**ग्रीष्मकालीन अवकाश गृहकार्य**
**कक्षा – 12वीं (हिंदी विषय – CBSE Board)**
**सत्र : 2026–27**

प्रिय विद्यार्थियों,
ग्रीष्मकालीन अवकाश केवल विश्राम का समय नहीं, बल्कि आत्म-अध्ययन, रचनात्मकता और ज्ञानवृद्धि का भी अवसर है। नीचे दिए गए कार्यों को ध्यानपूर्वक पूर्ण करें।

## हिंदी विषय गृहकार्य

### 1. गद्य एवं पद्य अध्ययन

- पाठ्यपुस्तक के सभी गद्य एवं पद्य पाठों का पुनरावर्तन करें।
- प्रत्येक पाठ के मुख्य बिंदु, लेखक/कवि परिचय एवं कठिन शब्दार्थ लिखें।
- अपनी पसंद की किसी एक कविता का भावार्थ अपने शब्दों में लिखें।

### 2. लेखन कौशल

- निम्नलिखित विषयों पर 250–300 शब्दों में निबंध लिखें –
    1. पर्यावरण संरक्षण
    2. डिजिटल भारत
    3. जल ही जीवन है
- किसी एक सामाजिक समस्या पर पत्र-लेखन (औपचारिक पत्र) लिखें।
- विद्यालय पत्रिका हेतु “ग्रीष्मकालीन अवकाश का सदुपयोग” विषय पर लेख लिखें।

### 3. व्याकरण

- मुहावरे – 20
- लोकोक्तियाँ – 20
- तत्सम–तद्भव शब्द – 20
- पर्यायवाची एवं विलोम शब्द – 25–25
- वाक्य शुद्धि के 15 उदाहरण लिखें।

**4. परियोजना कार्य (Project Work)**

- हिंदी साहित्य के किसी एक प्रसिद्ध कवि/लेखक जैसे

  ,

  ,

  पर चित्र सहित परियोजना तैयार करें।

- परियोजना में उनका जीवन परिचय, प्रमुख रचनाएँ एवं साहित्य में योगदान शामिल करें।

**5. पठन कार्य**

- प्रतिदिन कम से कम 20 मिनट हिंदी समाचार पत्र पढ़ें।
- समाचारों में से 5 महत्वपूर्ण समाचार लिखें।

**विशेष निर्देश**

- सभी कार्य साफ-सुथरी लिखावट में A4 शीट / प्रोजेक्ट फाइल में करें।
- परियोजना कार्य आकर्षक एवं रचनात्मक होना चाहिए।
- विद्यालय खुलने पर समस्त कार्य अनिवार्य रूप से जमा करें।

**शुभकामनाएँ!**

आपका ग्रीष्मकालीन अवकाश सुखद, रचनात्मक एवं ज्ञानवर्धक हो।

**SUMMER HOLIDAY HOMEWORK**
**CLASS-12th (Bio)**

1. Write down the all practical's of biology in practical notebook.
2. Complete the project file.
3. Write down the all notes in biology notebook of unit 1 and unit 5.
4. Solve the question paper of monthly test April in biology notebook.
5. Solve the previous years board questions of each chapter of unit 1 and unit 5.

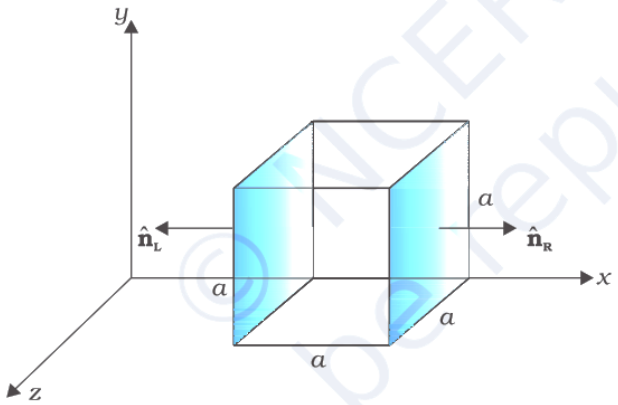
Subject Teacher- G.D. Rai (PGT BIO)

