ENGLISH

Autumn Break Work

Class VI

1.Read the following stories and write their summary in your own words.

I. Fair Play
II. The Monkey and the Crocodile

2. Write a letter to your friend describing how you enjoyed Autumn Break.
3.Write a short paragraph on Durga Pooja in about 50-60 words.

CLASS VII

1.Read the following stories and write their summary in your own words.

I. Expert Detectives
II. Invention of Vita wonk
III. Chandni
IV. The bear story

2. Write a letter to your friend who lives in Delhi inviting him to coochbehar for visiting Durga Puja festival.
3.Write an essay on Durga Pooja festival in about 60-80 words.

CLASS IX

1.Read the following stories and write their summary in your own words.

I. Reach for the top
II. Kathmandu
III. The Last Leaf
IV. A House is not a Home

2. Write a descriptive paragraph on "Sharadotsav" in West Bengal in about 100-120 words.
3.Complete the story:
It was the celebration of Durga Puja in my city coochbehar. I, my parents and my younger brother were enjoying the various pandals and activities there.when I saw a man begging.....

CLASS X

1.Read the following stories and write their summary in your own words.

I. The sermon at Banaras
II. Bholi
III. The proposal
iv. The Book that saved the earth.

2. Write a letter to the Editor of The Times Newspaper, highlighting increasing technological addiction among the youth.
3.Attempt all the extract based questions from the pdf shared in class group.

Class VIII English

Q1. Robert Bruce was the king of Scotland. His country was not free. It was under the English. He wanted to free his country. He made many attempts, but all in vain. He lost heart and fled into a forest. He hid himself in a cave. He was very sad. One day he caught sight of a spider. It was trying to reach its cobweb. The cobweb was near the ceiling. It made eight attempts, but failed. In its eighth attempt it had reached its cobweb but it again fell down. The king thought that it would not try any more. But it did not lose heart. It tried once more. This time it got success. The king learnt a lesson. He decided to try once more. He gathered a large army. He attacked the enemy. He fought bravely. This time he succeeded. His country was free again. He was very happy.

Answer the following questions

1. Who was the king of Scotland?
2. Was his country free?
3. Why did the king hide himself in a cave ?
4. What was the spider doing ?
5. What was the " great lesson " that the king learnt ? What did he do ?

Q2. Once upon a time, a donkey was wandering in the forest and found a lion's skin. To establish his dominance over all the animals, he wore it.
When other animals in the forest saw him they were frightened, but the donkey was so pleased that he started to bray loudly.
At the same time, a fox heard it and told each of the animals that he is not a lion, rather he is a donkey. When no one believed the fox's words, the fox said to the donkey, "Brother Donkey ! How are you ?".
Hearing this statement of the fox, he ran away from there.

Answer the following questions

1. Where was the donkey wandering?
2. What did the donkey find in the forest ?
3. Write synonyms for the words : a) frightened b) pleased
4. Why was the donkey so pleased ?
5. Who heard the donkey's braying ?

Q.3 Among the ancestors of Lord Rama, there was a king named Dalip. He was very religious, but he had a problem.The problem was that he had no son. Therefore, on the advice of Guru Vashishtha, he and his wife started serving a cow named Nandini.
One day, a lion pounced on the cow. Seeing the cow in distress, the king immediately pointed the arrow but his hand stopped. The lion said that the cow is my prey, so I will eat her.Hearing this, the king said, please don't do so and instead of her eat me.

Answer the following questions

1. Who was Dalip?
2. What advice did Guru Vashishtha give to Dalip?
3. Why did the lion pounce on the cow?
4. Who had no son?
5. What was the name of the cow?

Kendriya vidyalaya, BSF, Gandhinagar
Social science Home Work
for Autumn Break.

Class - VI

1. What were the means adopted by Ashoka to spread the message of Dhamma? 3
2. What were the problems that Ashoka wanted to solve by introducing Dhamma? 3
3. What are the types of maps? Discuss it. 5
4. What are the levels of government? 3
5. What do you know about Panchayati raj? 3

Class - VII

1. What are the differences between public health services and private health facilities? 3
2. What was the role of the Zamindar in Mughal Administration? 3
3. How important was the income from land revenue to the stability of the Mughal Empire? 3
4. What are the works of a river? 5
5. What are the works of wind? 5

Class - VIII

1. What do you know about Secondary activities? Explain with example. 3
2. Which industry is often referred to as the backbone of modern industry and why? 3
3. What do you know about industrial disaster? Explain with example. 3
4. What was the demand of Rani Lakshmibai of Jhansi that was refused by the British? 3
5. What are the importance of Judiciary in Indian Democracy? 5

Class - IX

1. What is Constitution? Why do we need a Constitution? 5
2. What are the factors affecting India's climate? 5
3. Why are rivers important for the country's economy? 5
4. What is Economic Activities? What are the types of Economic Activities? 5
5. Explain why Nazi propaganda was effective in creating a hatred for Jews. 3

Class - X

1. What are the outcomes of Democracy? 5
2. What do you know about Beej Bachao Andolan? 3
3. What is Globalisation? What are the impact of Globalisation on Indian Economy? 5
4. How has liberalisation of trade and investment policies helped the Globalisation process? 3
5. Discuss the Salt March to make clear why it was an effective symbol of resistance against colonialism. 5

Rajdeep Barg
TGT S.ST

KV GANDHINAGAR BSF
AUTUMN BREAK HW
Class- VI
Subject- Mathematics

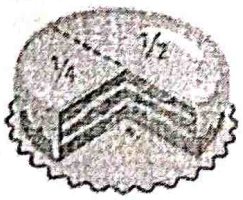
1. Add the given integers by using number line : $(-2) + 8 + (-4)$

2. Ila read 25 pages of a book containing 100 pages. Lalita read $\frac{2}{5}$ of the samebook. Who read less?

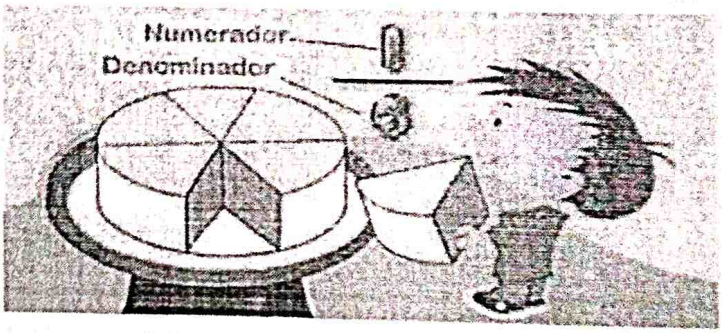
3. Solve: $4\frac{2}{3} + 3\frac{1}{4}$

4. Draw a rough sketch of a regular hexagon. Connecting any three of its vertices, draw a triangle. Identify the type of the triangle you have drawn.

5.Today Golu is happy as he will celebrate his ninth birthday. His father knows Golu likes cake. So, he brings two cakes, one(cake1) 2 kg for him and another (cake 2) 3 kg for celebration. But before celebration Golu had tasted of both the cakes.



Cake 1



cake2

(i) How much of cake 1 was consumed by Golu?

(a) $\frac{3}{4}$ (b) $\frac{1}{4}$ c) $\frac{2}{4}$ (d) $\frac{5}{4}$

(ii) How much of cake1 is remaining?

(a) half b) one fourth c) three fourth d) two third

(iii) How much of cake 2 is remaining?

a) $\frac{2}{5}$ b) $\frac{3}{5}$ c) $\frac{5}{6}$ d) $\frac{6}{5}$

(iv) How much of cake 2 was consumed by Golu?

(a) $\frac{2}{5}$ (b) $\frac{1}{6}$ (c) $\frac{5}{6}$ (d) $\frac{6}{5}$

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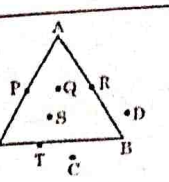
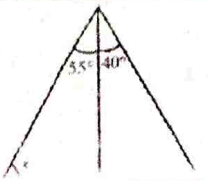
AUTUMN BREAK HOLIDAY HOMEWORK 2023-24

	Do all the questions in the copy, earlier used for Summer Vacation Home Work otherwise make a separate copy of 50 pages and do in that copy.
1	 What are the points that lie on the given triangle?
2	Two sides of a triangle are 11 cm and 5.5 cm. What will be the minimum length of the third side?
3	 In Figure find the value of x.
4	Check whether the following measures (in cm) can be the sides of a right - angled triangle or not., 3.6, 3.9
5	One on the exterior angles of a triangle is 70° and the interior opposite angles are in the ratio 3:4. Find the angles of the triangle.
6	In ΔABC, 2A = 3B = 6C. Calculate A, B and C.
7	A cloth shrinks 0.5% when washed. What fraction is this?
8	What percentage is Rs 19.75 of Rs 25?
9	Out of 40 students in a class, 32 opted to go for a picnic. What percent of students opted for picnic?
10	Anita takes a loan of₹ 5,000 at 15% per year as rate of interest. Find the interest she has to pay at the end of one year.
11	Narayan secured 45% marks in English, 60% in Mathematics and 69% in Hindi. If the maximum marks in these subjects are 60, 80 and 100 respectively, find his aggregate percentage.
12	In an examination, there are three papers each of 100 marks. A candidate obtained 53 marks in the first and 75 marks in the second paper. How many marks must the candidate obtain in the third paper to get an overall of 70 per cent marks?
13	Arrange in ascending order $\frac{2}{5}, \frac{1}{3}, \frac{-3}{4}, \frac{1}{6}$
14	Insert 3 equivalent rational numbers between: $\frac{-1}{2}$ and $\frac{1}{5}$.
15	Give three rational numbers equivalent to $\frac{7}{11}$
16	Give three rational numbers equivalent to $\frac{-3}{4}$
17	What should be subtracted from $\left(\frac{3}{4}-\frac{2}{3}\right)$ to get $-\frac{1}{6}$?
18	Represent the rational numbers $\frac{-1}{4}, \frac{-7}{12}$ and $\frac{-5}{6}$ as points A, B and C on the number line.

