**Shriram School Mawana**
**Holiday Homework**
**Class- XII**
**Sub: - English**
**Worksheet- 1**
**(Writing skills)**
**M.M. - 20**

**Ques. 1. Write an article on the topic 'Hazards of Television Watching for Kids' in about 200 words.**                    **1x10=10**

**Ques.2. Prepare an advertisement to let out a flat giving necessary details.      1x4=5**

**Ques. 3. Design a poster to announce the staging of a play in your school giving necessary details.**                **1x5=5**

**Shriram School Mawana**
**Holiday Homework**
**Class- XII**
**Sub:-English**
**Worksheet- 2**
**(Literature)**
**M.M. - 20**

**Ques. 1. Read the extract given below and answer the questions that follow. 1x4=4**

*' and felt that old familiar ache,*
*my childhood fear, but all I said was*
*see you soon Amma all I did was*
*smile and smile and smile. '*

1. Where are these lines taken from?
2. Who is the poet of these lines?
3. What familiar ache did the poet feel?
4. Why did the poet only smile?

**Ques. 2. Read the lines given below and answer the questions that follow. 1x4=4**

*" it was all much more tempting than the rule for participles, but I had the strength to resist, and hurried off to school."*

1. Who is an 'I' referred to here?
2. What was much more tempting than the rule for participles?
3. Where was the speaker going?
4. Name the chapter and its author.

**Ques. 3. Answer the following questions in about 40 to 50 words.**　　　　**2x6=12**

1. Mention the hazards of working in the glass bangles industry?

2. What did the note inside the first day cover reveal in the story The Third Level?

3. What was the full name of the Tiger King?

4. How did the Maharaja deal with a high-ranking british officer who wanted to shoot a tiger?

5. What do you learn about Galesburg, Illinois during 1894?

6. Why was Franz not scolded for reaching the school late that day?

**Shriram School Mawana**
**Holiday Homework**
**Class- XII**
**Sub:-English**
**Worksheet- 3**
**(PROJECT WORK)**

**Ques. 1. Write a story review of the chapter 'The Lost Spring' or 'The Tiger King' in about 200 - 250 words.**

● **Begin with the gist of the story.**
● **Then write how did you like the story and why?**
● **Then explain which part of the story you liked the most and why?**
● **Then mention which character is your favourite in it and why?**
● **And then the conclusion.**

# SHRIRAM SCHOOL , MAWANA

## HOLIDAY HOME WORK

## SUBJECT-PHYSICS

## CLASS XII

## WORK SHEET  -1

1. A convex lens placed in a medium behave as an ordinary plate. What is the refractive index of the medium relative to the lens
2. What is lens maker formula? Why is it so called?
3. How does the focal length of a convex lens changes if red light is used instead of Violet light?
4. The wavelength of red light is almost twice that of Violet light. Is the refractive index of a material also greater for red colour then that for Violet colour?
5. Two concave mirrors have the same focal length but the aperture of one is greater than that of the other. Which mirror from The Sharper Image and why?

## WORK SHEET  -2

1. Drive The lens maker formula for convex lens.
2. Discuss the reflection through convex spherical surface when image forms is virtual in nature .
3. Obtain mirror equation by concave mirror .
4. Obtane lens equation for concave lens.
5. Explain the phenomena of total internal reflection.

*General Instructions :*

■ *Do your work neatly.*

■ *Holiday homework can be done in fair register .*

*CHAPTER-2  Solutions*

*Q. 1  Very Short Answer Questions .*
*a)* What is  de-icing agent? How does it work?
*b)* Why is glycol and water mixture used in car radiators in cold countries?
*c)*  The dissolution of ammonium chloride in water is an endothermic process but still it dissolves in water readily. Why?
*d)* Why is osmotic pressure of 1M KCl higher than 1M Urea solution ?

*Q. 2  Short Answer Questions-I.*
 *a*) On mixing liquid X and liquid Y , volume of the resulting solution decreases. What type of deviation from Raoult's law is shown by the resulting solution ?What change in temperature would you observe after mixing liquids X and Y?
*b)*  Will the elevation in boiling point be same if 0.1 mol of sodium chloride or 0.1 mol of sugar is dissolved in 1L of water? Explain.
*c)*  Draw the graph between vapour pressure and temperature and explain the elevation in boiling point of a solvent in solution.
*d)*  Write two differences between a solution showing positive deviation and a solution showing negative deviation from Raoult's law.
*e)*  What type of deviation is shown by ethanol and acetone? What type of azeotrope is formed by mixing ethanol and acetone ?

*Q. 3  Short Answer Questions -II.*

**a)** A solution prepared by dissolving 8.95 mg of a gene fragment in 35.0 ml of water has an osmotic pressure of 0.335 Torr at 25°C. Assuming that the gene fragment is a non-electrolyte , calculate its molar mass.