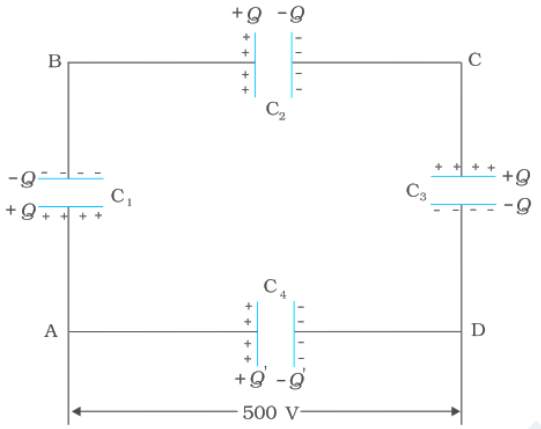
PM SHRI KENDRIYA VIDYALAYA TIKAMGARH

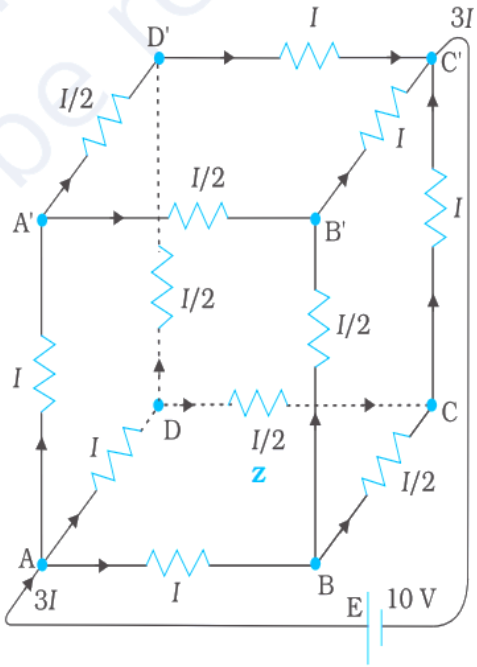
**CLASS – 12** ( 2026 – 27)

SUMMER VACATION HOLIDAY HOMEWORK

SUBJECT – PHYSICS

| | | |
|---|---|---|
| 1 | **ACTIVITY – CHART MAKING**<br><br>Prepare the chart and explain the given topic with proper **diagram and illustrations**.<br><br>Roll no 1 to 5 --- Describe the Gauss's Law and its applications.<br><br>Roll no 6 to 10 --- Describe the Electric Dipole and torque on a dipole in uniform electric field. .<br><br>Roll no 11 to 15 --- capacitance of a parallel plate capacitor with and without dielectric medium between the plates.<br><br>Roll no 16 to 20 --- Kirchhoff's rules and Wheatstone bridge.<br><br>Roll no 21 to 30 ---- Describe Drift velocity of electron and relation between I and Vd | |
| 2 | **Example 1.10** The electric field components in Fig. 1.24 are $E_x = \alpha x^{1/2}$, $E_y = E_z = 0$, in which $\alpha = 800$ N/C m$^{1/2}$. Calculate (a) the flux through the cube, and (b) the charge within the cube. Assume that $a = 0.1$ m.<br><br><br>FIGURE 1.24 | |
| 3 | **Example 1.11** An electric field is uniform, and in the positive $x$ direction for positive $x$, and uniform with the same magnitude but in the negative $x$ direction for negative $x$. It is given that $\mathbf{E} = 200\ \hat{\mathbf{i}}$ N/C for $x > 0$ and $\mathbf{E} = -200\ \hat{\mathbf{i}}$ N/C for $x < 0$. A right circular cylinder of length 20 cm and radius 5 cm has its centre at the origin and its axis along the $x$-axis so that one face is at $x = +10$ cm and the other is at $x = -10$ cm (Fig. 1.25). (a) What is the net outward flux through each flat face? (b) What is the flux through the side of the cylinder? (c) What is the net outward flux through the cylinder? (d) What is the net charge inside the cylinder? | |