AUTUMN BREAK HW
Class- IX
Subject- Mathematics

1. Sum of all the interior angles in a triangle is –
i) 180° ii) 280° iii) 380° iv) 360°

2. Opposite angles of a parallelogram are –
i) Equal ii) Not equal iii) 180° iv) 360°

3. Assumptions which are specific to geometry are –
i) Theorems ii) PostulatesI ii) Axioms. iv) Proofs .

4. Point (2, - 3) lies in the –
i) I- Quadrant ii) II- Quadrant iii) III- Quadrant iv) IV - Quadrant .

5. Between two rational numbers there is/are–
i) Infinite number of rational numbers ii) one and only one rational number
iii) no rational number iv) no irrational number

6. Degree of the polynomial $4y^4+3y^2-4y+5$ is -
i) 2 ii) 3 iii) 4 iv) 1 .

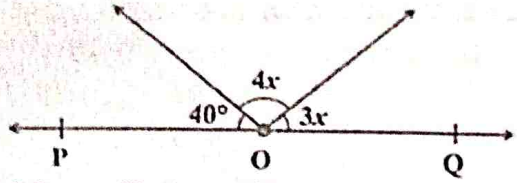
7. Which of the following is irrational?
i) $\sqrt{4}$ (ii) $\frac{4}{5}$ (iii) $\sqrt{81}$ (iv)

8. The linear equation $9x - 5y = 8$ has –
i) A unique solution ii) Two solutions iii) infinitely many solutions .

9. Thedistance of the (4,–3) from y–axis is-
i) 3units (ii)–3units (iii)4units (iv) 5units

10. If (2,0) is a solution of the line are quation $2x+3y=k$, then the value of k is
i) 4 ii) 6 iii) 5 iv) 2

11. In Fig., POQ is a line. Then find the value of x.



i) 25 ii) 41 iii) 45 iv) 20

12. A quadrilateral has only one pair of opposite side is parallel , it is –
i) Trapezium ii) Rhombus iii) Kite iv) none of these

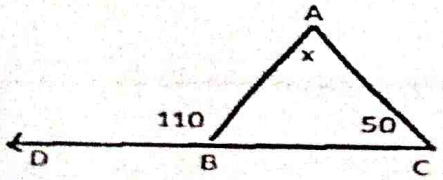
13. Every rational number is –
i) a natural number ii) an integer iii) a real number iv) a whole number

14.If equal are added to equals, the wholes are –
i) smaller ii) greater iii) double iv) equal

15. What is the value of $(27)^{1/3}$?
i) 5 ii) 3 iii) 15 iv) 125

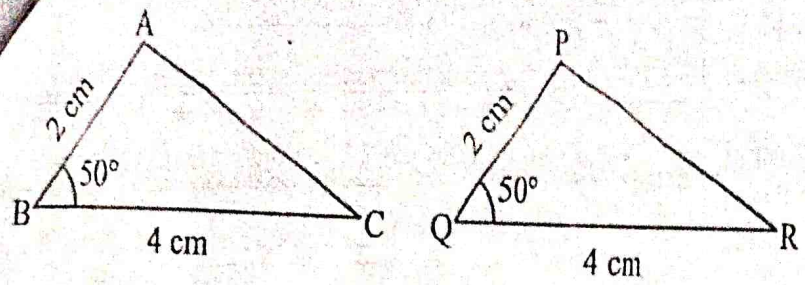
16. What is the coefficient of y^2 in $4 - y - 4y^2$
i) 1 ii) -4 iii) 4 iv) 2

17. In triangle ABC, if angle ABD is an exterior angle, then find the value of x.



i) 123° ii) 41° iii) 45° iv) 60°

By which congruence rule, $\Delta ABC \cong \Delta PQR$?



i) AAS ii) SSS iii) SAS iv) ASA

DIRECTION: In the question number 19 and 20, a statement of **assertion (A)** is followed by a statement of **Reason (R).**

Choose the correct option

19 . ***Statement A (Assertion):*** A linear equation in two variables has infinitely many solutions .

Statement R(Reason) **:** An equation $2x+2y = 10$ has solutions (3,2) and (5, 0)

(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)

(b) Both assertion (A) and reason (R) are true and reason (R) is not the correct explanation of assertion (A)

(c) Assertion (A) is true but reason (R) is false.

(d) Assertion (A) is false but reason (R) is true.

20 . ***Statement A (Assertion):*** $\sqrt{7}$ is an irrational number.

Statement R(Reason) **:** Square root of a positive integer which is not a perfect square is an irrational number.

(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)

(b) Both assertion (A) and reason (R) are true and reason (R) is not the correct explanation of assertion (A)

(c) Assertion (A) is true but reason (R) is false.

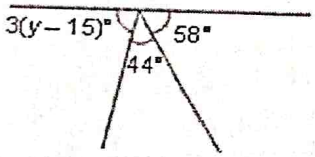
(d) Assertion (A) is false but reason (R) is true.

21. Express $3x + 1 = 6y$ in the form $ax+by+c=0$ and write the value of a, b and c.

22. Verify: (i) $x^3-y^3 = (x-y)(x^2+xy+y^2$

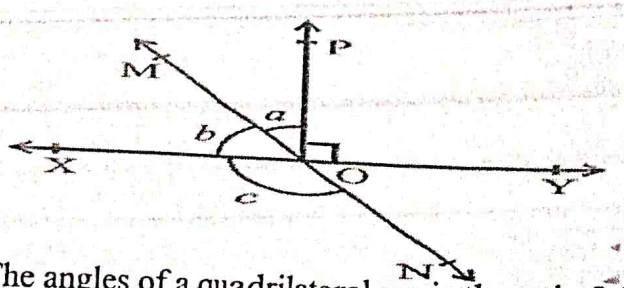
23. Name the quadrant or axis in which these points lies –: (3,5) , (-5,0) , (-7,-5) , (3, -5)

24. Find the value of y in given figure .



25. If a point 'C ' lies between two points 'A' and 'B' such that AC = BC , then prove that AC = ½ AB . Explain by drawing the figure.

26. In given figure lines XY and MN intersect at o . If $\angle POY = 90^0$ and a:b =2:3,find c.



27. The angles of a quadrilateral are in the ratio 3:5:9:13 Find all the angles of the quadrilateral.

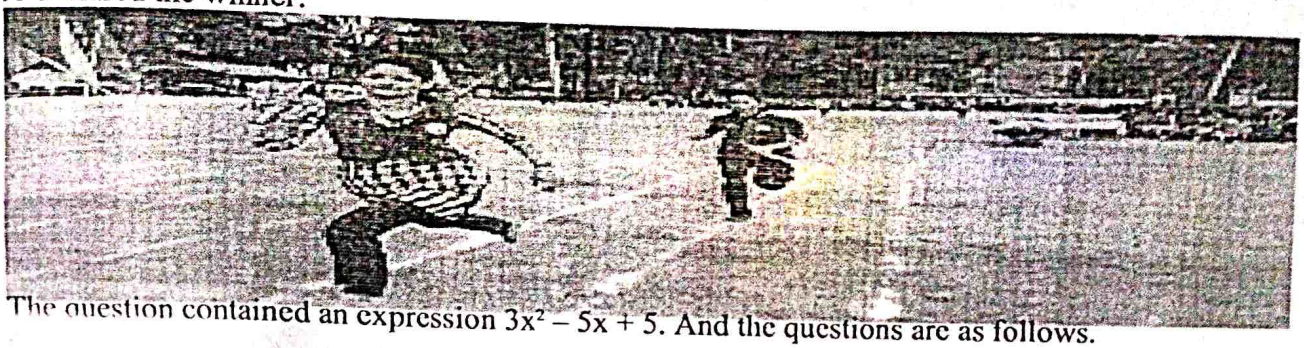
$+4k$ is 4 units.

Case Study)

28. Case study based-1

MATHEMATICAL RACE

)ne day when students demanded games period, a mathematics teacher of class 9th said, "Today we will)lay a mathematical race". The teacher said that the students have to run from point A to B and must solve he problem placed at point B and then return to point A. Whosoever returns with correct solution, would)e declared the winner.



The question contained an expression $3x^2 - 5x + 5$. And the questions are as follows.

I) What is the degree of this polynomial?

ii) What is the coefficient of x^2

iii) What is the value of this polynomial at $x = 5$

29. Case study 2 -On environment day, class-9 students got five plants of mango, silver oak, orange, banyan and amla from soil department. Students planted the plants and noted their locations as(x, y).

	Mango	Silver Oak	Orange	Banyan	Amla
x	2	3	0	–3	–2
y	0	4	7	4	0

(i) What is the abcissa for the location of Banyan tree.

(ii) What is the ordinate for the location of Silver Oak?

iii)Name the trees which located on x axis .

30. Case study 3

A pattern is a regularity in the word, in human made designs,or nature designs. A geometric pattern is a kind of pattern formed of geometric shapes. In figure B, Δ ABC and Δ PQR are equilateral triangles.

