# MAHAVIR SENIOR MODEL SCHOOL RANA PRATAP BAGH, G.T. KARNAL ROAD, DELHI-110033



# HOLIDAYS HOME WORK FOR SUMMER VACATION 2024 CLASS XI - C

"Two roads diverged in a wood, and I— I took the one less travelled by, And that has made all the difference."

# Dear Mahavirians,

Holidays are a time for rejuvenation, a chance to recharge our minds and hearts. At the same time, we must also nourish our souls with purposeful activities. Here's a gentle reminder on how to make the most of this break:

**Read Extensively**: Readers are leaders. Unplug from screens, and explore the world of books. Make a habit of reading every day.

Catch Up with Passions and Hobbies: Remember that guitar gathering dust in the corner? Or the canvas waiting for your brush strokes? Now is the time to rekindle those flames. Dive into your hobbies—whether it's painting, dancing, coding, or cooking. Let your passions ignite your days.

Quality Family Time: Families are the heartbeats of our lives. Share stories, cook together, play board games, and laugh until your bellies ache. These moments are the threads that weave the fabric of cherished memories.

Academics and Studies: Yes, even during holidays, let's keep the academic flame alive. Regular study sessions need not be burdensome. A chapter a day, a math puzzle, or a historical documentary—these small steps maintain the rhythm of learning.

Homework with a Twist: Homework doesn't have to be done in a mundane manner. Be innovative! Create a science project that dazzles, write a poem that dances with metaphors, or solve math problems with flair. Remember, it's not just about finishing; it's about understanding and enjoying the process.

So, dear students, embrace this break with open arms. Explore both the well-trodden paths and the hidden trails. Let curiosity be your compass, and creativity your quide.

Wishing you a joyful and enriching summer break!

**Ruchika Sukhija** Principal

## **CHEMISTRY**

- 1. Complete Notes and questions of NCERT of Chapter-2 Structure of Atom in your assignment register.
- 2. Collect information for Chemistry Project as indicated by teacher and complete your Chemistry Practical File.
- 3. (a) Prepare 3 D models of three covalent molecules assigned you in the class using
  - biodegradable materials. [Roll No.'s 1 to 12]
  - (b) Prepare a life history sketch with pictures of famous scientists in the field of Chemistry on A-3 Size Sheet. Decorate it with border. [Roll No.'s 13 to 24]
  - (c) Prepare long form of the periodic table on the cardboard by using some innovative
    - and creative ideas as discussed in the class. [Roll No.'s 25 to 36]

### **ENGLISH**

- 1. Register and write a short story for Summer Book Writing Carnival, as per the details shared by the English Mentor.
- 2. Complete the UNESCO MGIEP Course on **Global Citizenship** and share your certificate and photograph with the English Mentor.
- 3. Prepare a good Introduction and Speech for ASL.
- 4. Read the Play- *Mother's Day (Snapshots)* and complete the given Worksheet based on it.
- 5. Draft the following Posters in your Fair Register:
  - On the occasion of World Cancer Day (February 4), the government of your state/country needs a poster to be published as a public service advertisement. Create a poster that urges people to stay Cancer Free and suggests some ways to do so.
  - Draft a poster inviting students to join the Eco- club of the school for a Cleanathon
- 6. Write a Speech on the following topic in about 120- 150 words:
  - Write a speech on the Value of Yoga in Sports in everyday life to be delivered in the Morning

- 7. Solve the Two Unseen Passages shared by the English Mentor
- 8. Prepare a famous speech for the competition- Silver Tongued Speeches, as per the details shared by English Mentor.
- 9. Revise all the lessons discussed in class so far and complete your worksheets.
- 10. Students are advised to read at least one collection of Short Stories during the Summer Break. They have to further make a brief PowerPoint Presentation comprising the Theme, Significant Characters, Plot Summary etc in about 3-4 slides. Some suggested readings are given below:
  - The Elephant Vanishes by Harukini Murakami
  - The Metamorphosis by Franz Kafka
  - Train to Pakistan by Khushwant Singh
  - To Kill a Mockingbird by Harper Lee
  - Here, There and Everywhere by Sudha Murty

# **PSYCHOLOGY**

Q-1 Select one topic and make a project on it.

- Memory
- Motivation
- Attention
- Learning
- Perception
- Human Development
- Learning Disability

**Aim:** The aim of the study is to understand the underlying concepts through research.

#### Guidelines for submitting the Project:

- 1. The project must be handwritten.
- 2. The total length of the project must be 25-30 sheets.
- 3. The project must be presented in the following order:
  - a. Make a cover page of the Title/topic chosen from the list given.it must contain title, student's detail (full name of the student, class and section, Roll number), school's name and session.
  - b. Index: List of contents with page numbers.

S.	.No	Topic	Page No.	Teachers Signature

c. Certificate and Acknowledgement: Certificate should be attached and should be Printed Acknowledging the institution and the persons who helped.

Certificate Specimen:-	
	(your name IN CAPITALS) of Class XI has worked and ct File under my guidance and supervision.
This is for ALL INDIA SENIOR SEC (SESSION: 2024-2025)	ONDARY SCHOOL CERTIFICATE EXAMINATION (AISSCE)
Place: Delhi Date:	
MS	MS
(Psychology Teacher)	(PRINCIPAL)

#### Acknowledgement Specimen:-

Many people have played an important role for the completion of My practical work. I take this opportunity to express my profound gratitude and deep regards to my guide Ms. Aruna Malhotra -PSYCHOLOGY Teacher for her exemplary guidance, monitoring and constant encouragement throughout the course of this practical.

Also, I would like to thank all my friends who were subjects for various experiments and tests, without their time and support this would not have been possible.

