SOUTH POINT INTERNATIONAL SCHOOL, SONIPAT

SESSION-2024-25

CLASS-X

SUMMER BREAK, 2024-25
(28th May to 30th June, 2024)

The school shall re-open on Monday, 1 st July, 2024 as usual.

Dear Students

Unfeigned Greetings!

Holidays' Homework serves several vital purposes for the students. It helps reinforce what students have learnt in the previous months, preventing the "Summer Slide" where important skills and Knowledge are forgotten over a long break.

Assignments given during the holidays help the students develop research, analytical, logical, speaking, writing, communication, reasoning and reading skills outside the regular classroom ambience. The Holidays' Homework introduces new concepts that will be taught in the coming days, giving students a head start. With more free time during the holidays, the given assignments help the students know how to balance leisure and work, fostering good habits in time management and self-discipline. Moreover, without the immediate support of teachers, the students learn to solve the problems on their own, fostering independence and confidence in their abilities.

TIPS FOR DOING HOLIDAYS' HOMEWORK

- **PLAN AHEAD**: *Start by listing all the Homework: Models, Projects, Assignments, Art -Integrated Activity etc., you need to complete. Break them into smaller, manageable tasks and set the deadlines for each.*

- **CREATE A SCHEDULE:** *Allocate specific times each day for the homework. Treat these times as the fixed appointments.*

- **SET CLEAR GOALS**: *Define what you need to accomplish in each study-session. Setting goals can keep you focused and give you a sense of achievement as you tick the tasks off your list.*

- **CHOOSE A CONDUCIVE AMBIENCE**: *Find a quiet and cosy place to study. Make sure it is free from distractions.*

- **TAKE REGULAR BREAKS:** *Don't forget to take short breaks to reset the brain.*

- **STAY ORGANISED**: *Keep all your study-material and notes organized and handy.*

- **REVIEW REGULARLY**: *Instead of cramming, review your notes, answers and other work regularly. This enhances memory-retention.*

- **STAY MOTIVATED**: *Keep your morale high.*

- **STAY HEALTHY**: *Maintain a balanced and nutritious diet, hydrate well and ensure that you get plenty of sleep. Stay away from heat. Your brain needs rest and fuel to function at its best.*

MAY YOUR HOLIDAYS BE FILLED WITH HAPPINESS, FUN, FROLIC, LAUGHTER AND CHERISHED MEMORIES!

PRINCIPAL

English

Section A (Reading Skills)

(Let's Read, Comprehend and Answer)

- Select the Articles / write- ups on 'Time management' ,'Terrorism - a Curse to Humanity', 'Information Technology and Young Generation', 'Impact of Social Media', 'Importance of Discipline', 'Hazards of Smoking', 'Sports', 'Importance of vote', 'Corruption - the Cancer of our Society' each containing 200-250 words from the English newspaper. Cut the Articles and paste them in the notebook. Frame 4 supply type questions, 1 MCQs and 2 Questions on Vocabulary and write their answers also.

Section B (Creative Writing Skills)

(Let's Compose)

Letter to Editor

1. A large number of stray dogs wander about in your locality. They are a great nuisance and pose a threat to the passers - by . Write a Letter to the Editor of a newspaper highlighting the problem and giving some suggestions to solve the problem. You are Arunita / Arun of 100, Guru Nanak Dev Mohalla , Bhatinda.
2. Write a Letter to the Editor of a newspaper expressing your concern over the excessive use of mobile phones by the youngsters. You are Rahul/Reema of 140C, Defence Enclave, New Delhi.
1. You are Raman / Nina. As the Manager of SIGMA Boutique, write a Letter to the Manager, S.K.Emporium, placing your order for furnishings and upholstery items for your boutique.
2. You are the Store Incharge of B.P.J. Senior Secondary School, Meerut. You require various items of furniture such as chairs, desks, almirahs etc. for your school. Mentioning the details of the items, write a Letter to M/S Chadda Furniture House, 15- Karol Bagh, New Delhi placing the order for the furniture. Ask for the discount available on the purchase.
1. Write a Letter to a firm complaining against the late delivery of goods. You are Meena/Raman, Manager, Sunder Cloth House, Hall Bazar, Amritsar.
3. You are Rita/Rahul. You purchased a T.V. set from the Capital Electronics. However after a month the T.V. set stopped working properly. The volume could not be adjusted and the T.V screen kept going dark . Write a Letter of complaint to the Manager of the store asking him to send a technician and if required, replace the T V. set as it is within warranty period.