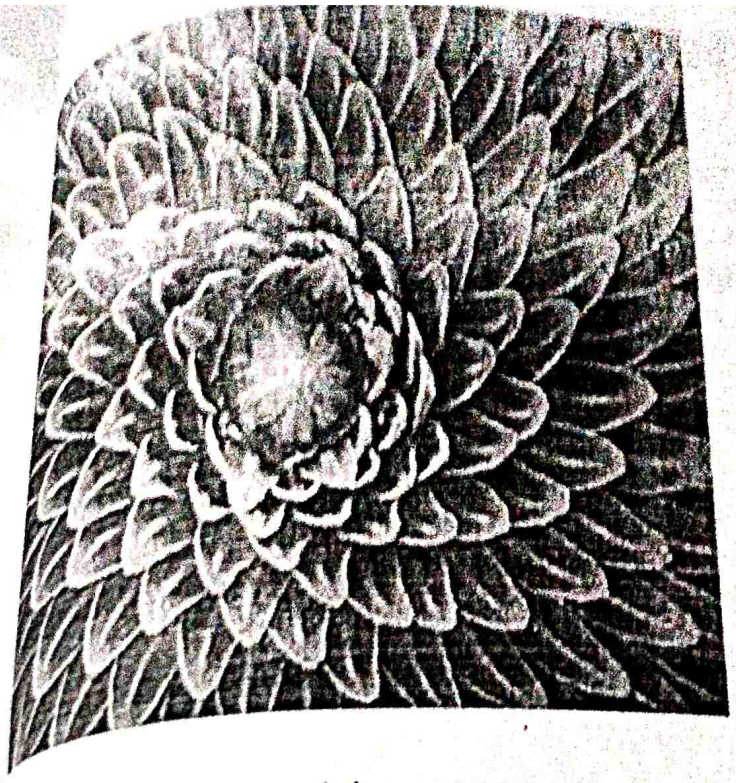


Figure (a)

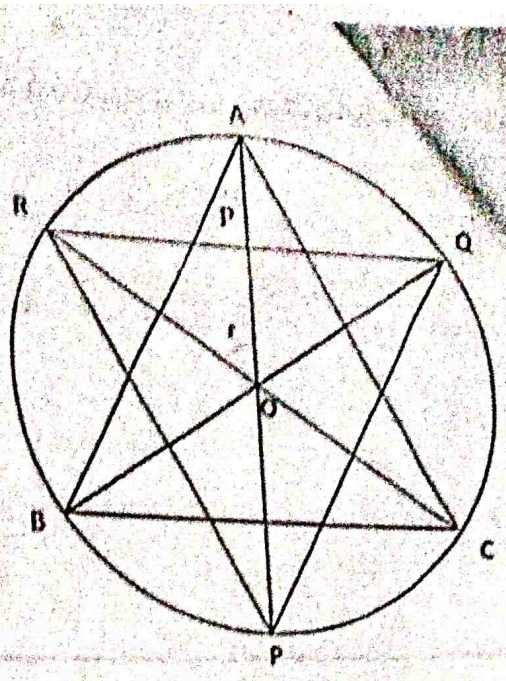


Figure (b)

i. Write a pair of parallel lines and its transversal.
ii. Write a pair of vertically opposite angles..
iii. Writetwo sets of linear pair angles.

XHW

VI, VII, IX X

Sub- Mathematics

KIRAN .

KV GANDHINAGAR BSF

AUTUMN BREAK HW

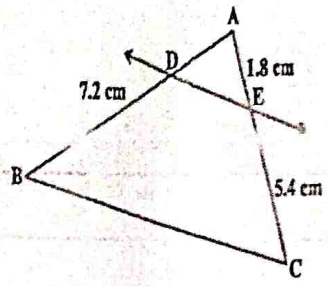
Class X

Subject- Mathematics

1. The roots of the equation $x^2 + 7x + 12 = 0$ are
   (a) 3and4 (b) –3and 4 (c) –3 and –4 (d) 3 and–4

2. If $p-1, p+3, 3p-1$ are in AP, then p is equal to
   (a)-4 (b) 4 (c)8 (d) –8

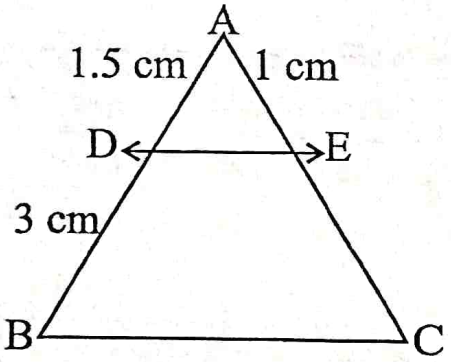
3. In figure DE || BC then the value of AD is
   (a)2.4 cm (b) 2.0cm (c)3cm (d) none of the above



4. What is the mid point of a line with end points (3, 7) and (11,–5)?
   (a)(7,–1) (b)(14,–2) (c) (7, 1) (d) none ofthese

5. Find the point on x-axis which is equidistant from (2, -5) and (-2,9).

6. In the below figure, DE || BC, findEC



7. Which term of the AP : 3, 8,13,18, ...,is 78?

8. (a) Find the value of k for which the quadratic equation $9x^2 + 8kx + 16 = 0$ has two real equal roots
   (b) Factorise: $x^2 + 11x + 30 = 0$

9. Solve by using quadratic formula
   $$40 + 3x - x^2 = 0$$

10. (a) How many terms of the AP : 24, 21, 18, . . . must be taken so that their sum is78?
    (b) Find the sum of first 24 terms whose nth term is given by $a_n = 3 + 2n$.

11. A vertical pole of length 6m casts a shadow 4m long on the ground and at the same time a tower cast a shadow 28 mlong. Find the height of the tower.

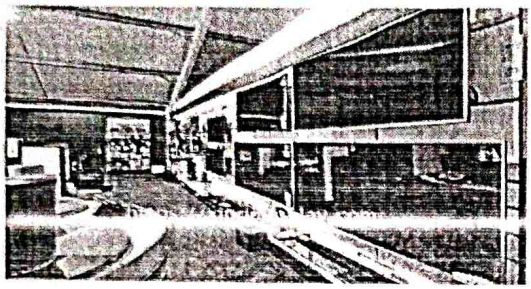
12. A point P lie on line segment joining the point A(-4,3) and B(5,-2). IF $\frac{PB}{AB} = \frac{2}{5}$ find the coordinate of P.

13. State and prove basic proportionality theorem

14. Solve for x: $\frac{1}{a}+\frac{1}{b}+\frac{1}{x}=\frac{1}{a+b+x}$.

15. CASE STUDY 1:

India is competitive manufacturing location due tothe low cost of manpower andstrong technical and engineering capabilities contributing to higherquality production runs.The production of TV sets in a factory increases uniformlyby a fixed number every year. It produced 16000 sets in 6th year and 22600 in 9thyear.



Based on the above information, Answer the following Questions:

(i) What will be the production during first year.

a. 2000 b. 2200 c. 2400 d. none of these

(ii) What will production during 8th year.

a. 18200 b. 20600 c 20400 d. none of these

(iii) What will the production during3rd years.

a. 9400 b. 2200 c. 11600 d . none of these

(iv) In whichyear, theproductionis Rs29,200.

a. 10 b. 11 c. 12 d. none of these

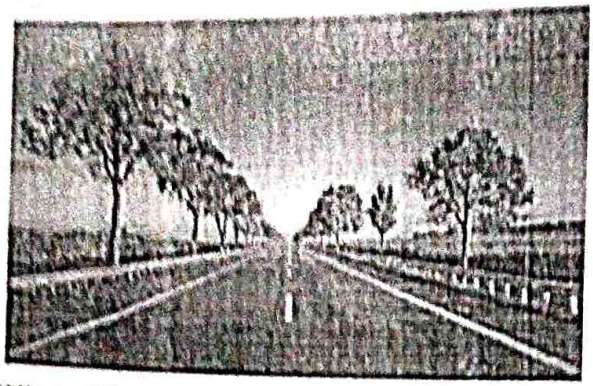
(v)Findthedifferenceoftheproductionduring 7th yearand4th year.

a. 4400 b. 6600 c. 6000 d. none of these

16. CASE STUDY 2:

Raj and Ajay are very close friends. Both the families decide togo to Ranikhet bytheir own cars.Raj's car travels at a speed of x km/h while Ajay's car travels 5 km/hfaster than Raj's car. Raj took 4 hours more than Ajay to complete the journey of 400km.

Basedon the above information, Answer the following Questions:



1. Whatwill be the distance covered by Ajay's car in two hours?

a) $2(x+5)$km

b) $(x-5)$km

c) $2(x+10)$km

d) $(2x+5)$km

2. Which of the following quadratic equation describe the speed of Raj's car?

a) $x^2-5x-500=0$

b) $x^2+4x-400=0$

c) $x^2+5x-500=0$

d) $x^2-4x+400=0$

3. What is the speed of Raj's car?

a) 20 km/hour

b) 15 km/hour

c) 25 km/hour

d) 10 km/hour

4. How much time took Ajay to travel 400 km?

a) 20hour

b) 40hour

c) 25hour

d) 16hour

5. How much time took Raj to travel 400km?

a. 20hour

b. 40hour

c. 25hour

d. 16hour

Mathematics Holiday Homework

Class XII **VECTOR ALGEBRA** **Assignment No. 10**

Q1. Find the magnitude of each of the following vectors :-

(i) $\vec{a} = \hat{i} + 2\hat{j} + 5\hat{k}$ (ii) $\vec{b} = 3\hat{i} + 4\hat{j} - 3\hat{k}$ (iii) $\vec{c} = \frac{1}{\sqrt{3}}\hat{i} - \frac{1}{\sqrt{3}}\hat{j} + \frac{1}{\sqrt{3}}\hat{k}$

Q2. Find the unit vector in the direction of :-

(i) $\vec{a} = \hat{i}3 + 4\hat{j} - 5\hat{k}$ (ii) direction of AB if A (-2, 1, 2) & B (2, -1)

Q3. Find a vector in the direction of $\vec{a} = \hat{i}6 - 2\hat{j} + 3\hat{k}$ whose magnitude is 4 units.

