

The image is a vibrant, cartoon-style illustration of a beach scene. At the top, a bright yellow sun with rays is partially obscured by a blue cloud. The words "SUMMER VACATION" are written in large, bold, blue, sans-serif capital letters across the top. Below the text is a large, blue wooden frame that resembles a signpost or a gate. In the center of this frame is a white rounded rectangle containing the text "HOLIDAY HOMEWORK", "SESSION 2023-24", and "CLASS XI(Science)". The background is a light blue sky with a few white clouds. At the bottom, there is a sandy beach with two palm trees, a red and yellow striped beach umbrella, and two matching striped beach chairs. The entire scene is framed by a dark blue border with a white inner line.

SUMMER VACATION

HOLIDAY HOMEWORK
SESSION 2023-24
CLASS XI(Science)



MRGS, ROHTAK

PREFACE

Dear Parents and Students,

Summer vacation is around the corner, bringing with itself a much-needed respite from hectic school days. We hope that you will thoroughly enjoy the vacations and make the most of this summer. While it is indeed important that you relax and refresh yourselves, it is also important that you exercise your minds.

Keeping this in mind, we have designed various exciting activities to keep the students engaged and active during the summer vacation. These fun projects/ assignments would enhance learning skills, help understand concepts better, and make for a great crash course aimed at improving academic output.

These activities will not only help you to revise what was taught, but will also enrich your knowledge. These projects will be assessed as Subject Enrichment Activity, Portfolio or Art Integrated activity.

We encourage parents to motivate and support the students to ensure the given work is completed in time, to the best of their ability. Your support and encouragement both have a huge impact on your child's learning ability.

The Holiday Home Work is to be done neatly with relevance to the questions asked and to be submitted to the subject teachers . School reopening i.e. 1th July 2023.

Wishing you a fun filled, safe summer vacation.

**PRINCIPAL
MR. DHARMVEER**

English

1. Choose any two comprehensive passage (Discursive & Case based) from e-book or any source and write the answers of the questions. Find 10 difficult words from the passage.
2. Write 10 objective questions of the chapter "A Portrait of a Lady" "We are not afraid to die." which has not been written in your Fair Notebook.
3. Write 10 objective questions of the chapter " " and "The Summer of Beautiful White Horse" which has not been written in your Fair Notebook.
4. Write five objective questions of the poem "A Photograph" which has not been written in your Fair Notebook.
5. Write two conceptual and internal questions of each chapter "A Portrait of a Lady" "We are not afraid to die." and "A Summer of beautiful White Horse" which has not been written in your Fair Notebook.
5. Write summary of the poem "A Photograph" and "The Labrunum Top" in your own language.
6. Write Advertisement of 1. Situation Wanted 2. Sale and Phurase 3. Matrimonials 4. Lost and Found.
7. Write 50 sentences of correct Tense of the verb.
8. Write 50 sentences of Voice (Tense, Modals and Imperative sentences)

Physics

1. Revise Chapter 1, 2, 3.
2. Make a Project file on an Motion in a strait line or Fundamental units and Measurement.
3. Do give assignment in your fair Notebook

Chemistry

- . Revise ch_2,3
 - . Do all the NCERT questions in your FNB notebook.
 - . Make a chart on periodic table and learn elements with atomic number upto 50.
 - . Make a chart on Quantum number or electronic configuration.
- Solve the given assignment in your FNB.

Biology

- 1: Revise Lesson cell and organelles.
- 2: Revise Lesson Enzyme.
- 3: Revise Lesson Biomolecules.
- 4: Do assignment of chapter Biomolecules in your Notebook.
- 5: Write Ncert question answer of Biomolecules in fair note book.
- 6: Do MCQ of chapter Biomolecules and enzymes. from book Ncert at Finger tips.