Section-B (Grammar) (Let's Hone Grammar Skills)

- Tenses (Editing and gap-filling)-06 exercises
- Subject-Verb Agreement (Editing and gap filling)-06 exercises
- Re arrangement of jumbled-up words-06 exercises each containing 4 sentences

Section-C (Literature)

(Let's Check Literary Flavour)

Note:- Read the following chapters carefully and learn the answers of the textual exercises:

"A Letter To God", "Nelson Mandela: A Long Walk to Freedom", "A Triumph of Surgery, "The Thief's Story", Poem:- "Dust of Snow", "Fire and Ice" , "A Tiger in the Zoo".

Read Ch- "From the Diary of Anne Frank" Poem "The Ball Poem and Ch- "A Question of Trust" very carefully, find out the answers of the textual exercises and write them in the Holiday' Homework notebook.

Art-Integrated Activity

Select any two Novelists and two Poets of Manipur and Haryana each and write about their life, education, works, honours and awards. Paste their photographs also. Prepare a project file.

(Speaking Skills)

Speaking skills are equally significant in education. Effective speaking not only allows students to express themselves confidently but also enables them to articulate their thoughts and ideas clearly. Strong Speaking Skills contribute to academic vibrance, self confidence and future career opportunities. These skills are essential for demonstrating understanding, critical thinking and effective argumentation. Prepare a SPEECH in about 180 -200 words on any one of the following topics, prepare it excellently well, deliver the same at home, make a video and send it to the respective Class Teacher by 8th June, 2024 positively.

Ensure that you are in proper school uniform while delivering the speech.

1. 'Junk food'
2. 'Global warming'
3. 'Women Empowerment'
4. 'Obesity'
5. ' Importance of Vote'

हिंदी

1.'पर्यावरण संरक्षण' या अपने द्वारा बनाई गई 'पहाड़ी चॉकलेट' का विज्ञापन तैयार करें।

2. मित्र की नौकरी लगने पर शुभकामना संदेश प्रेषित करें।(40 शब्द)

3.'ए०आई० का बढ़ता वर्चस्व' अथवा 'मज़दूरी के दलदल में फंसा बचपन' में से किसी एक विषय पर अपने विचार प्रस्तुत करते हुए डेढ़ से दो मिनट की एक वीडियो बनाकर 9 जून कोअपनी विषय अध्यापिका के पास व्हाट्सएप पर भेजें।

3. अभी तक जो भी पढ़ाया गया है ,उसको कम से कम पांच बार दोहराएं । ग्रीष्मकालीन अवकाश के बाद आते ही उसी में से प्रश्न पूछे जाएंगे

4. एन०सी०ई०आर०टी०, नई दिल्ली में लिपिक पदों के रिक्त स्थानों को भरने के लिए समाचार. पत्र में विज्ञापन आया है। उस संदर्भ में सचिव के नाम अपना आवेदन प्रेषित करते हुए स्ववृत्त .लेखन कीजिए ।

5. सिक्किम के दर्शनीय स्थलों की जानकारी देते हुए मुंबई स्थित अपने मित्र को पत्र लिखिए।

6. कला समेकित परियोजना व्हरियाणा और मणिपुर॒ की ग्रामीण संस्कृति पर एक सचित्र परियोजना तैयार कीजिए।

Mathematics

Make PPT on :
- Zeroes of a polynomial.
- Graphical meaning of zeroes of polynomial.
- Number of zeroes.
- Factorization of polynomial.
- Relation between zeroes and co- efficient of a polynomial.

Project Work
- Make a model on Surface Areas and Volumes
- Make a chart on Areas Related to Circles.

Lab Manual Activity

Do following Assignment in fair notebook

Chapter- 1

1. **CASE STUDY:**

Fit India Movement: 'Fit India Movement' was launched by Prime Minister Narendra Modi on the occasion of National Sports Day on August 29, 2019. It is a nationwide campaign that aims at encouraging people to include activities and sports in their everyday lives.

In 72nd Republic Day Parade, 102 girl students of Delhi Government School, Yamuna Vihar performed "Hum Fit Toh India Fit" dance representing Fit India Movement.