Q4. Find direction ratios and direction cosins of $\vec{a} = 5\hat{i} - 3\hat{j} + 4\hat{k}$

Q5. Find the angel between the vectors $\vec{a} = (3\hat{i} - 2\hat{j} + \hat{k}$ & $\vec{b} = \hat{i} - 2\hat{j} - 3\hat{k}$

Q6. Find x for which vectors $\vec{a} = 3\hat{i} + \hat{j} - 2\hat{k} + \vec{b} = \hat{i} + \lambda\hat{j} - 3\hat{k}$ are perpendicular to each other.

Q7. Find the projection of $\vec{a} = 2\hat{i} - \hat{j} + \hat{k}$ on $\vec{b} = \hat{i} - 2\hat{j} + \hat{k}$

Q8. Find a vector with magnitude 3 units & is perpendicular to each of the vector $\vec{a} = 3\hat{i} + \hat{j} - 4\hat{k}$ and $\vec{b} = 6\hat{i} + 5\hat{j} - 2\hat{k}$

Q9. Find $(\vec{a}x\vec{b})$ and I $\vec{a}x\vec{b}$ I if (i) $\vec{a} = \hat{i} - \hat{j} + 2\hat{k}$ & $\vec{b} = 2\hat{i} + 3\hat{j} - 4\hat{k}$

(ii) $\vec{a} = 2i + j + 3k$ & $\vec{b} = 3i + 5j - 2k$ (iii) $\vec{a} = 3i + 5j - 2k$ & $\vec{b} = 3\hat{i} + \hat{k}$

Q10. Find the area of parallelogram whose diagonal are (i) $\vec{d}1 = 3\hat{i} + \hat{j} - 2\hat{k}$ & $\vec{d}2 = \hat{i} - 3\hat{j} + 4\hat{k}$

(ii) $\vec{d}1 = 2\hat{i} - \hat{j} + \hat{k}$ & $\vec{d}2 = 3\hat{i} + 4\hat{j} - \hat{k}$

Q11. Using Vector find area of Δ ABC if :-

(i) A (3, -1, 2), B (1, -1, -3) & C (4, -3) (ii) A(1,2,3), B(2, 5, -1), C (-1, 1, 2)

Q12. Using vector show A, B, C are collinear pts.

(ii) A (3, -5, 1), B(-1, -, 8) & C (7, -10, -6) (ii) A(6, -7, -1) B(2, -3, 1) & C (4, -5, 0)

Q13. Verify $\vec{a}x(\vec{b} + \vec{c}) + (\vec{a}x\vec{b}) + (\vec{a}x\vec{c})$ *if*

(i) $\vec{a} = \hat{i} - \hat{j} - 3\hat{k}$, $\vec{b} = 4\hat{i} - 3\hat{j} + \hat{k}$ and $\vec{c} = 2\hat{i} - \hat{j} + 2\hat{k}$

(ii) $\vec{a} = 4\hat{i} - \hat{j} - \hat{k}$, $\vec{b} = \hat{i} - \hat{j} + \hat{k}$ and $\vec{c} = 2\hat{i} - \hat{j} + 2\hat{k}$

Q14. If I $\vec{a}$ I = 5, I $\vec{b}$ I = 13, and $(\vec{a}x\vec{b}) = 25$, find $\vec{a}$, $\vec{b}$

Q15. If I $\vec{a}$ I = 2, I $\vec{b}$ I = 7, and $(\vec{a}x\vec{b}) = 3\hat{i} + 2\hat{j} + 6\hat{k}$, find the angle between $\vec{a}$ and $\vec{b}$.

Class - XI

MATHEMATICS HOLIDAY HOMEWORK

Q1. Line through the points (-2, 6) and (4, 8) is perpendicular to the line through the points (8, 12) and $(x, 24)$. Find the value of x.

Q2. Find the value of x for which the points $(x, -1)$, $(2, 1)$ and $(4, 5)$ are collinear.

Q3. Without using Pythagoras theorem, show that $A(4, 4)$, $B(3, 5)$ and $C(-1, -1)$ are the vertices of a right angled triangle.

Q4. Find the equation of a line passing through the point (2, 2) and cutting of intercepts on the axis whose sum is 9.

Q5. A line perpendicular to the line segment joining the points $(1, 0)$ and $(2, 3)$ divide it in the ratio $1: n$. Find the equation of the line.

Q6. A ray of light passing through the point $(1, 2)$ reflects on the $X - axis$ at point A and the reflected ray passes through the point $(5, 3)$. Find the coordinates of A.

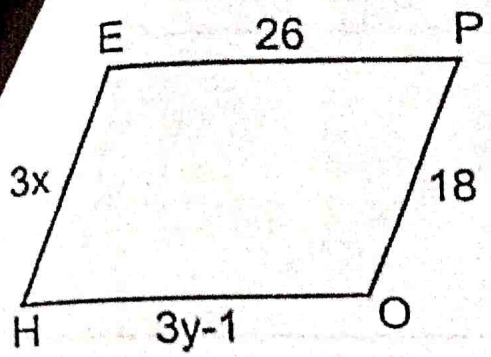
ACTIVITY

Q1. To identify a relation and a function.

Class – VIII

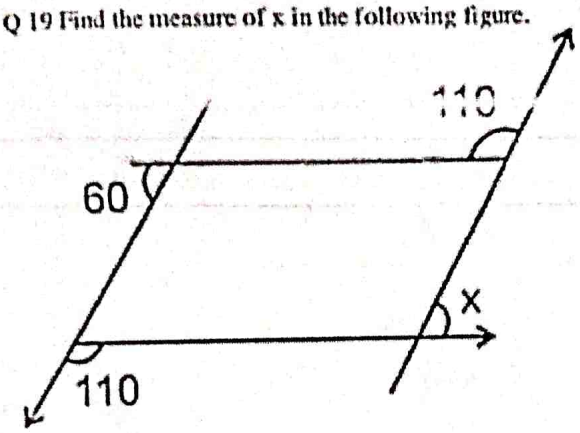
Mathematics Holiday Homework

In parallelogram HOPE, find x and y.



Marks (2)

Q 19 Find the measure of x in the following figure.



Marks (2)

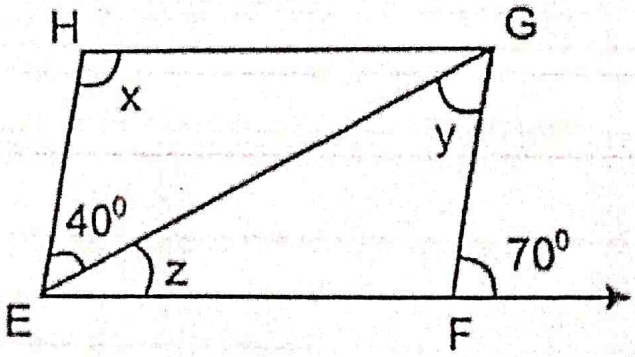
Q 20 The measure of two adjacent angles of a parallelogram are in the ratio of 2 : 3. Find the measure of each of the angles of the parallelogram.

Marks (3)

Q 21 Two adjacent angles of a parallelogram have equal measure. Find the measure of each of the angles of the parallelogram.

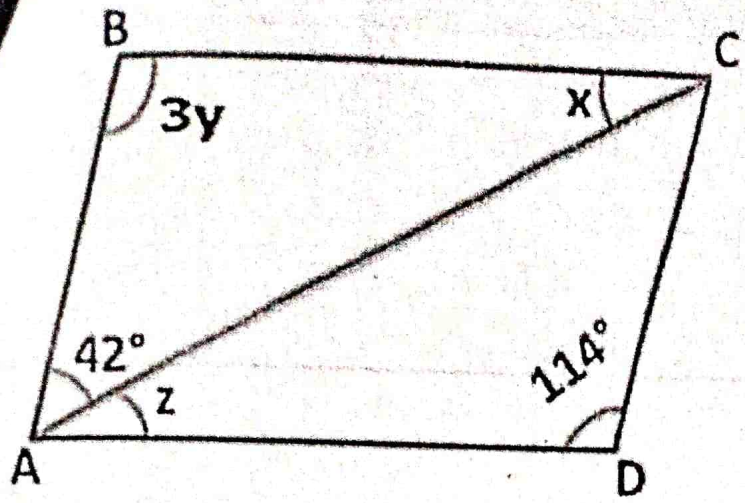
Marks (3)

Q 22 EFGH is a parallelogram. Find the angle measures x, y and z.



