents and students

My humble greetings to all of you.

We have together as a team completed the innovative endeavour of digital online teaching for our children in the stressful and testing times of national lockdown during COVID-19.

I congratulate you for your patience, perseverance and support in making digital teaching learning process a success.

The students need a much awaited break to prepare themselves further to cope with the uncertainty that surrounds us due to the pandemic.



ENGLISH

Attempt all questions.

Q1. You want to sell your house at 15 Rajendra Nagar, New Delhi. Draft an advertisement in not more than 50 words, giving the necessary details, to be published in the classified columns of 'The New India Express.' You are Krishna/Alka.

Q2. You are Anuj, a social activist. Design a poster to observe 'Wildlife Protection Week' in your city, in 50 words.

Q3. G.L. Institute recently organised a 'No Tobacco' Workshop. Write a report on the same to be published in the newspaper in 150-200 words.

Q4. Spurt of violence previously unknown in Indian schools makes it incumbent on the educationists to introduce value education effectively in schools. Write an article in 150-200 words expressing your views on the need of value education. You are Anu/Aditya.

Q5. 'Brain Drain is not a bane for a country like India.' Write a debate in 150-200 words either for or against the motion.

Write an article on the topic 'How to make Online Teaching more effective'

PROJECT

(to be done on A4size sheet)

Create a poster (as per CBSE format) on A4size sheet on any of the f topics. Use appropriate Slogan.

- 1 Checking vehicular pollution.
- 2 Acceptance toward Mental Health
- 3 Anti bullying
- 4 Celebrating diversity

MATHEMATICS

1. Make a project of Graph of different function (eg. Linear , quadratic and cubic polynomials)
2. Make a chart of formulas of Inverse Trigonometric function and Trigonometric function.
3. Make a notebook of all formulas in your book and 11 class book.
4. Revise chapter-2, chapter:-3 and chapter-4.
5. Do the assignment 1 and 2.

BIOLOGY

- 1) To make a powerpoint presentation regarding abstract for the project to be undertaken from the following (choose any one)
 - 1) Diseases
 - 2) Infertility Technique
 - 3) Tissue culture
 - 4) Mimicry of plants
- 2) To make a model of (a) DNA (b) Bio gas plant (c) Carbon cycle in the biosphere.
- 3) To learn chapter 1 to 4 from notes and previously completed assignments.

CHEMISTRY:

- 1) Make a project on Green Chemistry.
- 2) Topics which will be covered in Green Chemistry as follows:
 - 1) What is Green Chemistry ?

- 2) Green Chemistry is about What ?
- 3) Successful applications of Green Chemistry.
- 4) Problems occur during application of Green Chemistry

COMPUTER SCIENCE

Project:- Make a practical file and project file.

- Online examination system
- Hotel management
- Car booking system
- E-learning quiz system
- Fashion store management
- Bakery management system
- Hospital Management
- Car showroom system
- Movie ticket booking

PHYSICAL EDUCATION

PRACTICAL FILE COMPLETE

TOPIC-1

ATHLETIC -

1. HISTORY
2. DEFINE TRACK
3. JUMPING EVENT DEFINE

- Long jump
- Tripple jump
- High jump
- Pole valt

4. THROWING EVENT

- Shotput
- Hammer
- Discuss
- Javelin.

TOPIC -2

GAME (ANY ONE GAME)

BASKETBALL, FOOTBALL, KABADDI, KHO-KHO,
VOLLEYBALL, HANDBALL, HOCKEY.

- HISTORY
- GROUND MEASUREMENT

- NEW AND OLD RULES
- FUNDAMENTAL SKILLS
- TERMINOLOGY
- VENUE
- IMPORTANT AWARDS

TOPIC-3

YOGA ASANS (ANY FIVE)

ASANS- PICTURE, PROCEDURE, BENEFIT.

PHYSICS

SUBJECT TEACHER: S.N. MISHRA	HOLIDAY HOME-WORK PERIOD: JUNE, 2020	SUB: PHYSICS CLASS: (XII)
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- ① Obtain the formula for the electric field due to a long thin wire of uniform linear charge density λ without using Gauss's Law.
- ② Plot a graph showing the variation of coulomb force (F) versus $1/r^2$, where r is the distance between the two charges of each pair of charges: $(1\mu C, 2\mu C)$ and $(2\mu C, -3\mu C)$. Interpret the graphs obtained.
- ③ A charge of 8 mC is located at the origin. Calculate the work done in taking a small charge of $-2 \times 10^{-9}\text{ C}$ from a point $P(0, 0, 3\text{ cm})$ to a point $Q(0, 4\text{ cm}, 0)$, via a point $R(0, 6\text{ cm}, 9\text{ cm})$.
- ④ Two point charges, $q_1 = 10 \times 10^{-8}\text{ C}$ and $q_2 = -2 \times 10^{-8}\text{ C}$ are separated by a distance of 60 cm in air.
 - (i) Find at what distance from q_1 , would the electric potential be zero?
 - (ii) Also calculate the electrostatic potential energy of the system.
- ⑤ Four capacitors are connected as shown in the fig-I. Calculate the equivalent capacitance between the points X and Y.

(fig-I)
- ⑥

(fig-II)

Calculate the current in each branch of the net-work shown in the figure-II.
- ⑦ Calculate the current I in the shown circuit of fig-III

(fig-III)

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INNOVATIVE ACTIVITY

- Explain the application of joule Thomson effect taking an example out of your house hold appliances.
- The company “ pearl pet” makes kitchen wares. The names of the company involves the name of the raw material it uses. Discuss its chemistry.