(a) Which of following shows the prime factorisation of number of girls participated in the parade?[1]
  (i) 2×51 (ii) 3×34
  (iii) 6×17 (iv) $2 \times 3 \times 17$

(b) 54 girl students of Mount Abu Public School and Vidya Bharti School from Rohini performed a dance to highlight government's Atma Nirbhar Bharat initiative. What is the HCF (54, 102)?[1]
  (i) 2   (ii) 3
  (iii) 6   (iv) 9

(c) To keep healthy, Raman and Shravan go on morning walk daily. Raman takes 72 seconds and Shravan takes 84 seconds to round once around a park. If they start from the same place, after how much time will they meet again at the starting point?   [1]
  (i) 4 min 12 s   (ii) 8 min 24 s
  (iii) 6 min 18 s   (iv) 10 min 30 s

(d) A person must walk at least 6000 steps a day in addition to him/her daily routine work. A man has a mobile app which counts his steps when he walks. If he finds that its count is 5463 only, what per cent of goal could he achieve?   (1)
  (i) 9.16%   (iii) 90.15%
  (iii) 91.05%   (iv) 95.1%

2. Check whether 15^n can end with the digit zero (0) for any natural number n [2]

3. The traffic lights at three different road crossings change after every 48 seconds, 72 seconds and 108 seconds respectively. If they change simultaneously at 7 a.m., at what time will they change simultaneously again?   [3]

4. Prove that $\sqrt{7}$ is an irrational number.   [3]

5. Find the LCM and HCF of 12, 72 and 120 using prime factorisation. Also, show that HCF × LCM ≠ Product of three given numbers.   [3]

Or

6. There are 104 students in class X and 96 students in class IX in a school. In end term examination, the students are to be evenly seated in parallel rows such that no two adjacent rows are of the same class.

  (i) Find the maximum number of parallel rows of each class for the seating arrangement.

  (ii) Also find the number of students of class IX and also of class X in a row.

  (iii) What is the objective of the school administration behind such an arrangement?


ANSWERS ◇◇

1. (a–iv); (b–ii); (c–ii); (d–iii)
2. No
3. 7 : 07 : 12 a.m.   5. LCM = 360, HCF = 12
Or   (i) 8 rows of each class   (ii) 12, 13
    (iii) To minimise the tendency of the students to copy and to teach them value of honesty.

HINT. If the required number of rows is n, then n is the largest number which should divide both 104 and 96. So, n = HCF of 104 and 96.

Chapter-2

1. Find the number of zeroes for the polynomial $y = p(x)$ from the given graph: [1]
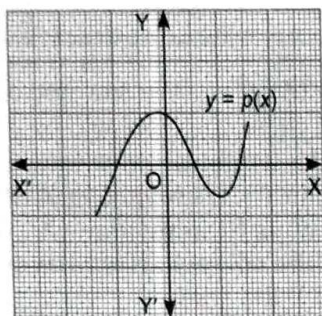
2. If α and β are the zeroes of $f(x) = px^2 - 2x + 3p$ and $\alpha + \beta = \alpha\beta$, then find the value of p. [1]

Or

If α and β are the zeroes of $p(x) = 2x^2 - x - 6$, then find the value of $\alpha^{-1} + \beta^{-1}$.

3. **Under passes of highway:** In a Greater Noida express highway, there are so many underpass and overpass so that the other persons while crosses the highway do not have any problem.
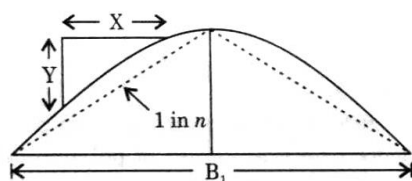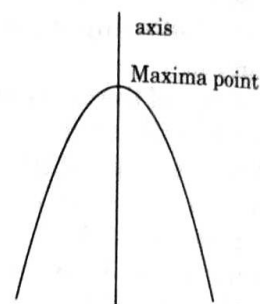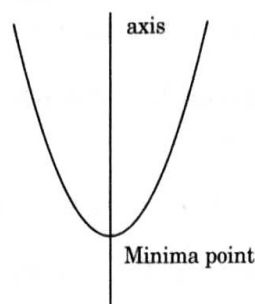

A Parabola is the graph that forms by the quadratic expression $p(x) = ax^2 + bx + c$. Parabolas are symmetric about a vertical line known as the Axis of Symmetry. The Axis of Symmetry runs through the maximum or minimum point of the parabola which is called the vertex.