| | | |
|---|---|---|
| 4 | **Example 2.5**<br>(a) Determine the electrostatic potential energy of a system consisting of two charges 7 μC and –2 μC (and with no external field) placed at (–9 cm, 0, 0) and (9 cm, 0, 0) respectively.<br>(b) How much work is required to separate the two charges infinitely away from each other?<br>(c) Suppose that the same system of charges is now placed in an external electric field $E = A\,(1/r^2)$; $A = 9 \times 10^5\ \text{NC}^{-1}\ \text{m}^2$. What would the electrostatic energy of the configuration be? | |
| 5 | **Example 2.8** A slab of material of dielectric constant $K$ has the same area as the plates of a parallel-plate capacitor but has a thickness $(3/4)d$, where $d$ is the separation of the plates. How is the capacitance changed when the slab is inserted between the plates? | |
| 6 | **Example 2.9** A network of four 10 μF capacitors is connected to a 500 V supply, as shown in Fig. 2.29. Determine (a) the equivalent capacitance of the network and (b) the charge on each capacitor. (Note, the *charge on a capacitor* is the charge on the plate with higher potential, equal and opposite to the charge on the plate with lower potential.)<br><br><br>**FIGURE 2.29** | |
| 7 | **Example 3.3** An electric toaster uses nichrome for its heating element. When a negligibly small current passes through it, its resistance at room temperature (27.0 °C) is found to be 75.3 Ω. When the toaster is connected to a 230 V supply, the current settles, after a few seconds, to a steady value of 2.68 A. What is the steady temperature of the nichrome element? The temperature coefficient of resistance of nichrome averaged over the temperature range involved, is $1.70 \times 10^{-4}\ ^\circ\text{C}^{-1}$. | |

| | | |
|---|---|---|
| 8 | **Example 3.5** A battery of 10 V and negligible internal resistance i connected across the diagonally opposite corners of a cubical networ consisting of 12 resistors each of resistance 1 Ω (Fig. 3.16). Determin the equivalent resistance of the network and the current along eac edge of the cube.<br><br> | |
| 9 | Write the **summary** and **points to ponder** given at the end of each chapter 1, 2 and 3 in your copy. | |
| 10 | Solve all the **Intext and exercise** questions of chapter 1, 2 and 3 in your copy | |

# KENDRIYA VIDYALAYA TIKAMGARH HOLIDAYS HOMEWORK

CLASS: XII SUB-CHEMISTRY CHAPTER: SOLUTIONS WORKSHEET No: 01

Q.1 4L of 0.02M aqueous solution of NaCl was diluted by adding one litre of water. The molality of the resultant soltion is

(a) 0.004 (b) 0.008
(c) 0.012 (d) 0.016

Q.2The value of Henry's constant $K_H$ is:

(a) greater for gases with higher solubility (b) greater for gases with lower solubility.
(c) constant for all gases. (d) not related to the solubility of gases

Q.3 What is the mole fraction of ethylene glycol in a solution containing 20g by mass?

(a) 0.022 (b) 0.054
(c) 0.068 (d) 0.090

Q.4 The solubility of a substance in a solvent depends on

(a) Temperature (b) Pressure
(c) Nature of solute and solvent (d) All of the above

Q. 5 Which of the following does not dissolve in benzene?

(a) Naphthalene (b) Anthracite
(c) $C_6H_{12}O_6$ (d) All of the above

Q.6 Choose the ideal solution from the following.

(a) Carbon disulphide and acetone (b) Phenol and Aniline
(c) Chloroform and Acetone (d) Ethyl iodide and ethyl bromide

Q.7 How does the solubility of gasses vary with pressure?

(a) Increases with pressure (b) Decreases with pressure
(c) First increases and then decreases (d) No effect

Q.8 How does the solubility of gasses in a liquid vary with increase in temperature?

(a) Increases with temperature (b) Decreases with temperature
(c) First increases and then decreases (d) No effect

Q.9 Increasing the temperature of an aqueous solution will cause:

(b) decrease in molality (b) decrease in molarity
(c) decrease in mole fraction (d) decrease in % (w/w)

Q.10 Which of the following condition is not satisfied by an ideal solution?

(a) $\Delta H_{mixing} = 0$ (b) $\Delta V_{mixing} = 0$
(c) Raoult's Law is obeyed (d) Formation of an azeotropic mixture

**Given below are two statements labelled as Assertion (A) and Reason (R) Select the most appropriate answer from the options given below:**

**Both A and R are true and R is the correct explanation of A**
**Both A and R are true but R is not the correct explanation of A**
**A is true but R is false**
**A is false but R is true**

1. **Assertion:** Molarity of a solution in liquid state changes with temperature.
Reason: The volume of a solution changes with change in temperature

2. **Assertion:** When NaCl is added to water a depression in freezing point is observed.
**Reason:** The lowering of vapour pressure of a solution causes depression in the freezing point.

3. **Assertion:** When a solution is separated from the pure solvent by a semipermeable membrane, the solvent molecules pass through it from pure solvent side to the solution side.
**Reason:** Diffusion of solvent occurs from a region of high concentration solution to a region of low concentration solution.