**b)** A solution of glucose ( molar mass =180 g /mol) in water has a boiling point of 100.20°C. Calculate the freezing point of the same solution. Molal constants for water Kf and Kb are 1.86 K Kg / mol and 0.512K kg / mol respectively.

## *Topic-Investigatory Project*

*Prepare a project report (investigatory) involving laboratory testing and collecting information from different sources on any one of the following :*

■ *Study of the presence of oxalate ions in guava fruit at different stages of ripening.*

■ *Study of quality of casein present in different samples of milk.*

■ *Preparation of soyabean milk and its comparison with the natural milk with respect to curd formation, effect of temperature etc.*

■ *Study of the effect of potassium bisulphate as food preservative under various conditions (temperature, concentration ,time etc.)*

■ *Study of digestion of starch by salivary amylase and effect of pH and temperature on it.*

■ *Comparative study of the rate of fermentation of following materials :Wheat flour, gram flour, potato juice, carrot juice etc.*

■ *Extraction of essential oils present in saunf (aniseed), Ajwain ( Carum), illaichi (cardamom) .*

■ *Study of common food adulterants in fat, oil, butter ,sugar, turmeric powder, Chilli powder and pepper.*

*Note: Any other investigatory project can be chosen with the*

*approval of the teacher.*

**Subject Teacher -Mrs Alpna Plawat**

# SRIRAM SCHOOL, MAWANA
## SUB- Mathematics
## CLASS-XII
## HOLIDAY HOMEWORK
## WORKSHEET - 1

M.M- 20

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## SECTION- A                                   ( 1 x 4 = 4 )

1. Using the principal values find the value of $\cos^{-1}\left(\cos\dfrac{13\pi}{6}\right)$.

2. If A is a matrix of order 2 × 3 and B is a matrix of order 3 × 5 then what is the order of matrix (A B)′.

3. Write the value of:  $\tan 2\,(\sec^{-1} 2) + \cot 2\,(\operatorname{cosec}^{-1} 3)$.

4. A matrix A of order 3 × 3 has determinants 6. What is the value of |4A|.

## SECTION- B                                   ( 2 x 5 = 10 )

5.   1. Prove that $\tan^{-1}\left(\dfrac{3}{4}\right) + \tan^{-1}\left(\dfrac{3}{5}\right) - \tan^{-1}\left(\dfrac{8}{19}\right) = \dfrac{\pi}{4}$

6. If $\sin\left(\sin^{-1}\left(\dfrac{1}{2}\right) + \cos^{-1} x\right) = 1$, then find the value of $x$.

7. Write the value of $\tan^{-1}\left[2\sin\left(2\cos^{-1}\dfrac{\sqrt{3}}{2}\right)\right]$.

8. If $A = \begin{bmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{bmatrix}$      Find $2A - 3B$.

9. Find adj. A of the matrix $A = \begin{bmatrix} 1 & -1 & -2 \\ 3 & 1 & -1 \\ 1 & 0 & 3 \end{bmatrix}$

## SECTION- C                                   ( 3 x 2 = 6 )

10. Solve for $x$, $\tan^{-1}\left(\dfrac{x-1}{x-2}\right) + \tan^{-1}\left(\dfrac{x+1}{x+2}\right) = \dfrac{\pi}{4}$

11. Determine the product $\begin{bmatrix} -4 & 4 & 4 \\ -7 & 1 & 3 \\ 5 & -3 & -1 \end{bmatrix}\begin{bmatrix} 1 & -1 & 1 \\ 1 & -2 & -2 \\ 2 & 1 & 3 \end{bmatrix}$ and using it solve the  equations.

$x + y + 2z = 1$,  $-x - 2y + z = 4$,  $x - 2y + 3z = 0$

M.M- 20

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## SECTION- A                    ( 1 x 4 = 4 )

1.  If $\begin{vmatrix} a & b & c \\ m & n & p \\ x & y & z \end{vmatrix} = k$ then $\begin{vmatrix} 6a & 2b & 2c \\ 3m & n & p \\ 3x & y & z \end{vmatrix} =$

   a) $\frac{1}{6}k$                b) 2k                c) 3k                d) 6k

2. Given $\begin{bmatrix} 7 & 1 & 2 \\ 9 & 2 & 1 \end{bmatrix}\begin{bmatrix} 3 \\ 4 \\ 5 \end{bmatrix} + 2\begin{bmatrix} 4 \\ 2 \end{bmatrix}$ is equal to

   a) $\begin{bmatrix} 4 & 3 \\ 4 & 4 \end{bmatrix}$        b) $\begin{bmatrix} 4 & 3 \\ 4 & 5 \end{bmatrix}$        c) $\begin{bmatrix} 4 & 5 \\ 4 & 4 \end{bmatrix}$        d) $\begin{bmatrix} 4 & 4 \\ 4 & 5 \end{bmatrix}$

3. If $3\tan^{-1} x + \cot^{-1} x = \pi$ then x equals

   a) 0                b) 1                c) -1                d) $\frac{1}{2}$

4.  A matrix A of order 3 × 3 has determinants 6 . What is the value of |3A|.


## SECTION- B                    ( 2 X 5 = 10 )

5.  If A = $[a_{ij}]$ is a matrix of order 2 × 2 such that $|A|$ = -10 and $c_{ij}$ represents the co- factors of $a_{ij}$. Then find $a_{21}c_{21} + a_{22}c_{22}$.