Generally quadratic polynomial forms two types of shapes, which are shown below

(i) When $a > 0$ 　　　　(ii) When $a < 0$

Attempt any there questions:

(a) In the polynomial expression $f(x) = cx^2 + bx + a$, if $c < 0$, then the parabola open [1]
　(i) Upward 　　　　(ii) Downward
　(iii) Right side 　　(iv) Left side

(b) As the highway overpass is represented graphically on the coordinate axes. The number of zeroes of polynomial is equal to number of points where the graph of polynomial [1]
　(i) Intersect y-axis
　(ii) Intersect x-axis
　(iii) Intersect y-axis or x-axis
　(iv) Neither intersect x-axis nor y-axis

(c) If the underpass is represented by polynomial $x^2 - 3x - 10$, then its zeroes [1]
　(i) 2, 5 　　　　　(ii) 2, -5
　(iii) -2, -5 　　　(iv) None of these

(d) If the zeroes of any parabolic curve of underpass are -3 and -7, then the representation of curve of highway underpass is [1]
　(i) $x^2 - 10x - 21$ 　(ii) $x^2 + 10x + 21$
　(iii) $x^2 - 10x + 21$ 　(iv) None of these

4. If one of the zeroes of the quadratic polynomial $f(x) = 14x^2 - 42k^2x - 9$ is negative of the other, find the value of 'k'. [2]

5. If one zero of the polynomial $ax^2 + bx + c$ is double of the other, then show that $2b^2 = 9ac$. [2]

6. Find the zeroes of $4\sqrt{3}\,x^2 + 5x - 2\sqrt{3}$ and verify the relation between the zeroes and coefficients of the polynomial. [3]

7. If α and β are the two zeroes of $f(x) = 2x^2 - 4x + 6$, find a quadratic polynomial whose zeroes are

$\dfrac{\alpha}{\beta^2}$ and $\dfrac{\beta}{\alpha^2}$. [3]

ANSWERS ◇◇◇

1. Three　2. $\dfrac{2}{3}$ *Or* $-\dfrac{1}{6}$

3. (a–ii); (b–ii); (c–iv); (d–ii)

4. $k = 0$　　6. $\dfrac{-2}{\sqrt{3}}, \dfrac{\sqrt{3}}{4}$

7. $9x^2 + 10x + 3$

CHAPTER-3

1. Find the value of k, for which the following equations will represent coincident lines. $2x + ky = 7$, $4x + 8y = 14$. [1]

2. If $x = a$, $y = b$ is the solution of the equations $x - y = 2$ and $x + y = 4$, then find the values of a and b. [1]

3. **CASE STUDY – AYUSHMAN SOCIETY**

The resident welfare association of a Ayushman society decided to build two straight paths in their neighbourhood park such that they do not cross each other, and also plant trees along the boundary lines of each path.
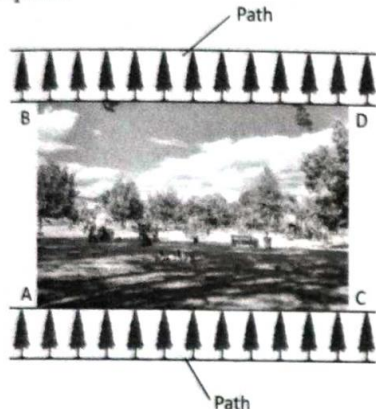
Path

Path

One of the members of association popat lal suggested that the paths should be constructed represented by the two linear equations $x - 3y = 4$ and $-3x + 9y = 15$.

Attempt any four questions—

(a) If the pair of equations $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$ has infinitely solutions, then condition is [1]

(i) $\dfrac{a_1}{a_2} \neq \dfrac{b_1}{b_2} = \dfrac{c_1}{c_2}$ (ii) $\dfrac{a_1}{a_2} = \dfrac{b_1}{b_2} = \dfrac{c_1}{c_2}$

(iii) $\dfrac{a_1}{a_2} = \dfrac{b_1}{b_2} \neq \dfrac{c_1}{c_2}$ (iv) None of these

(b) If pair of lines are parallel, then pair of linear equations is [1]

  (i) Inconsistent   (ii) Consistent

  (iii) Consistent or inconsistent

  (iv) None of the above

(c) How many point(s) lie on the line $x - 3y = 4$? [1]

  (i) One   (ii) Two

(iii) Three   (iv) Infinite

(d) If the line $2x + 6y = 15$ intersect the y-axis, then find its coordinate. [1]

  (i) $(-2.5, 0)$ (ii) $(2.5, 0)$

  (iii) $(0, 2.5)$ (iv) $(0, -2.5)$

Or

(e) If line AB is denoted by $-3x - y = 10$, where does AB meet with line $x - 3y = 4$? [1]

  (i) $\left(\dfrac{-13}{5}, \dfrac{-89}{5}\right)$ (ii) $\left(\dfrac{13}{5}, \dfrac{89}{5}\right)$

  (iii) $\left(\dfrac{-13}{5}, \dfrac{89}{5}\right)$ (iv) None of these

4. Solve $67x + 43y = 24$, $43x + 67y = -24$. [2]

5. For what value of k, the following system of linear equations has no solution?
$3x + y = 1$; $(2k - 1)x + (k - 1)y = 2k + 1$. [2]

6. The angles of a cyclic quadrilateral ABCD are [2]
$\angle A = (6x + 10)°$, $\angle B = (5x)°$
$\angle C = (x + y)°$, $\angle D = (3y - 10)°$
Find x and y, and hence the values of the four angles.