Maths

Practice questions of

Logarithm

Inequality

Quadratic equation

From NDA pathfinder book and Assignment in rough note book

QUESTIONS FOR PRACTICE

Q.1 $(x-1)(3-x)(x-2)^2 > 0$

Q.2 $\frac{6x-5}{4x+1} < 0$

Q.3 $\frac{2x-3}{3x-7} > 0$

Q.4 $\frac{0.5}{x-x^2-1} < 0$

Q.5 $\frac{x^2-5x+6}{x^2+x+1} < 0$

Q.6 $\frac{x^2+2x-3}{x^2+1} < 0$

Q.7 $\frac{(x-1)(x+2)^2}{-1-x} < 0$

Q.8 $\frac{x^2+4x+4}{2x^2-x-1} > 0$

Q.9 $x^4-5x^2+4 < 0$

Q.10 $x^4-5x^2-63 \leq 0$

Q.11 $\frac{3}{x-2} < 1$

Q.12 $\frac{1}{x-1} \leq 2$

Q.13 $\frac{4x+3}{2x-5} < 6$

Q.14 $\frac{5x-6}{x+6} < 6$

Q.15 $\frac{5x+8}{4-x} < 2$

Q.16 $\frac{x-1}{x+3} > 2$

Q.33 $\frac{7x-5}{8x+3} > 4$

Q.34 $\frac{3x^2-4x-6}{2x-5} < 0$

Q.35 $\frac{17-15x-2x^2}{x+3} < 0$

Q.36 $\frac{x^2-9}{3x-x^2-24} < 0$

Q.37 $\frac{x+7}{x-5} + \frac{3x+1}{2} \geq 0$

Q.38 $1 < \frac{3x^2-7x+8}{x^2+1} \leq 2$

Q.39 $\frac{x^2-5x+6}{|x|+7} < 0$

Q.40 $\frac{x^2+6x-7}{|x+4|} < 0$

Q.41 $\frac{|x-2|}{x-2} > 0$

Q.42 $\left| \frac{2}{x-4} \right| > 1$

Q.43 $\left| \frac{2x-1}{x-1} \right| > 2$

Q.44 $\left| \frac{x^2-3x-1}{x^2+x+1} \right| < 3$

Q.45 $\frac{x^2-7|x|+10}{x^2-6x+9} < 0$

Q.46 $\frac{|x+3|+x}{x+2} > 1$

Q.47 $\frac{|x-1|}{x+2} < 1$

Q.48 $\frac{|x+2|-x}{x} < 2$

Q.17 $\frac{x}{x-5} > \frac{1}{2}$

Q.18 $\frac{5x-1}{x^2+3} < 1$

Q.19 $\frac{x-2}{x^2+1} < -\frac{1}{2}$

Q.20 $\frac{x+1}{(x-1)^2} < 1$

Q.21 $\frac{x^2-7x+12}{2x^2+4x+5} > 0$

Q.22 $\frac{x^2+6x-7}{x^2+1} \leq 2$

Q.23 $\frac{x^4+x^2+1}{x^2-4x-5} < 0$

Q.24 $\frac{1+3x^2}{2x^2-21x+40} < 0$

Q.25 $\frac{1+x^2}{x^2-5x+6} < 0$

Q.26 $\frac{x^4+x^2+1}{x^2-4x-5} > 0$

Q.27 $\frac{1-2x-3x^2}{3x-x^2-5} > 0$

Q.28 $\frac{x^2-5x+7}{-2x+3x+2} > 0$

Q.29 $\frac{2x^2-3x-459}{x^2+1} > 1$

Q.30 $\frac{x^2-1}{x^2+x+1} < 1$

Q.31 $\frac{x}{x^2-3x-4} > 0$

Q.32 $\frac{x^2+7x+10}{x+\frac{2}{3}} > 0$

Q.50 $\left| \frac{3x}{x^2-4} \right| \leq 1$

Q.51 $\left| \frac{x^2-5x+4}{x^2-4} \right| \leq 1$

Q.52 $\frac{|x-3|}{x^2-5x+6} \geq 2$