4. **Assertion:** Molecular mass of polymers cannot be calculated using boiling point or freezing point methods.
**Reason:** Polymers solution do not possess a constant boiling point or freezing point.

5. **Assertion:** Non-ideal solutions always from azeotropes.
**Reason:** Boiling point of azeotrope may be higher or lower than boiling points of both components.

**Short Answer Type questions**

**Q.1** Components of a binary mixture of two liquids A and B were separated by distillation. After some time separation of components stopped and the composition of the vapour phase became the same as that of the liquid phase. Both the components started coming in the distillate. Explain why this happened?

Ans:_____

_____

**Q.2** Explain why on the addition of 1 mol of NaCl to 1 liter of water, the boiling point of water increases, while the addition of 1 mol of methyl alcohol to one liter of water decreases its boiling point.

Ans:_____

_____

**Q.3** Explain the solubility rule "like dissolves like" in terms of intermolecular forces that exist in solutions.

Ans:_____

_____

**Q.4** Concentration terms such as mass percentage, ppm, mole fraction and molality are independent of temperature, however molarity is a function of temperature. Explain why?

Ans:_____

_____

**Q.5** What is the significance of Henry's Law constant $K_H$ ?

Ans:_____

_____

**Q.6** What type of deviation is shown by mixture of ethanol and acetone? Give reason**.**

Ans:_____

_____

**Matching Type Questions**

**Note:** In the following questions match the items given in Column I and Column II.

**Match the items given in Column I and Column II**.

| **Column I** | **Column II** |
|---|---|
| (a) Saturated solution | (i) Solution having the same osmotic pressure at a given temperature as that of the given solution. |
| (b) Binary solution | (ii) A solution whose osmotic pressure is less than that of another. |
| (c) Isotonic solution | (iii) Solution with two components. |
| (d) Hypotonic solution | (iv) A solution which contains the maximum amount of solute that can be dissolved in a given amount of solvent at a given temperature. |
| (e) Solid solution | (v) A solution whose osmotic pressure is more than that of another. |
| (f) Hypertonic solution | (vi) A solution in the solid phase. |

**Ans**

| **Column I** | **(a)** | **(b)** | **(c)** | **(d)** | **(e)** | **(f)** |
|---|---|---|---|---|---|---|
| **Column II** | | | | | | |

2. Match the items given in Column I with the type of solutions given in Column II.

| Column I | Column II |
|---|---|
| (a) Soda water | (i) A solution of gas in solid |
| (b) Sugar solution | (ii) A solution of gas in gas |
| (c) German silver | (iii) A solution of solid in liquid |
| (d) Air | (iv) A solution of solid in solid |
| (e) Hydrogen gas in palladium | (v) A solution of gas in liquid |

**Ans**

| **Column I** | **(a)** | **(b)** | **(c)** | **(d)** | **(e)** | |
|---|---|---|---|---|---|---|
| **Column II** | | | | | | |

3. Match the laws given in Column I with expressions given in Column II.

| Column I | Column II |
|---|---|
| (a) Raoult's law | (i) $\Delta T_f = K_f m$ |
| (b) Henry's law | (ii) $\pi = CRT$ |
| (c) Elevation of boiling point | (iii) $p = x_1 p_1^0 + x_2 p_2^0$ |
| (d) Depression in freezing point | (iv) $\Delta T_b = K_b m$ |
| (e) Osmotic pressure | (v) $p = K_H x$ |

**Ans**

| **Column I** | **(a)** | **(b)** | **(c)** | **(d)** | **(e)** | |
|---|---|---|---|---|---|---|
| **Column II** | | | | | | |