7. Seven times a two digit number is equal to four times the number obtained by reversing the order of its digits. If the difference between the digits is 3, find the number. [3]

Or

Find the solution of the pair of equations $\dfrac{x}{10} + \dfrac{y}{5} - 1 = 0$ and $\dfrac{x}{8} + \dfrac{y}{6} = 15$.

Hence, find λ, if $y = \lambda x + 5$. [NCERT Exemplar]

8. A person travels 600 km partly by train and partly by car. If he covers 400 km by train and the rest by car, it takes 6 hours 30 minutes. But, if he travels 200 km by train and the rest by car, he takes half an hour longer. Find the speed of the car and that of the train. [3]

9. Determine, graphically, the vertices of the triangle formed by the lines [3]
$y = x$, $3y = x$, $x + y = 8$

10. A bird flying in the same direction as that of the wind, covers a distance of 45 km in 2 hours 30 minutes. But it takes 4 hours 30 minutes to cover the same distance when it flies against the direction of the wind. Ignoring conditions other than the wind conditions, find [4]
  (i) the speed of the bird in still air.
  (ii) the speed of the wind.

ANSWERS

1. 4   2. $a = 3$ and $b = 1$ 3. (a-ii); (b-i); (c-iv); (d-iii); (e-i)
4. $x = 1$, $y = -1$ 5. $k = 2$
6. $x = 20$, $y = 30$, $\angle A = 130°$, $\angle B = 100°$, $\angle C = 50°$, $\angle D = 80°$

8. $x = 340$, $y = -165$; $\lambda = -\dfrac{1}{2}$ 7. 36
9. Speed of train = 100 km/h, Speed of car = 80 km/h.
10. $(0, 0)$, $(6, 2)$, $(4, 4)$ *Or* (i) 14 km/h (ii) 4 km/h

Chapter-11

1. In Fig. 11.25, O is the centre of the circle and area of sector APBO is $\frac{6}{18}$ of the area of the circle. Find the value of x. [1]
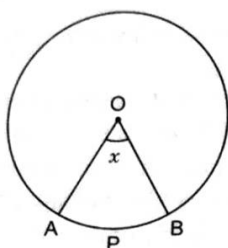

Fig. 11.25

2. Find the diameter of a circle whose area is equal to the sum of areas of two circles with radii 24 cm and 7 cm. [1]

3. If circumferences of two circles are equal, then what is the ratio between their areas? [1]

4. The sum of circumferences of two circles is 132 cm. If the radius of one circle is 14 cm, find the radius of the second circle. [2]

5. Find the area of the minor segment of a circle of radius 42 cm, if the length of the corresponding arc is 44 cm. [3]

Or

The short and long hands of a clock are 4 cm and 6 cm long respectively. Find the sum of distances travelled by their tips in 48 hours. [2018C]

6. The diameters of front and rear wheels of a tractor are 80 cm and 2 m respectively. Find the number of revolutions that rear wheel will make in covering a distance in which the front wheel makes 1400 revolutions. [3]

7. A race track is in the form of a ring whose inner and outer circumferences are 437 m and 503 m respectively. Find the width of the track and also its area. $\left(\text{Use } \pi = \frac{22}{7} \right)$ [4]

NSWERS ◇◇

. 100° **2.** 50 cm **3.** 1 : 1 **4.** $r = 7$ cm **5.** 161.07 cm² *Or* 608π cm **6.** 560 **7.** 10.5 m; 4935 m²

Chapter-12

1. If the surface area of a sphere is $4\pi r^2$, then what will be the total surface area of hemisphere? **[1]**

2. Volume of two spheres are in the ratio 64 : 27. Find the ratio of their surface areas. **[1]**

3. A solid cube of side 12 cm is cut into eight cubes of equal volume. What will be side of the new cube?**[1]**

4. A right-circular cylindrical water tanker supplies water to colonies on the outskirts of a city and to nearby villages. Each colony has a cuboidal water tank. In villages, people come with matkas (spherical clay pots) to fill water for their household. **[2023]**
   (*Note:* The figures are not to scale.) **[4]**

   (i) How many colonies in total would one full tanker be able to supply?