I further extend my deepest gratitude to Ms. Ruchika Sukhija, Principal for their help in my file work. Without their encouragement and support, it would not have been possible.

I would also like to thank my parents for helping me to go my own way. Last, but not the least, thanks to the almighty, who blessed me and made all things possible.

#### YOUR NAME

- d. Subject Matter/Content: Sub topics with relevant headings (refer to Checklist). e. Summary and conclusion.
- f. Bibliography: It must have the names of books, websites along with their links from where the content is collected.
- g. Photographs should be clearly labeled properly.

#### **Expected Checklist**

- 1. Introduction/Basic Concept of topic/title.
- 2. Brief Historical background of the topic.
- 3. Types if any.
- 4. Methodology used to study like observation, questionnaire, survey or case study using movie analysis or research paper analysis etc.
- 5.Conclusion/Summary
- 6.Citation of the materials referred to, in the file in resource section/bibliography.

#### Modes of the presentation

At the end of the stipulated term for completion of the project, each student will present their work in the project file to the teacher. It will be followed by a viva in half yearly and at the end of the year so be very vigilant while making the project.

Q-2 Make a creative short film on any of the following topics Psychology:

- Empowering India for Socio emotional Wellbeing
- Creating Happy Childhood and Happy India
- Impact of Social Media on Positive Mental Health
- Peer learning for effective adolescent life skills
- Family school partnership for holistic child development
- Senior citizens Blessings on the sands of time
- Gender Sensitization and Awareness in schools
- Child Rights Education a thought in time for 21st Century Education
- The Indian Armed Forces- Sentinels of the Nation
- Meditation- Cultivating a Mind-Body Harmony

#### Guidelines for short film:

a. The students may apply innovative ideas to showcase the message from the viewpoint of the

Adolescents and Youth in a group of 4-5 students each.

- b. The duration of the short film shall not be more than 4 to 5 minutes including all credit rolls etc.
- c. The short video may be prepared in English or Hindi. It can also be bilingual.

# **BIOLOGY**

- 1. Complete notes and practical file.
- 2. Find matter for Project Report as indicated by the teacher.
- 3. Prepare collage (A3 sheet) on Conservation on any of the following topics:
  - Water conservation/pollution
  - Green School Environment

- 4. Prepare a 3 D model of any one of the following:
  - DNA helix on a stand,
  - Mitosis/Meiosis on cardboard.

# **MATHEMATICS**

#### Part A ( Activity file)

- 1. Sets and Subsets
- 2. Operations on Sets using venn diagram
- 3. Graph of trigonomrtrical function

PartB ( Working Model)

Prepare a working model based on any Mathematical concept as discussed in class.

Part C (Practice Worksheet)- Worksheets Based on Sets, Relation and function and trigonometric Functions (in form of DPP)

# **COMPUTER SCIENCE**

Q1. Prepare a presentation in SWAY on one of the given topics (as assigned to students). Once completed, please share the link at <a href="mailto:msmscomputerdepartment@gmail.com">msmscomputerdepartment@gmail.com</a>."

- Wi-Fi Networking Concepts
- Social Networking effects
- Artificial Intelligence
- What makes a country developed?
- Cyber Crimes and Cyber Laws
- Internet Vs Newspapers
- Technologies that will disappear in next 5 years
- Q2. Visit the website "Code.org" Complete at least two online courses available on the website. Submit the completion certificate of the same

#### **ASSIGNMENT**

- 1. Write Python command/instruction/statement to display your name.
- 2. Write Python command to display your school name, class, and section, separated by "-".
- 3. Evaluate the following expressions manually:

```
(i) (4 + 6) ** 3 - 12 / 4

(ii) (1 + 1.5) * 5//4+(4 + 6.0)/ 2

(iii) 12 + (3 * 4 - 6) / 3.0

(iv) 6 + (4**3-6)// 2

(v) 15 * 1.5 % 5 + 2 * 6//4
```

Evaluate the above expressions by using IDLE as a calculator and verify the results that you got manually.

4. Identify invalid variable names from the following, give reason for each:

float, total sum, C.I., volume, tot\_value, #TAG, total\$, 11B+C,\*\*

5. Find the output of the following code:

```
(1) x=3
y=x+2
x+=y
print(x,y)
(2) x=-2
y=2; x+=y; y-=x ;print(x,y)
(3) a=5
b=2*a ;a+=a+b; b*=a+b; print(a,b)
(4) p=10; q=20; p*=q/3; q+=p+q*2;
print(p,q)
(5) p=5%2
q=p**4 ;r=p//q; p+=p+q+r; r+=p+q+r; q-=p+q*r; print(p,q,r)
(6) p=21//5
```

q=p%4; r=p\*q; p+=p+q-r; r\*=p-q+r; q+=p+q; print(p,q,r)

- 6. Write Python expressions to represent the following situations:
  - a. Add remainder of 10/7 to the product of 10 and 7.
  - b. Find the square root of the sum of 8 and 43.
  - c. Find the sum of the square roots of 8 and 43.
  - d. Find the integral part of the quotient when 63 is divided by 29.

# **PHYSICS**

- 1. Complete Notes and questions of NCERT of Chapter-2 and Chapter-3 in your assignment register.
- 2. Complete your Physics Practical File.
- 3. (a) Read newspaper, Science magazine or from any other resources collect information about Latest developments in space science of India and make collage of same on A3 size sheet. [Roll No.'s 1 to 18]
  - (b) Draw any one advanced robot and explain its application on A-3 Size Sheet. [Roll No.'s 19 to 36]
- 4. Prepare a PPT on Innovative solutions to environmental challenges for Science Conclave.

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