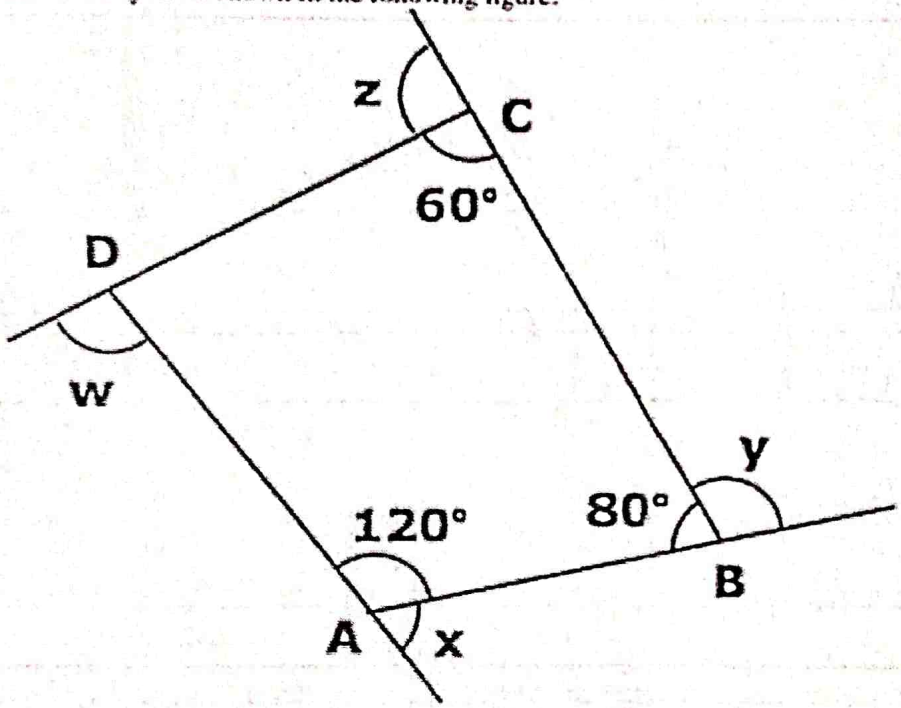
Marks (3)

Q 27 Find the values of x, y and z in a parallelogram ABCD shown in the figure given below.



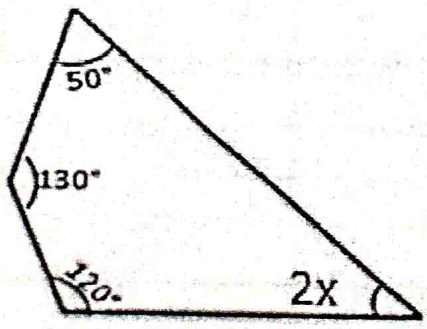
Marks (3)

Q 28 Find x+y+z+w shown in the following figure:



Marks (4)

Q 29 Find the measure of angle x in the following figure:
(i)



दूना अवकाश कालीन गृह कार्य की कक्षावार सूची

विषय - हिन्दी दिनांक - 19/10/2023

कक्षा - 9वीं

(1) विगत परीक्षा अर्थात आवधिक परीक्षा द्वितीय के हिन्दी प्रश्न-पत्र का समाधान करना।
(2) हरिशंकर परसाई द्वारा रचित 'प्रेमचंद के फटे जूते' शीर्षक पाठ को स्वतः पढ़कर प्रश्नोत्तर लिखना।
(3) आज का युग विज्ञापन का युग है। विषय पर परियोजना कार्य

कक्षा - 10वीं

(1) विगत परीक्षा अर्थात आवधिक परीक्षा द्वितीय के हिन्दी प्रश्न-पत्र का समाधान करना। (विद्यार्थीगण प्रश्न के आदर्श उत्तर को विभिन्न स्रोतों से ज्ञात करने के लिए समुचित प्रबंध स्वयं करें)
(2) कृतिका भाग-2 से अज्ञेय द्वारा रचित 'मैं क्यों लिखता हूँ' शीर्षक गद्य पाठ को स्वतः पढ़कर उक्त पाठ से प्रश्नोत्तर लिखना।
(3)

कक्षा - 11वीं

(1) 'राजस्थान की रजत बूँदें' शीर्षक पाठ को पुनः पढ़कर प्रश्नोत्तर लिखना।
(2) जल ही जीवन है, जल के बिना सुनहरे कल की कल्पना करना व्यर्थ है।" विषय पर परियोजना कार्य

कक्षा - 12वीं

(1) 'जी ट्वेंटी और भारत' विषय पर परियोजना

कार्य 1

दिशानिर्देश -

(1) भूमिका - क्या है, क्यों है आदि का विवरण।

(2) विभिन्न देशों में प्रभाव

(3) भारत के साथ तुलनात्मक अध्ययन

(4) कारण और निवारण।

(5) आपकी भूमिका / योगदान / सुझाव

2 विगत परीक्षाओं में पूछे गये प्रश्नों से सम्बन्धित (अनदेखा) लेखन विषय को अध्ययन करना एवं किन्हीं चार के विवरण। अपने गृहकार्य की कॉपी पर करना।

मनोज कुमार ठाकुर
(स्नातकोत्तर शिक्षक, हिन्दी)

Chemistry Holiday Homework

Assigned by- Haimanti Chakraborty (PGT CHEM)

- **Class – VII**
  Project on rusting of iron

- **Class- IX**

To write total 50 different chemical name and chemical formula of compound by using table in NCERT Book.

- **Class- X**
  1.Worksheet on Chemical reactions and equations.
  2. Worksheet on Acid ,base and salt
  3.worksheet on Metals and non metals.

- **Class- XI**
  1.Worksheet on Chemical bonding
  2.Worksheet on periodicity
  3. Excercise questions of thermodynamics.

- **Class – XII**
  1.worksheet on Alcohol,phenol , ether
  2. Worksheet on aldehyde,ketone and carboxylic acid.
  3.Investigatory project .

Haimanti Chakraborty
PGT-CHEM

19.10.23

SCIENCE HOMEWORK
CLASS - VI

1.Write the names of the parts of a flower. 2.Write the difference between bone and cartilage.

3.Discuss about different types of joint their location & function.

4.What is the difference between tap root and fibrous root?

5.What is the basic difference between adaptation, acclimatisation and habitat.

CLASS -9

Biology Homework

Chapter-1 (The fundamental Unit of Life)

Ques:-1 M.C.Q's:-

Q1.Longest cell in human body - a) Muscle cell b) nerve cell c) liver cell d) blood cell Q2.The movement of substances through selectively permeable substances - a) Osmosis b) diffusion c) Plasmolysis d) endocytosis Q3.The structural & functional unit of life - a) Organ system b) tissue c) cell d) all of these

Q4.Lysosomes stores - a)fats b) protein. c) hydrolytic enzyme d) RNA

Q5.ATP stands for - a) Adenosine triphosphate b) Amino triphosphate c) Amino trigly cero phosphate d) Adenine triphosphate

Ques2. Very Short Questions:-

Q1.Who discovered cell and how? c) plasmolysis c) cell d)endocytosis d) all of these e)hydrolytic enzymes

Q2.Which cell organelle is called "suicidal bags"?

Q3.Why cell is called structural & functional unit of life?

Q4.What is cell wall? Q5.What is plasma membrane?

Ques3. Short Questions:-

Q1.Differentiate between:-

a) Unicellular & multicellular organisms

b) Prokaryotic & eukaryotic cell c) Plant cell & animal cell with diagram

d) Diffusion & osmosis

e) Hypotonic, isotonic & hypertonic solution

Q2. What is cell division? Define its types. Q3.Differentiate between SER & RER. How ER is important for membrane biogenesis?

Q4.Long Questions:-

Write short notes on:-

a) Mitochondria

b) Lysosomes

c) Nucleus

e) Plastids

d) Golgi apparatus

CLASS : X
SUBJECT: BIOLOGY
HOLIDAY HOMEWORK TOPIC: LIFE PROCESSES

Q1. Why do herbivores have longer, small intestine than carnivores? (1 marks)

Q2. Write the balanced chemical equation for the process of photosynthesis. How photosynthesis occurs in desert plants? (1 mark)

Q3. In single celled organisms diffusion is sufficient to meet all their requirements of food, exchange of gases or removal of wastes but it is not in case of multicellular organisms. Explain the reason for this difference.(2 marks)

Q4. Draw a neat labeled diagram of human alimentary canal. (2 marks)

Q5. Explain the process of nutrition in Amoeba. (2 marks)

Q6. How do guard cells regulate the opening and closing of the stomata?(2 marks)

Q7. Explain exchange of gases in humans. (3 marks)

Q8. State the role of the following in human digestive system: (3 marks) (a) Digestive enzymes (b) Hydrochloric acid (Hcl) (c) Villi

Q9. Draw a diagram of human respiratory system and label the following: (3marks)
(a) Part where air is filtered by fine hairs and mucus (b) Part which terminates in balloon like structures (c) Part which separates chest cavity from abdominal cavity (d) Part where exchange of gases takes place.

Q10. Draw a neat labeled diagram of opened and closed stomata. (3marks)

BIOLOGY HOMEWORK
CLASS - XI

Q1. Write the arrangement of microtubules in cilia or flagella.
Q2. Write the structure of an amino acid .
Q3. Write the common name of Periplanata americana.
Q4. What is the nature of cell wall in diatoms ?
Q5. How is key helpful in the identification and classification of an organism ?
Q6. What do the term phycobiont and mycobiont signify ?
Q7. Draw a diagram of conjoint and an open type of vascular bundle . What are Bulliform cells ? Write their significance .
Q8. What are following and where do you find them in animal body . a) Chondrocytes b) Ciliated epithelium
Q9. What are annual rings ? Write their significance ?
Q10. Illustrate the taxonomic hierarchy with suitable example of a plant or an animal.
Q11. What are the characteristics features of Euglenoids?
Q12. Explain the following terms with example : a) Protonema b) Diplontic
Q13. Name the various types of fruits with example.
Or
Write the floral formula of a actinimorphic , bisexual, hypogynous flower with five united sepals , five free petals , five free stamens and two united carpels with superior ovary and axile placentation.