   (ii) If a tanker supplies water to 3 colonies and then goes to a village where 400 people fill their matkas, roughly how much water is supplied by the tanker in all? Give your answer in m³.

   Show your work.

   (*Note:* Assume all the tanks/matkas are completely filled without any loss of water; Take as $\frac{22}{7}$; Use 1000000 cm³ = 1 m³.)
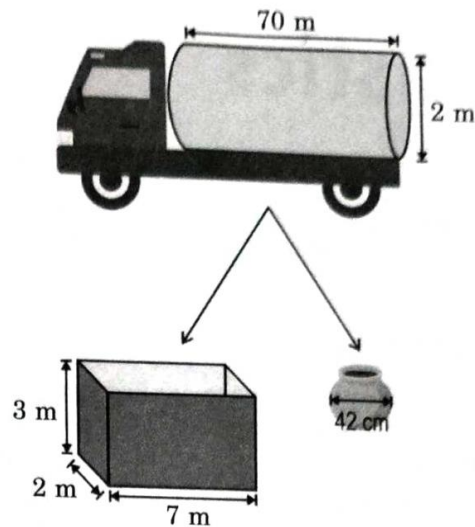
5. A circus tent is in the shape of a cylinder surmounted by a conical roof. If the common diameter is 56 m, the height of the cylindrical portion is 6 m and the height of the roof from the ground is 30 m, find the area of the canvas used for the tent. **[4]**

6. A decorative block as shown in figure is made of a cube and a cone. The base of the block is the cube with the edge of 6 cm and the cone attached on the top has a diameter of 5.6 cm and height 1.4 cm. If the block is to be painted at the rate of ₹ 0.45/cm², find the surface area to be painted and the cost of painting the block. **[4]**
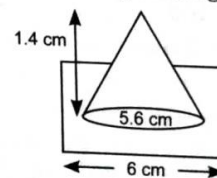

Fig. 12.41

ANSWERS

1. $3\pi r^2$ 2. 16:9 3. 6 cm 4. (i) 5 colonies (ii) 142 m³
2. 16 : 9 5. $(1056 + 352\sqrt{85})$ m²
6. 217 cm² (approx); ₹ 97.65 (approx)

Science

PHYSICS (LIGHT)

QI A ray of light AM is incident on a spherical mirror as shown in the diagram. Redraw the diagram and show the path of reflected ray.

Q2 Explain why a ray of light passing through the centre of curvature of a concave mirror gets reflected

along the same path?

Q3 What is the radius of plane mirror?

Q4 Why do we use convex surface for side view mirror?

Q5 Relate the focal length 'f ' and the radius of curvature 'R'.

Q6 Which kind of mirror is used in the headlights of a motor car and why?

Q7 What is focal length of a plane mirror?

Q8 A concave mirror is placed in water. Will there be any change in the focal length? Give reasons.

Q9 Name the type of mirror which always forms a virtual and diminished image.

QIO A ray of light LM is incident on a mirror as shown in the figure. The angle of incidence for the ray is

the angle between it and the line joining the other points in the figure. Name these two points.
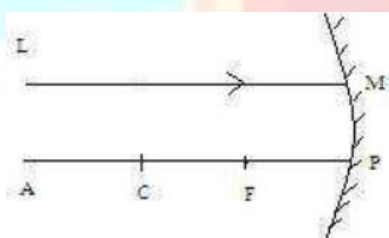
Q11. Define Refractive index of a medium and write it's unit .

Q12 What is refraction ? What is cause of refraction ? Write laws of refraction

Q13 Locate the position of image formed by a concave mirror if the object is at C.

Q14 Find the focal length of a convex mirror whose radius of curvature is 32cm.

Q15 Name the type of mirror used in:

(a) Solar furnace
(b) Rear view mirror of a vehicle   (c) Headlights of a car.
    Support your answer with reason.

Q16 Draw the ray diagram to show

(i)   the position

(ii) nature of the image formed when an object is placed between focus F and pole P of a concave
      mirror.

Q17 A concave mirror and a convex lens are held separately in water. What changes (if any) do you

expect in the focal length of either?

Q18 A convex mirror used on an automobile has a focal length of 3m. If a vehicle behind is at a distance

of 5m, find the location of the image.

Q19 (i) Distinguish between a real and virtual image.

(ii)Distinguish between a convex and concave mirror.

Q20 We have to form an erect image of an object placed in front of a concave mirror of focal length 15cm.