**VERY SHORT ANSWER TYPE QUESTIONS**

1. What inter-particle interaction is present when NaCl is dissolved in water?

Ans_____

_____

2. Vapour pressure is----------(increased, decreased) when NaCl is added in water.

3. Which has more Freezing point and why? (Distilled water or Sea water)

Ans_____

_____

4. What is the van't Hoff factor of NaCl for very dilute solution in Water?

Ans_____

_____

5. Which has more boiling point and why? (1mol of NaCl in 100 mL water, 1 mol of Glucose in 100mL water)

Ans_____

_____

6. Why doctors asked the patient to take low sodium salt for high B.P patient?

Ans_____

_____

7. Why do you gargle Luke warm salt water?

Ans_____

_____

8. When you measure molar mass through colligative properties, why NaCl shows abnormal molecular mass but nor glucose?

Ans_____

_____

# KENDRIYA VIDYALAYA SANGATHAN BHOPAL REGION

**CLASS: XII** **WORKSHEET No: 02**

**CHAPTER: SOLUTION** **TIME: 35 MINUTES**

**Numericals** -

1. Calculate the mole fraction of ethylene glycol ($C_2H_6O_2$ ) in a solution containing 20% of $C_2H_6O_2$ by mass.

Ans: _____

2. Calculate the molarity of a solution containing 5 g of NaOH in 450 mL solution

Ans: _____

3. Calculate (a) molality (b) molarity and (c) mole fraction of KI if the density of 20% (mass/mass) aqueous KI is 1.202 g $mL^{-1}$ .

Ans: _____

4. The vapour pressure of pure benzene at a certain temperature is 0.850 bar. A non-volatile, non-electrolyte solid weighing 0.5 g when added to 39.0 g of benzene (molar mass 78 g mol-1). Vapour pressure of the solution, then, is 0.845 bar. What is the molar mass of the solid substance?

Ans: _____

5. The boiling point of benzene is 353.23 K. When 1.80 g of a non-volatile solute was dissolved in 90 g of
6. benzene, the boiling point is raised to 354.11 K. Calculate the molar mass of the solute. Kb for benzene is 2.53 K kg $mol^{-1}$

Ans: _____

7. 2 g of benzoic acid ($C_6H_5COOH$) dissolved in 25 g of benzene shows a depression in freezing point equal to 1.62 K. Molal depression constant for benzene is 4.9 K kg mol–1. What is the percentage association of acid if it forms dimer in solution?

Ans: _____

**Write Short Notes on -**

Henery's law

Mole fraction

Raoult's law

Azeotropic Mixture

Ideal and non Ideal solution

Reverse Osmosis

Edeama

Hypertonic solution

**Q.Give reason for followings**

(a) Why are aquatic species more comfortable in cold water than in warm water?

(b) Deep sea divers are advised not to come to surface immediately from deep waters. Why?

(c) Cooking is faster in pressure cooker than in cooking pan

(d) Two liquids A and B boil at 120°C and 160°C respectively. Which of them has higher vapour pressure at 70°C?

(e) Name the substances which are used by deep sea divers to neutralize the toxic effects of nitrogen dissolved in the blood.

Ans- (a)

(b)----------

(c)----------

(d)----------

(e)----------

**Case study based question –**

In order to account extent of association and dissociation van't Hoff introduced a factor i called van't Hoff factor is defined as i= theoretical molar mass/ experimental molar mas. In case of association, the magnitude of experimental mass is greater theoretical molar mass. So the factor i has value less than one &in case of dissociation vice-versa. In case of solute which neither undergo association nor dissociation magnitude of experimental and theoretical molar mass is same so i is one.

Now answer the following-

(i) What is the value of van't Hoff i when solute undergoes to dimerization

(ii) What is the expected value of van't Hoff factor i for $K_4[Fe(CN)_6]$

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# PM SHRI KENDRIYA VIDHYALAYA TIKAMGARH

Summer break-Holiday Homework

Computer science

## Class-12

1. Solve the question paper of monthly test (April) in your notebook.

2. Make a report file.

a. Read a text file line by line and display each word separated by a #.

b. Read a text file and display the number of vowels / consonants/ uppercase/lowercase character in the file.

c. Remove all the lines that contain the character 'a' in a file and write it to another file.

d. Write python program to test if dictionary contains unique keys and values.

e. Write a python program that takes two lists and returns True if they have at least one common member.

f. Write a program to find the number is even or odd with compound statement.

g. Write a program to print the Fibonacci series.

h. Write a program for palindrome.

i. Write a program to generate prime numbers upto N. Where, N is a user input more than 3. A wrong input should display proper error

message.

j. Write a program to calculate the sum and mean of the elements which are entered by user.

k. Write a program to count the frequency of elements in a list entered by user.

**PM SHRI KENDRIYA VIDYALAYA, TIKAMGARH Holiday**

**Homework- Summer Break**

**2025-26**

**CLASS XII** **Subject- English**

Summer break is for the students to relax and rejuvenate themselves. It is hoped that you find the following assignment an interesting learning exercise.