BIOLOGY
CLASS - XII
Homework
Chapter - Human Health & Diseases

1.Name the test performed for the diagnosis of AIDS? [1]
2. Give an example of vaccine produced by recombinant DNA technology? [1]
3. What is the name given to the infectious stage of plasmodium? [1]
4. Name the cells of immune system that are affected by HIV. [1]
5. How does cell – mediated immune system works when our body is infected? [2]
6. Why is Second exposure to the same antigen elicits a quick & intense response? [2]
7. Draw a well – labelled diagram of antibody molecule. [2]
8. What is metastasis? [2]
9. What are the various routes by which transmission of HIV takes place? [2]
10. What is vaccination? What type of immunity is provided by vaccination? [3]
11. i) Differentiate between communicable & non – communicable diseases?
Ii) Name the body part & the host in which following events takes place in life cycle of plasmodium - a) fertilization b) Development of Gametophyte c) Release of sporozoites d) Asexual Reproduction.

1

Autumn break holiday homework.

Class IX

1.Define motion, average speed, uniform speed, velocity & acceleration.

2. A car is moving along a straight road at a steady speed it travel s150 metre 5sec

I) What is its average speed?

ii) How far does it travel in 1 sec?

iii) How far does it travel in 6 seconds?

iv) How long does it take to travel 240 metre?

3. Define momentum, force, Newton's second law, inertia.

4. Define buoyancy, Archimedes 's principle, pressure.

5. State universal law of gravitation. Give 2 example of it.

What is acceleration due to gravity?

Class X

1.List two possible ways in which a concave mirror can produce a magnified image of an object placed in front of it. State the difference if any between these two images.

2.What is meant by power of a lens? What does its sign (+ve or -ve) indicate? State its S.I. unit related to focal length of a lens.

3.An object is placed at a distance of 15 cm from a convex lens of focal length 20 cm. List four characteristics (nature, position, etc.) of the image formed by the lens.

4.The refractive indices of glass and water with respect to air are 3/2 and 4/3 respectively. If speed of light in glass is 2 × 10^8 m/s, find the speed of light in water

5.The absolute refractive indices of glass and water are 1.5 and 1.33 respectively. In which medium does light travel faster? Calculate the ratio of speeds of light in the two media

6.State the function of each of the following parts of human eye:

(i) Cornea (ii) Iris (iii) Pupil

7.Why is Tyndall effect shown by colloidal particles?What is 'dispersion of white light'? State its cause.

8.Define resistance of a conductor. State the factors on which resistance of a conductor depends. Name the device which is often used to change the resistance without changing the voltage source in an electric circuit. Calculate the resistance of 50 cm length of wire of cross sectional area 0.01 square mm and of resistivity 5 × 10-8 Ω m

9.(a)Write the mathematical expression for Joules law of heating.

(b) Compute the heat generated while transferring 96000 coulomb of charge in two hours through a potential difference of 40 V.

10.(a) State Right Hand Thumb rule to find the direction of the magnetic field around a current carrying straight conductor.

(b) How will the magnetic field be affected on:

(i) increasing the current through the conductor

(ii) reversing the direction of flow of current in the conductor?

Class XI

1.A rocket is fired from the earth towards the sun. At what distance from the earth's centre is the gravitational force on the rocket zero? Mass of the sun = 2 x 10^30 kg, mass of the earth = 6 x 10^24 kg. Neglect the effect of other planets etc. (orbital radius = 1.5 x 10^11 m).

2. A Saturn year is 29.5 times the Earth year. How far is the Saturn from the Sun if the Earth is 1.50 x 10^8 km away from the Sun?

Arpita Deb
19/10/23

3.A body weighs 63 N on the surface of the Earth. What is the gravitational force on it due to the Earth at a height equal to half the radius of the Earth?

4.Assuming the earth to be a sphere of uniform mass density, how much would a body weigh half way down to the centre of the earth if it weighed 250 N on the surface?

5.The escape speed of a projectile on the Earth's surface is 11.2 km s-1. A body is projected out with thrice this speed. What is the speed of the body far away from the Earth? Ignore the presence of the Sun and other planets.

6.Which parameter is conserved when a planet is revolving around a star? What are the factors on which the M.I of a body depends?Why do we prefer to use a wrench, having a long arm? Does the C.M of a body necessarily have to lie inside a body, give example.

Class XII

1.A converging lens of refractive index 1.5 is kept in a liquid medium having same refractive index. What would be the focal length of the lens in this medium?

2.How does the angle of minimum deviation of a glass prism vary, if the incident violet light is replaced with red light?

3.How does the angle of minimum deviation of a glass prism of refractive index 1.5 change, if it is immersed in a liquid of refractive index 1.3?

4.Two thin lenses of power + 6D and – 2D are in contact. What is the focal length of the combination?

5.Calculate the speed of light in a medium whose critical angle is 30°

6.A biconvex lens made of a transparent material of refractive index 1.5 is immersed in water of refractive index 1.33. Will the lens behave as a converging or a diverging lens? Give reason.?

7.A ray of light, incident on an equilateral glass prism ($\mu g = 3–V$) moves parallel to the base line of the prism inside it. Find the angle of incidence for this ray.

8.A ray of light passing through an equilateral triangular glass prism from air undergoes minimum deviation when angle of incidence is 3/4th of the angle of prism. Calculate the speed of light in the prism.

9.Differentiate between a ray and a wave front.

10.In a single slit diffraction experiment, the width of the slit is reduced to half its original width. How would this affect the size and intensity of the central maximum?

11.Laser light of wavelength 640 nm incident on a pair of slits produces an interference pattern in which the bright fringes are separated by 7.2 mm. Calculate the wavelength of another source of light which produces interference fringes separated by 8.1 mm using same arrangement. Also find the minimum value of the order 'n' of bright fringe of shorter wavelength which coincides with that of the longer wavelength.

12.The maximum kinetic energy of a photoelectron is 3 eV. What is its stopping potential?

13.State de-Broglie hypothesis.An electron and alpha particle have the same de-Broglie wavelength associated with them. How are their kinetic energies related to each other?

14.Write Einstein's photoelectric equation. State clearly the three salient features observed in photoelectric effect, which can be explained on the basis of the above equation.

15.Write the expression for Bohr's radius in hydrogen atom.

Find the ratio of energies of photons produced due to transition of an electron of hydrogen atom from its

(i) second permitted energy level to the first level, and

(ii) the highest permitted energy level to the first permitted level

16.Using Bohr's postulates of the atomic model, derive the expression for radius of nth electron orbit. Hence obtain the expression for Bohr's radius.

Class VIII

1.Two boys are riding their bicycles on the same concrete road. One has new tyres on his bicycle while the other has tyres that are old and used. Which of them is more likely to skid while moving through a patch of the road which has lubricating oil spilled over it?

2.When the cutting edge of a knife is put against a fast rotating stone to sharpen it, sparks are seen to fly. Explain the reason.

3.Determine the pressure when a force of 200 N acts on area 20 meter square.Explain why wooden or concrete sleepers are kept below the railway line.

4.A matchstick does not catch fire on its own.But when it is rubbed, it starts burning.Why?

5.Write some important uses of the various constituents of petroleum.

Amy Deb
19/10/23

PM SHRI KV BSF GANDHINAGAR

SESSION- 2023-24

AUTUMN BREAK HOLIDAYS HOME WORK

SUBJECT: ART EDUCATION

CLASS	TOPIC	REMARK
III	ORIGAMI MAKING or SCENERY	ANY FORM
IV	ORIGAMI MAKING or SCENERY	ANY FORM
V	ORIGAMI MAKING or PORTRAIT OF ANY FREEDOM FIGHTER/UNSUNG HEROES	PENCIL SHADE OR COLOURING ON CHART PAPER
VI	PORTRAIT OF ANY FREEDOM FIGHTER/UNSUNG HEROES OR SLOGAN WRITING ON INDIAN FREEDOM MOVEMENT ON AZADI KA AMRIT MOHOTSAV (AKAM)	PENCIL SHADE OR COLOURING ON CHART PAPER
VII	PORTRAIT OF ANY FREEDOM FIGHTER/UNSUNG HEROES OR SLOGAN WRITING ON INDIAN FREEDOM MOVEMENT ON AKAM	PENCIL SHADE OR COLOURING ON CHART PAPER
VIII	PORTRAIT OF ANY FREEDOM FIGHTER/UNSUNG HEROES OR SLOGAN WRITING ON INDIAN FREEDOM MOVEMENT ON AKAM	PENCIL SHADE OR COLOURING ON CHART PAPER
IX	PORTRAIT OF ANY FREEDOM FIGHTER/UNSUNG HEROES OR SLOGAN WRITING ON INDIAN FREEDOM MOVEMENT ON AKAM	PENCIL SHADE OR COLOURING ON CHART PAPER
X	PORTRAIT OF ANY FREEDOM FIGHTER/UNSUNG HEROES OR SLOGAN WRITING ON INDIAN FREEDOM MOVEMENT ON AKAM	PENCIL SHADE OR COLOURING ON CHART PAPER

S Deb

TGT AE

Principal

F M SHRI KV BSF GANDHINAGAR

SESSION- 2023-24

AUTUMN BREAK HOLIDAYS HOME WORK

SUBJECT : Work-Experience

CLASS	TOPIC	REMARK
VI	Making Toys from trash	
VII	Making of a simple project by using cell/battery.	
VIII	Best out of Waste	
IX	Magnetic toy, structure of an atom, Clap switch, Alexa coding, Plant Cell model, Animal cell model, Automatic night lamp etc.	
X	Working model of a fountain, Volcano working model, Pen stand, Street light working model, working model to protect train accident, Sculpture, Extension board etc.	