Draw the ray diagram.

Q21 Why does a ray falling normally on a plane mirror, retrace its path?

Q22 Whatever may be the position of object, the image appears to be erect. Give the nature of mirror with

reason.

Q23 From which surface of a mirror, the polished surface or the silvered surface, does most of the light

reflect?

Q24 Convex mirrors are used as rear view mirrors in scooters, motorcycles etc. Expalin why?

Q:25 Draw all Ray diagrams of concave mirror convex mirror convex len and concave lens

Do all NCERT Questions of Ch-Light

Chemistry

Write the answers of following questions:

Q1. Why do we store Silver Chloride in dark colored bottles?

Q2. A solution of Potassium chloride when mixed with Silver nitrate solution forms an insoluble white

substance. Write the chemical reaction involved and mention the type of chemical reaction.

Q3. Write the two observations when the Lead nitrate is heated in a test tube. Name the type of reaction.

Write the balanced chemical equation to represent the above reaction.

Q4. What is observed when a solution of Potassium iodide is added to a solution of Lead nitrate taken in a

test tube? What type of reaction is this? Write a balanced chemical equation to represent the above

reaction.

Q5. In the electrolysis of water:

(i) Name the gas collected at the cathode and anode respectively.

(ii) Why is the volume of gas collected at one electrode is double than the other?

(iii) Define the type of reaction involved.

Q6. Fresh Milk has a pH of 6. How do you think the pH will change as it turns into curd? Explain your answe

Q7. (a) Dry Hydrogenchloride gas does not change the color of dry litmus paper. Why?

   (b) While diluting an acid, why is it recommended that the acid should be added to the water and not water to the acid?

Q8. 2g of ferrous sulphate crystals were heated in a hard glass tube and observations recorded :

   (a) What was the successive colour change?

   (b) Identify the liquid droplets collected on the cooler parts of the test tube.

   (c) What type of odour is observed on heating ferrous sulphate crystals ?

   (d) Name the products on heating ferrous sulphate crystals.

   (e) What type of reaction is taking place?

Q9. Solid calcium oxide was taken in a container and water was added slowly to it.

   (i) State two observations made in the experiment.

   (ii) Write the balanced chemical equation of this reaction.

Q10. Consider the chemical equations given below and answer the questions:

   (a) $CuO + H_2 \rightarrow Cu + H_2O$

   (b) $ZnO + C \rightarrow Zn + CO$

      (i) Name the substances that are respectively oxidised and reduced.

      (ii) Identify the reducing agent in each case.

Q11. You have two solutions, A and B. The pH of solution A is 6 and pH of solution B is 8. Which solution has more hydrogen ion concentration? Which of this is acidic and which one is basic?

Q12. Five solutions A, B, C, D and E when tested with universal indicator showed pH as 4, 1, 11, 7 and 9, respectively. Which solution is :

   (a) neutral?

   (b) strongly alkaline?

   (c) strongly acidic?

   (d) weakly acidic

   (e) weakly alkaline?

      Arrange the pH in increasing order of hydrogen- ion concentration.

Q13. What is a neutralization reaction? Give two examples.

   Note: Also Do NCERT Questions:

   Chapter 1: Q1, Q6, Q9, Q10, Q11, Q12, Q13, Q15, Q17

   Chapter 2: Q1, Q2, Q7, Q12.

Practical Work

Experiment 1: Performing and observing the reaction between Sodium Sulphate

and Barium Chloride Solutions.

Experiment 2: Studding the properties of Acid HCL on the basis of its reaction with

   (a) Litmus Solution

   (b) Zinc Metal

   (c) Solid Sodium Carbonate

Project: Prepare a project on any one of the following:-

   (1) Chemical Reactions and equations

   (2) Acids, Bases and Salts

BIOLOGY

Assignment-A

SECTION-A

Write the answers of the following in your biology notebook :

1. Name two inorganic substances which are used by autotrophs tomake food.

2. Name the pigment which can absorb solar energy.

3. In which part of the digestive system is water absorbed?

4. Name the organs of breathing in fish.

5. Where does the blood absorb oxygen in the human body?

6. What is the role of glomerulus in the kidney?

7. Name one animal having single circulation of blood and another having double circulation.

8. Name two liquids which help in the transportation of substances in the human body.

9. Which gaseous waste products are excreted by the plants?

10. Name the procedure used in the working of artificial kidney.

SECTION-B

11. How are oxygen and carbon dioxide transported in human beings?

12. What are the components of the transport system in human beings? What are the functions of

   these components?