1. Design the first page of your assignment as your portfolio which should have the following details:
   a) Name, class & section
   b) Passport sized latest photograph
   c) Self-introduction in 50 words
2. Reading Challenge:
   Read the lessons of the supplementary reader- VISTAS and write the themes of any four lessons in about 150 words.
   3. Writing:
   After reading lessons from your supplementary reader, which two characters did you like the most? Describe these characters in about 150 words each.
   4. Make a crossword puzzle with at least 15 new words that you have learned from your English textbooks. Also supply the solved puzzle on the next page.

Points to Remember:

a) Holiday homework should be done in the grammar notebook.
b) Do your work neatly and creatively.
c) Make your assignment attractive with illustrations.
d) This assignment carries 10 marks. These marks will be added in the final Internal assessment scores.

**SUBJECT – MATHEMATICS**

**CLASS-XII** **M.M. 40**

| | **SECTION – A (01 MARK EACH)** | |
|---|---|---|
| 1 | $\tan^{-1}\sqrt{3} - \sec^{-1}(-2)$ is equal to<br>(a) $\pi$ (b) $-\pi/3$ (c) $\pi/3$ (d) $2\pi/3$ | 1 |
| 2 | Domain of $\sin^{-1}(3x-2)$ is<br>(a) [-1,1] (b) [1/3,2] (c) [1/3,1] (d) [1,3] | 1 |
| 3 | Let R be a relation in the set N given by $R = \{(a, b) : a = b - 2, b > 6\}$. Choose the correct answer:<br>(a) $(2, 4) \in R$ (b) $(3, 8) \in R$ (c) $(6, 8) \in R$ $(8, 7) \in R$ | 1 |
| 4 | Let R be a relation on the set N of natural numbers defined by nRm if n divides m. Then R is<br>(A) Reflexive and symmetric (B) Transitive and symmetric<br>(C) Equivalence (D) Reflexive, transitive but not symmetric . | 1 |
| 5 | If $y = \sec^{-1} x$ , then<br>(a) $0 \le y \le \pi$ (b) $0 \le y \le \pi/2$ (c) $-\pi/2 < y < \pi/2$ (d) None of these | 1 |
| 6 | Let $A = \{1, 2, 3, \ldots, n\}$ and $B = \{a, b\}$. Then the number of surjections from A into B is<br>(a) ${}^nP_2$ (b) $2^n - 2$ (c) $2^n - 1$ (d) None of these | 1 |
| 7 | The value of $\cos^{-1}(1/2) + 2\sin^{-1}(1/2)$ is equal to<br>(a) $\pi/4$ (b) $\pi/6$ (c) $2\pi/3$ (d) $5\pi/6$ | 1 |
| 8 | The maximum number of equivalence relations on the set $A = \{1, 2, 3\}$ are<br>(a) 1 (b) 2 (c) 3 (d) 5 | 1 |
| 9 | Assertion (A): Principal value of $\tan^{-1}(-\sqrt{3})$ is $-\frac{\pi}{3}$.<br>Reason (R): $\tan^{-1} : R \to \left(-\frac{\pi}{2}, \frac{\pi}{2}\right)$ so for any $x \in R$, $\tan^{-1}(x)$ represent an angle in $\left(-\frac{\pi}{2}, \frac{\pi}{2}\right)$.<br>a) Both A and R are true and R is the correct explanation of A.<br>b) Both A and R are true but R is not the correct explanation of A.<br>c) A is true but R is false.<br>d) A is false but R is true. | 1 |
| 10 | Assertion (A): In set $A = \{1, 2, 3\}$ a relation R defined as $R = \{(1, 1), (2, 2)\}$ is reflexive.<br>Reason (R): A relation R is reflexive in set A if $(a, a) \in R$ for all $a \in A$.<br>a) Both A and R are true and R is the correct explanation of A.<br>b) Both A and R are true but R is not the correct explanation of A.<br>c) A is true but R is false.<br>d) A is false but R is true. | 1 |
| | **SECTION-B(02 MARKS EACH)** | |
| 11 | For the principal value evaluate: $\tan^{-1}\left\{2\sin\left(4\cos^{-1}\frac{\sqrt{3}}{2}\right)\right\}$ | 2 |
| 12 | Write the interval for the principal value of function and draw its graph : $\text{cosec}^{-1} x$. | 2 |
| 13 | **Find the value of $\tan^2(\sec^{-1}2) + \cot^2(\text{cosec}^{-1}3)$ .** | 2 |

**OR**

**Evaluate : $3\sin^{-1}\left(\frac{1}{\sqrt{2}}\right) + 2\cos^{-1}\left(\frac{\sqrt{3}}{2}\right) + \cos^{-1}(0)$**

## SECTION-C (03 MARKS EACH)

Let $A = R - \{3\}$ and $B = R - \{1\}$. Consider thefunction $f: A \to B$ defined by $f(x) = \frac{x-2}{x-3}$. Is $f$ one-one and onto? Justify your answer.