6. If A and B are square matrix of same order and B is a skew-symmetric matrix. Show that A'BA is also a skew-symmetric matrix.

7.  Write the value of $\tan^{-1}\left[2\sin\left(2\cos^{-1}\frac{\sqrt{3}}{2}\right)\right]$.

8.  Evaluate the following determinants $\begin{vmatrix} \cos 15^{\circ} & \sin 15^{\circ} \\ \sin 15^{\circ} & \cos 75^{\circ} \end{vmatrix}$

9.  Without computing adj A. Find |adj. A| of the matrix A = $\begin{bmatrix} 1 & -1 & 2 \\ 3 & 1 & -2 \\ 1 & 0 & 3 \end{bmatrix}$

## SECTION - C                    ( 3 x 2 = 6 )

10. Solve for $x$ : $\tan^{-1}\left[\dfrac{x-3}{x-4}\right] + \tan^{-1}\left[\dfrac{x+3}{x+4}\right] = \dfrac{\pi}{4}$.

11. If A = $\begin{bmatrix} 1 & 2 & 0 \\ -2 & -1 & -2 \\ 0 & -1 & 1 \end{bmatrix}$ find $A^{-1}$

Using $A^{-1}$ solve the system of linear equations:

$x - 2y = 10$, $2x - y - z = 8$, $-2y + z = 7$.

**SHRIRAM SCHOOL, MAWANA**
        **SUBJECT -BIOLOGY**
            **CLASS-XII**
            **Worksheet**
**Q1.Answer the following questions:**

**Q1. What is microsporogenesis?**
**Q2. What is funicle?**
**Q3. What type of flowers are present in oxtails and Viola?**
**Q4.Define Juvenile phase.**

**Q3.Answer the following ques :**
**Q1. Where is the sporopollenin present in plants? State its significance with reference to its chemical nature.**
**Q2.Explain any two devices by which autogamy is prevented in flowering plants.**
**Q3. Differentiate between hypocotyl and epicotyl?**
**Q4. What is pericarp? Mention any two functions of it .**
**Q5. How are pollen grains preserved?**

**Q3.Answer the following questions:**
**Q1.Explain the characteristics features of flowers that facilitate wind pollination.**
**Q2.Draw a labelled schematic representation of a mature embryo sac of  an angiosperm.**

*Write and learn all NCERT exercises of chapter 1 to 4 in your fair note book.*

*Prepare a INVESTIGATORY PROJECT on a suitable topic related to your syllabus.*

*SUBJECT TEACHER -SARITA TYAGI*

SHRIRAM SCHOOL, MAWANA

HOLIDAY HOME WORK( 2021-22)

CLASS XII

SUBJECT: I.P

- MAKE A PPT ON COMPUTER NETWORKING.
- PPT SHOULD COVER ALL THE TOPICS OF THE CHAPTER AND SHOULD HAVE MIN 15 SLIDES.

**Shri Ram school,Mawana**
**Sub-Fine Art**
**Holiday Home work**
**Class-12(A,B)**

Q,1Write a short note on Radha (Bani-Thani).

Q-2 Describe the Rajsthani painting of KRISHNA ON SWING.

Q.3 Explain the Pahari school of miniature painting.

Q.4Explain in brief about the Krishna with Gopis(Pahari school).

विषय (हिन्दुस्तानी संगीत गायन)

कक्षा बारह

1. अलंकार से आप क्या समझते हैं? अलंकार के कुछ प्रकार उदाहरण सहित लिखें!

2. ग्राम को परिभाषित करते हुए उसके प्रकार लिखें!

3. मूर्च्छना शब्द से आप क्या समझते हैं?

4. मूर्च्छना के कितने प्रकार हैं? सविस्तार वर्णन करें!

5. ग्राम व मूर्च्छना में समानता और भिन्नता का संक्षेप में वर्णन करें!

6. श्रुति शब्द को परिभाषित करते हुए उसका स्वर के साथ संबंध स्थापित करें

Shriram school Mawana

Holiday Homework

Class ------12th

Sub. – Physical education

   M M.    20

Q.1. describe the types of tournaments.

Q. 2. Explain the rules of given by Byes.

Q. 3. Describe any three myths regarding diet.

Q. 4. Define balanced diet. Explain any four micro -nutrition.

Q. 5. Prepare a fixture of 21 teams on the basis of knockout tournament.

Your school is organising run for unity explain the responsibilities of  First -aid and technical committee