13. Write three modes of heterotrophic nutrition. Also give examples in each case.

14. Name the two glands associated with the digestive system in humans. Name their secretion.

15. Draw a labelled diagram of stomata.Explain the structure of stomata. Write the function of guard cells.

16. What are the functions of stomach? What are the constituents of gastric juice? Write one function

   of each.

17. Draw a diagram depicting human alimentary canal and label on it: gall bladder, liver and pancreas.

   -State the role of liver and pancreas.

-Name the organ which performs the following function in human.

(a) Absorption of digested food   (b) Absorption of water

18. What are two different ways in which glucose is oxidised to provide energy in various organisms?

Write any two differences between the two ways of oxidation of glucose in organisms.

19. Draw a neat and labelled diagram of human respiratory system. Explain in brief how lungs are

designed in human beings to maximise the area for exchange of gases?

20. Draw a schematic representation of transport andexchange of oxygen and carbon dioxide during

transportation of blood in human beings and label on it:lung capillaries, pulmonary artery to lungs,

aorta to body, pulmonary vein from lungs.

21. Draw a diagram of excretory system in human beings and label on it : aorta, vena cava, urinary bladder

and urethra.List two vital functions of the kidney.

Assignment-B

Draw all the diagrams from Chapter-6: Life Process. (With the help of NCERT textbook).

Make a model (with thermocol sheets and charts)on one of the following topics-

- Human digestive system
- Human respiratory system
- Human heart
- Human excretory system
- Open and closed stomatal pore

Note: learn the lesson -life processes.

Social Science

1. Pre-Reading Task:

Read Ch-2 'Federalism of Democratic Politics' ,History Ch-2 'Nationalism in India', Geo. Ch-3 'Water

Resources' thoroughly and find out atleast 20 one mark questions from each chapter and write in your

fair notebook.

2. Revise all the syllabus taught in the Month of April and May.

3. Art Integrated Activity : Prepare a video or PPT including Map work showing Introduction, Agriculture,

Tourism, Political Parties and Historical Monuments of Haryana and Manipur.

4. Every Student has to compulsorily undertake any one project of the following topics as mandated by CBSE

*Consumer Awareness

Or

* Social Issues

Or

Sustainable   Development

Guidelines for the Project:

*To be done on A -4 size sheet.

**Handwritten for 15 pages

*On the cover page Students Name, Class , Roll no., Session and Topic to be written On Page No. 1

Acknowledgement

On Page 2 Content, On Page 3 Introduction

From Page 4 to 13 Explanation of the Project On Page 14 Summary / Conclusion

On Page 15 Bibliography

5. Do the Assignment given in fair notebook.

Social Science

ASSIGNMENT

Q1. Discuss the ethnic composition of Belgium and Sri Lanka.

Q2. Mention the majoritarian measures introduced by Sri Lankan Government to establish Sinhala supremacy.

Q3. Why Power Sharing is desirable?

Q4. Discuss the Elements of Belgian model of Power Sharing.

Q5. Describe four forms of Power Sharing.

Q6. What may be development for one may not be for the other. It may be destructive. Explain the statement.

Q7. For development people look at a mix of goals. Support the statement with suitable examples.

Q8. What is the main criterion used by the World Bank in classifying different countries?

Q9. "Money cannot buy all the goods and services that you need to live well". Explain.

Q10. Why is the issue of sustainability important for development?

Q11. What is Sustainable Development?

Q12. Write the characteristics of Alluvial Soil.

Q13. What is Soil Erosion? What are the causes of Soil Erosion?

Q14. Explain the various steps taken by the Indian Government to conserve biodiversity.

Q15.What is federalism? Explain the two routes of federalism.

Information Technology

- Read Unit- 2(Part- A) 'Self Management Skills' and Unit- 2(Part- B) 'Electronic Spreadsheet'
- Write difference between:
  a) Relative and Absolute hyperlink
  b) Internet hyperlink and Document hyperlink
- Explain different types of "what-if" tools available in Calc.
- Define the following terms.
    i)Anchoring   ii) Scaling   iii) Cropping   iv) Wrap Text
    v) Grouping   vi) Fill format   vii) Sizing handles   viii) Alignment

ix) Arrangement   x) TOC

- Make a presentation on 'Types of Operating System'.
- **Activity No. :-**
  Roll No. (1-25) Do the activity based on session 2(Part B) "Images in a Document" given on   **Pg. No. 31** of book.
  Roll No. (26-50) Do the activity based on session 4(Part B)"Create and Use Template" given on **Pg. No.50** of book.