B. Sarkar, TGT-NFG
19/10/2023

Principal

Autumn break holiday homework

COMPUTER

Class VI

1. Draw and write about primary, secondary memory .

Class VII

1. Create a webpage or website using HTML tags and write about *Durga Puja Festival*

ARTIFICIAL INTELLIGENCE

Class VIII

1. Write few ways in which you can individually promote sustainable development goals.

Class IX

1. Create a project cycle related to making bills in grocery store.

English project (Autumn break homework)
CLASS XI

Name of the poems :
1.A Photograph
2.The Voice of the rain

Points to be written 1.About the poet
2.About the poem (what the poem is all about)
3.Themes
4. Rhyming scheme
5. Poetic devices used in the poem. (Give definition of the poetic device then mention the line from the poem accordingly)

Format :
1st page : students information (Name , class ,stream , Roll No, subject, Topic : "English Poems " Name of subject teacher,date of submission)
2nd page : Acknowledgement
3rd page : Certificate
4th page : Index
Project starts as per topics (pages as required)
Last page :Bibliography

*** Points to be noted .**
1. Well covered project file
2. Each and everything as mentioned above must be followed
3. Neat and clean work
4. Photos of poets to be pasted
5. Black and blue pen should be used for writing purpose
6. Topics can be highlighted using coloured sketch pens.

Class :XI Subject : COMPUTER SCIENCE (083) Holiday Homework – Autumn break

➢ Do the following questions in a homework copy .

Q1.	_____ is known as a volatile memory a) RAM b) ROM c) EPROM d) Flash	1
Q2.	Identify the input device(s): a) Speaker b) Printer c) Key board d) Scanner	1
Q3.	Which of the following is referred to the brain of computer? a) Processor b) RAM c) Hard Drive d) ROM	1
Q4.	ASCII stand for _____ a) American Standard Computer for Information Interchange b) American Status Code for Information Interchange c) All India Standard Code for Information Interchange d) American Standard Code for Information Interchange	1
Q5.	Python is the fastest language. a) False b) True	1
Q6.	The fetch –Decode –execute cycle is also known as _____ cycle a) Process Cycle b) Instruction Cycle c) Execute Cycle d) All above	1
Q7.	Which of the following is not a Python IDE? a) IDLE b) Sublime Text c) Jupyter Notes d) Spyder	1
Q8.	Which one of the following is NOT a computational thinking technique? a) Pattern recognition b) Decomposition c) Coding d) None of above	1
Q9.	Antivirus software is an example of _____ a) System software b) Application software c) Utility Software d) Business Software	1

Q10.	Who developed Python Programming Language a) Konrad Zuse b) Guido Van Rossum c) John Von Neumann d) Backus-Naar	1

Q11.	Write any two examples of Application Software.	1
Q12.	24 GB = _____ MB = _____ KB	1
Q13.	Why is Python termed as 'Free and Open Source' Software?	1
Q14.	Python Programming language got its name from which show?	1
Q15.	How the specific purpose software useful in our life? Explain with example	2
Q16.	What is computer hardware? Give any two examples.	2
Q17.	What is the function of the CPU in a computer? What are its subunits?	2
Q18.	Briefly explain utility Software and its type	2
Q19.	Briefly explain the basic architecture of a computer.	2
Q20.	What is the function of memory? What are its measuring units?	2
Q21.	What is the work of system software? Explain function of its type	2
Q22.	What is the meaning of the term volatile primary memory? Explain briefly.	2
Q23.	What do you understand by flash memory?	2
Q24.	What is cache memory? How it is useful?	2
Q25.	Write full form of IDLE and write the shortcut key to run a Python program.	2
Q26.	What does a cross platform language mean?	2

Q27.	Differentiate between following: a) RAM and ROM b) Interpreter and compiler c) CPU and ALU	3
Q28.	Draw a block diagram depicting organization of a mobile system? What is the role of communication processing unit and application processing unit in a mobile system	3
Q29.	What is the role of operating system in computer system? Write its different types and example.	3

English project (Autumn break homework)
CLASS XII

Topic 1 : Roll no (1-5) "Struggles in the lives of marginalized communities" with reference to the story "Memories of childhood"

Topic 2 Roll no (6-10)
"Adolescent Fantasising and hero worship" as portrayed in the chapter "Going places" by A.R Barton

Topic 3 Roll no (11-16)
"Humanism transcends all man made prejudices and barriers " in context to "The enemy"

Topic 4 Roll no(17 - 22)
"Press vs individual privacy"
as showcased in the chapter "interview"

Format :
1st page : students information (Name , class ,stream , Roll No, subject, Topic, Name of subject teacher,date of submission)
2nd page : Acknowledgement
3rd page : Certificate
4th page : Index
Project starts as per topics (pages as required)
Last page :Bibliography

*** Points to be noted .**
1. Well covered project file
2. Each and everything as mentioned above must be followed
3. Neat and clean work
4. Photos of writers to be pasted
5. Black and blue pen should be used for writing purpose
6. Topics can be highlighted using coloured sketch pens.

Page-8 **Half-Yearly Examination 2023-24**

Class: XIIth

Subject: Computer Science (083)

Maximum Marks: 70 ***Time Allowed: 3 Hours***

General Instructions:

- *Please check this question paper contains 35 questions.*
- *The paper is divided into 5 Sections- A, B, C, D and E.*
- *Section A, consists of 18 questions (1 to 18). Each question carries 1 Mark.*
- *Section B, consists of 8 questions (19 to 26). Each question carries 2 Marks.*
- *Section C, consists of 6 questions (27 to 32). Each question carries 3 Marks.*
- *Section D, consists of 2 questions (33 to 34). Each question carries 4 Marks.*
- *Section E, consists of 2 questions (35 to 36). Each question carries 5 Marks.*
- *All programming questions are to be answered using Python Language only.*

SECTION - A

1. State True or False. 1
"Identifiers are names used to identify a variable, function in a program".
a) True b) False

2. In a table in MYSQL database, an attribute A of datatype varchar(20) has the value "Ravi". The attribute B of datatype char(20) has value "Rahul". How many characters are occupied by attribute A and attribute B ? 1
a) 4,20 b) 20,4 c) 4,5 d) 20,20

3. What will the following expression be evaluated to in Python? 1
print(2 + 3*4//2 - 4)
a) 4 b) -10 c) 6 d) 8

4. Select the correct output of the code: 1
```
a = "We all are 2024 batch hardworking students"
a = a.split('0')
b = a[0] + "$ " + a[1]
print (b)
```
a) Error
b) We all are 2$ 24 batch hardworking students
c) We all are $ batch hardworking students
d) We all are 2022 $ batch hardworking students

5. Which of the following commands will delete the table from MYSQL database? 1
a) DELETE TABLE b) DROP TABLE
c) REMOVE TABLE d) ALTER TABLE

6. Rita wants to transfer pictures from her mobile phone to her laptop. She uses Bluetooth Technology to connect two devices. Which type of network will be formed in this case? 1

a) PAN b) LAN c) MAN d) WAN

7. Given the following dictionaries 1
dict_exam={"Exam":"AISSCE", "Year":2024}
dict_result={"Total":500, "Pass_Marks":165}
Which statement will merge the contents of both dictionaries?
a) dict_exam.update(dict_result)
b) dict_exam + dict_result
c) dict_exam.add(dict_result)
d) dict_exam.merge(dict_result)

8. Consider the statements given below and then choose the correct output from the given options: 1
pride="#Kendriya"
print(pride[-2:2:-2])
a) yrn b) Knry c) yrnk d) error

9. Which of the following statement(s) would give an error after executing the following code? 1
N="Kendriya Vidyalaya Sangathan" # Statement 1
print(N) # Statement 2
N="Welcomes" # Statement 3
N[2]= '@' # Statement 4
N=N+"Thank you" # Statement 5
a) Statement 3 b) Statement 4
c) Statement 5 d) Statement 4 and 5

10. What possible outputs(s) will be obtained when the following code is executed?. 1
```
import random
List=["Delhi","Mumbai","Chennai","Kolkata"]
for y in range(4):
    x = random.randint(1,3)
    print(List[x],end="#")
```
(a) Delhi#Mumbai#Chennai#Kolkata#
(b) Mumbai#Chennai#Kolkata#Mumbai#
(c) Mumbai# Mumbai #Mumbai # Delhi#

11. A device used to connect dissimilar networks is called _____. 1
a) Hub b) Gateway c) Bridge d) Repeater

12. Which of the following function header is correct ? 1
(a). def fun_name(a=5,b):
(b). def fun_name (a=5,b,c=20):
(c). def fun_name (a=5,b=10,c=2):
(d). def fun_name (a=5,b=10,c=20,d):

State whether the following statement is True or False: 1

13. An exception may be raised even if the program is syntactically correct.

14. Fill in the blank: 1
All the candidate keys other than the primary keys of a relation are known _____ of that relation.
a)Domain b) Foreign Key c) Alternate Key d) Other Key

15. The protocol that is used to transfer files from client to server. 1
a) Telnet b) SMTP c) TCP/IP d) FTP

16. Which of the following mode in file opening statement results or generates an error if the file does not exist? 1
a) a+ b) r+ c) w+ d) None of the above

Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as
a) Both A and R are true and R is the correct explanation for A
b) Both A and R are true and R is not the correct explanation for A
c) A is True but R is False
d) A is false but R is True

17. Assertion(A): Tuple is a mutable data type. 1
Reasoning(R): When an attempt is made to update the value of an immutable variable, the old variable is destroyed and a new variable is created by the same name in memory.