Q.53 $\frac{x^2-|x|-12}{x-3} \geq 2x$

Q.49 $\frac{1}{|x|-3} < \frac{1}{2}$

CHAPTER – LOGARITHM

QUESTIONS FOR PRACTICE

- Q.1 $\log_{x-1}3 = 2$
Q.2 $\log_4(2\log_3(1+\log_2(1+3\log_3 x)))=1/2$
Q.3 $\log_3(1+\log_3(2^x - 7))=1$
Q.4 $\log_3(3^x - 8)=2-x$
Q.5 $\frac{\log_2(9-2^x)}{3-x} = 1$
Q.6 $\log_{5-x}(x^2 - 2x + 65)=2$
Q.7 $\log_3(\log_9 x + \frac{1}{2} + 9^x) = 2x$
Q.8 $\log_3(x + 1) + \log_3(x + 3) = 1$
Q.9 $\log_7(2^x - 1) + \log_7(2^x - 7) = 1$
Q.10 $\log 5 + \log(x + 10) - 1 = \log(21x - 20) - \log(2x - 1)$
Q.11 $1 - \log 5 = \frac{1}{3}(\log \frac{1}{2} + \log x + \frac{1}{3} \log 5)$
Q.12 $\log x - \frac{x+1}{2} \log(x - \frac{1}{2}) = \log(x + \frac{1}{2}) - \frac{1}{2} \log(x + \frac{1}{8})$
Q.13 $3^{\log_3 \log^{\sqrt{x}}} - \log x + \log^2 x - 3 = 0$
Q.14 $(x - 2)^{\log^2(x-2) + \log(x-2)^5 - 12} = 10^2 \log(x - 2)$
Q.15 $9^{\log_3(1-2x)} = 5x^2 - 5$
Q.16 $x^{1+\log x} = 10x$
Q.17 $x^{2\log x} = 10x^2$
Q.18 $x^{\frac{\log x + 5}{3}} = 10^{5+\log x}$
Q.19 $x^{\log_3 x} = 9$
Q.20 $(\sqrt{x})^{\log_5 x - 1} = 5$
Q.21 $x^{\log x + 1} = 10^6$
Q.22 $x^{\frac{\log x + 7}{4}} = 10^{\log x + 1}$
Q.23 $x^{\log \sqrt{x(x-2)}} = 9$
Q.24 $(\frac{\log x}{2})^{\log^2 x + \log x^2 - 2} = \log \sqrt{x}$
Q.25 $3\sqrt{\log_2 x} - \log_2 8x + 1 = 0$
Q.26 $\log^2 x - 3 \log x = \log(x^2) - 4$
Q.27 $\log_{\frac{1}{3}} x - 3 \sqrt{\log_{\frac{1}{3}} x + 2} = 0$
Q.28 $2(\log_x \sqrt{5})^2 - 3 \log x \sqrt{5} + 1 = 0$
Q.29 $\log_2^2 x + 2 \log_2 \sqrt{x} - 2 = 0$
Q.30 $(a^{\log_b x})^2 - 5y^{\log_b a} + 6 = 0$

Music

1. परिभाषाएँ :

(i) नाद, श्रुति, स्वर, सप्तक, थाट, जाति, लय, ताल, मार्गि, देशी, और राग

2. द्रुपद, ख्याल और तराना

3. (तानसेन विश्व नारायण भातखड़े और विश्णु दिगंबर पलुस्कर)

= ये जीवनियाँ याद करनी है और कॉपी में लिखनी है।

4. तीन ताल, एक ताल याद करो और कॉपी में लिखो।

5. तालपुरा का चित्र बनाओ और उसको भागों के नाम और तालपुरा कैसे मिलाया जाता है उसकी विधी लिखो

6. (राग बिहाग बिपलासी और भैखी) = इन तीनों रागों का परिचय अपनी कॉपी में लिखो और याद करों।