Let f : R→ R be define as f(x) = $x^4$ check whether the given function is one – one onto, or other

## SECTION-D (04 MARKS EACH)

**Read the following text carefully and answer the questions that follow:**

**Priyanka and Renu are playing Ludo at home . While rolling the dice, Priyanka's sister Pummy observed and noted the possible outcomes of the throw every time belongs to set {1, 2, 3, 4, 5, 6}. Let A be the set of players while B be the set of all possible outcomes.**



**A = {S, D}, B = {1, 2, 3, 4, 5, 6}**

1. **Pummy wants to know the number of functions from A to B. How many number of functions are possible?**

2. **Pummy wants to know the number of relations possible from A to B. How many number of relations are possible?**

3. **Let R be a relation on B defined by R = {(1, 2), (2, 2),(1, 3), (3, 4), (3, 1), (4, 3), (5, 5) }. Is R an equivalence relation?**

**OR**

**Show that a relation, R : B → B be defined by R = {(x, y) : y is divisible by x} is a reflexive and transitive but not symmetric.**

**Mr Pradeep take a lecture in class – XII , in this class students divided into two groups A and B group A has 22 Students and group B has 23 students. The relation R: A → B between students are defined as $R=\{(x, y): x \in A \text{ and } y \in B\}$**

**Based of the above information answer the following questions-**

**(i) Find the number of elements in co-domain of R: A → B.**

**(ii) The set of all identity elements**

**(iii) Find the total number of relations that can be formed from set A to B.**

**OR**

**(iii). Find total number of functions.**

## SECTION-E (05 MARKS EACH)

Show that the relation $R$ on set $A = \{x \in Z \mid 0 \le x \le 12\}$, given by $R = \{(a, b) : |a - b| \text{ is multiple of } 4\}$ is an equivalence relation. Find equivalence class [1].

PM SHRI KENDRIYA VIDYALAYA TIKAMGARH

Class 12 Yoga Holiday Homework 2026-2027 Topics (27 Students roll no.wise)

1.Meaning and Importance of Yoga

2.History of Yoga in India

3.Types of Yoga

4.Principles of Yoga Practice

5.Role of Yoga in Daily Life

6.Benefits of Yoga for Physical Health

7.Yoga for Mental Health

8.Yoga for Students

9.Yoga in Lifestyle Diseases

10.Yoga for Better Sleep

11.Tadasana (Pose and Benefits)

12.Vrikshasana (Tree Pose)

13.Bhujangasana (Cobra Pose)

14.Pavanmuktasana (Wind Relieving Pose)

15.Surya Namaskar

16.Importance of Pranayama

17.Anulom Vilom Pranayama

18.Kapalbhati Pranayama

19.Bhramari Pranayama

20. Deep Breathing Techniques

21. Yoga and Meditation

22. Yoga for Anxiety and Stress

23. Yoga and Immunity

24. International Yoga Day

25. Yoga as a Career

26. Yoga for Women’ s Health

27. Yoga and Stress Management Techniques

📄 📥 How to Make the Project File (Copy This Below Topics)

📝 Instructions for Students

*Use A4 size sheets for the project.

*Make a beautiful cover page with:

*School Name (PM SHRI Kendriya Vidyalaya Tikamgarh)

*Subject: Yoga

*Topic Name

*Student Name, Class, Section, Roll No.

*Add an Index page after the cover page.

*Project should include:

*Introduction (1–2 pages)

*Main Content (10–15 pages)

*Diagrams / Pictures (related to topic)

*Benefits / Explanation

*Conclusion (1 page)

*Maintain:

*Clean handwriting

*Proper headings and subheadings

*Use colors for highlighting

*Draw or paste pictures of yoga poses *wherever required.

*Submit the project in a file/folder neatly arranged.