18. Assertion(A): Python standard library consists of number of modules. 1
Reasoning(R): A function in a module is used to simplify the code and avoids repetition.

SECTION - B

19. (a) Write the full forms of the following: 2
(i) HTML (ii) VoIP
(b) What is the use of TCP/IP?

20. Sunil has written a code to input a number and find its factorial. His code is having errors. Rewrite the correct code and underline the corrections made. 2

```
def fact()
   n=int(input("Enter number "))
   f=1
   for i range (1, n+1):
      f =* i
   Print("factorial is",f)
```

21. Write a function change(L), where L is the list of elements passed as argument to the function. The function arrange odd number and even numbers separately in two lists and display them. 2
For example:
If L = [10, 20, 30, 40, 12, 11,13,15]
Then function will create and display two lists:
List of even elements: [10, 20, 30, 40, 12]
List of odd elements: [11, 13, 15]

OR

Write a function to convert a number entered by the user into its corresponding number in words. For example, if the input is 876 then the utput should be
'Eight Seven Six'.

22. (a) If the following code is executed, what will be the output of the following code? 2

```
name="ComputerSciencewithPython"
print(name[3:10])
```

(b) Write the output of the code given below :

```
stu_dict = {"name": "Rahul", "age": 17, "Marks":340}
stu_dict['age'] = 19
stu_dict['address'] = "Delhi"
print(stu_dict.items())
```

23. Write the Python statement for each of the following tasks using BUILT-IN functions/methods only: 2
(i) To insert an element 150 at the Second position, in the list L1.
(ii) To convert a string named, message in upper case.

24. Explain the use of 'Primary Key' in a Relational Database Management System. Give example to support your answer. 2

25. Predict the output of the Python code given below: 2

```
def Diff(N1,N2):
    if N1>N2:
        return N1-N2
    else:
        return N2-N1
NUM= [10,23,14,54,32]
for CNT in range (4,0,-1):
    A=NUM[CNT]
    B=NUM[CNT-1]
    print(Diff(A,B),'#', end=' ')
```

26 Categorize the following commands as DDL or DML: 2
CREATE, UPDATE, ALTER, DELETE

SECTION - C

27. Predict the output of the code given below: 3

```
str="Nothing is impossible."
n=len(str)
nstr=""
for i in range (0,n):
    if str[i].isupper():
        nstr=nstr+str[i+1].lower()
    elif str[i].isalpha():
```

```
            nstr=nstr+str[i-1].upper()
        else:
            nstr=nstr+"&&"
    print (nstr)
```

28. Write the output of the queries (i) to (iii) based on the table, SPORTS given below. 3

Table : **SPORTS**

StudentNo	Class	Name	Game1	Grade1	Game2	Grade2
10	7	Sammer	Cricket	B	Swimming	A
11	8	Sujit	Tennis	A	Skating	C
12	7	Kamal	Swimming	B	Football	B
13	7	Venna	Tennis	C	Tennis	A
14	9	Archana	Basketball	A	Cricket	A
15	10	Arpit	Cricket	A	Athletics	C

(i) SELECT * FROM SPORTS WHERE StudentNo=13;
(ii) SELECT DISTINCT Class FROM SPORTS. ;
(iii) SELECT Class, Name FROM STUDENT
WHERE Game2 in ("Football", "Athletics");

29. Write a function in Python that counts the number of "Me" or "My" words present in a text file "STORY.TXT". 3

If the "STORY.TXT" contents are as follows:
My first book was Me and
My Family. It gave me chance to be Known to the world.
The output of the function should be:
Count of Me/My in file: 4

OR

Write a function in python to count the number lines in a text file 'Country.txt' which is starting with an alphabet 'W' or 'H' (Both lower & upper case to be counted).
If the file contents are as follows:
Whose woods these are I think I know.
His house is in the village though;
He will not see me stopping here To watch his woods fill up with snow.
The output of the function should be:
W or w : 1
H or h : 2

30. Consider the table EMPLOYEES given below: 3

Table: **EMPLOYEES**

EMPNO	ENAME	JOB	Sal	DEPTNO
8369	SMITH	CLERK	2985	10
8499	ANYA	NULL	9870	20
8566	AMIR	SALESMAN	8760	30
8698	BINA	MANAGER	6543	10

Based on the given table, write SQL queries for the following:

(i) Increase the salary by 10% of personals whose DEPTNO is 10.

(ii) Display Name and Salary of all employees.

(iii) Delete the records of employees who have salary greater than 5000

31. A list contains following record of a Student: 3

[Stud_no, name, Fee]

Write the following user defined functions to perform given operations on the stack named EMP

- Push_element()-to push an object containing Stud_no ,name & Fee of student who are paying fee more than 5000 to the stack Stud
- Pop_element()-to pop the objects from the stack and display them. Also display 'Stack Empty' when there are no elements in the stack.

For example

If the lists of student details:
[1001,"John", 5500]
[1002,"Angelia", 4000]
[1003, "Amrit",7000]
The stack should contain:
[1001,"John", 5500]
[1003, "Amrit",7000]
The output of should be:
[1001,"John", 5500]
[1003, "Amrit",7000]
Stack Empty

OR

Julie has created a dictionary containing names and marks as key value pairs of 6 students. Write a program, with separate user defined functions to perform the following operations:

- Push the keys (name of the student) of the dictionary into a stack, where the corresponding value (marks) is greater than 75.
- Pop and display the content of the stack. For example: If the sample content of the dictionary is as follows:

R={"OM":76, "JAI":45, "BOB":89, "ALI":65, "ANU":90, "TOM":82}

The output from the program should be:

TOM ANU BOB OM

32 (i)Give two advantages and two disadvantages of star topology 3
(ii)Define any one of the following terms
www , web hosting

SECTION - D

33 Consider the following table ITEM. 4

Table: **ITEM**

ITEMNO	NAME	PRICE
101	BOOK	20
102	PENCIL	4
103	PEN	15
104	ERASER	5
105	PEN	30

Based on the table given above answer the following questions:

(i) Identify the most appropriate column, which can be considered as Primary key.

(ii) If three columns are added and 2 rows are deleted from the table ITEM, what will be the new degree and cardinality of the above table?.

(iii) Write the statements to:

(a) Insert the following record into the table :
ITEMNO - 108, NAME- NOTEBOOK, PRICE- 80.

(b) Add a column BRAND_NAME in the table with datatype as varchar with 30 characters.

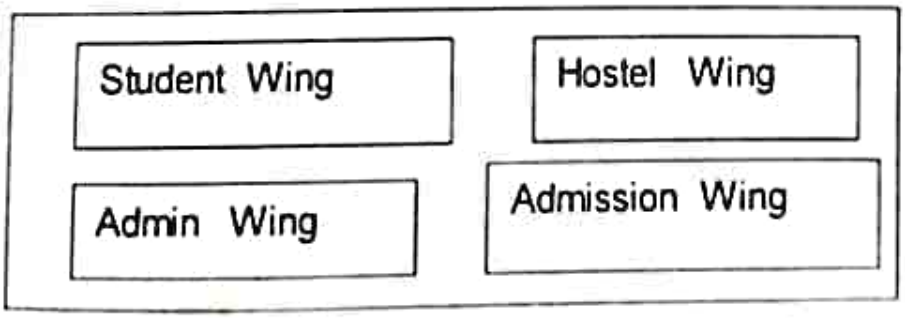
34. Write a Program in Python that defines and calls the following user defined functions: 4

(i) **ADD()** – To accept and add data of an item of shopping mall to a CSV file 'shop.csv'. Each record consists of a list with field elements as id, name and price to store item id, item name and item price respectively.

(ii) **COUNTR()** – To count the number of records present in the CSVfile named 'shop.csv'.

SECTION - E

35. "NEXTGEN CLASSES" is located in Jaipur and is planning to go in for networking of four wings for better interaction. The details are as shown below 5



The distance between various wings are :

Student to Admin	265m
Student to Admission	495m
Student to Hostel	525m
Admission to Admin	200m
Admission to Hostel	195m
Admin to Hostel	325m

Number of computers are :

Student Wing	312
Admission Wing	156
Admin Wing	26
Hostel Wing	125

(i) Suggest the most suitable place (i.e. Wing) to install the server of this organization with a suitable reason.

(ii) Suggest an ideal layout for connecting all Wings. Also write the type of Topology.

(iii) Suggest the placement of the following devices with reasons :
a) Modem b) Switch

(iv) The Institute is planning to link its another branch "ABHI CLASSES" in Andaman & Nicobar. Suggest the type of network (LAN, MAN, WAN) and a fast and very effective wireless transmission medium to connect it with Jaipur, reasonably high speed is required, cost is not the factor. Justify your answer.

(v) Suggest a protocol that shall be needed to provide Video Conferencing solution between Jaipur and Andaman.

36. (a) Differentiate between r+ and w+ file modes in Python 5

(b) A Binary file, CINEMA.DAT has the following structure:

[MNO,MNAME, MTYPE]

Where

MNO – Movie Number
MNAME – Movie Name
MTYPE is Movie Type

Write a user defined function, Searchtype(mtype), that accepts mtype as parameter and displays all the records from the binary file CINEMA.DAT, that have the value of Movie Type as *mtype.*

****