Bal Bharati PUBLIC SCHOOL
Sector-21, Noida, G.B. Nagar

SUMMER HOLIDAY HOMEWORK(2022-23)
CLASS IX

ENGLISH

Creative Writing

…. Suddenly it started raining and thunder rumbled. The animals frightened by the streaks of lightning and the roar of thunder, broke loose and began to run …

Write a story in 150-200 words which can have a different beginning and end but the middle must – be the same as above. *Before writing the story ,Fill in the Story Map given below*

Name: _____   Date: ___/___/_____

Story Map
(Identify and learn the elements of a book or story)

Topic: _____

Characters (Name and traits)

Setting (When and where)

Problem or Conflict (Something the MC "main character" has to solve)

Plot (Major events and key actions that contribute to the story)

Resolution/Ending (How the conflict gets solved)

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- ➢ **Read the Newspaper daily and write only one news article under the given headings like National, International, Sports, Glamour, Business and express your views on it. (100-120 words)**
- ➢ **Solve the Crossword based on Poetic Devices and paste it in Notebooks.**

Name: _____ Date: _____ Period: _____

Poetic/Literary Devices
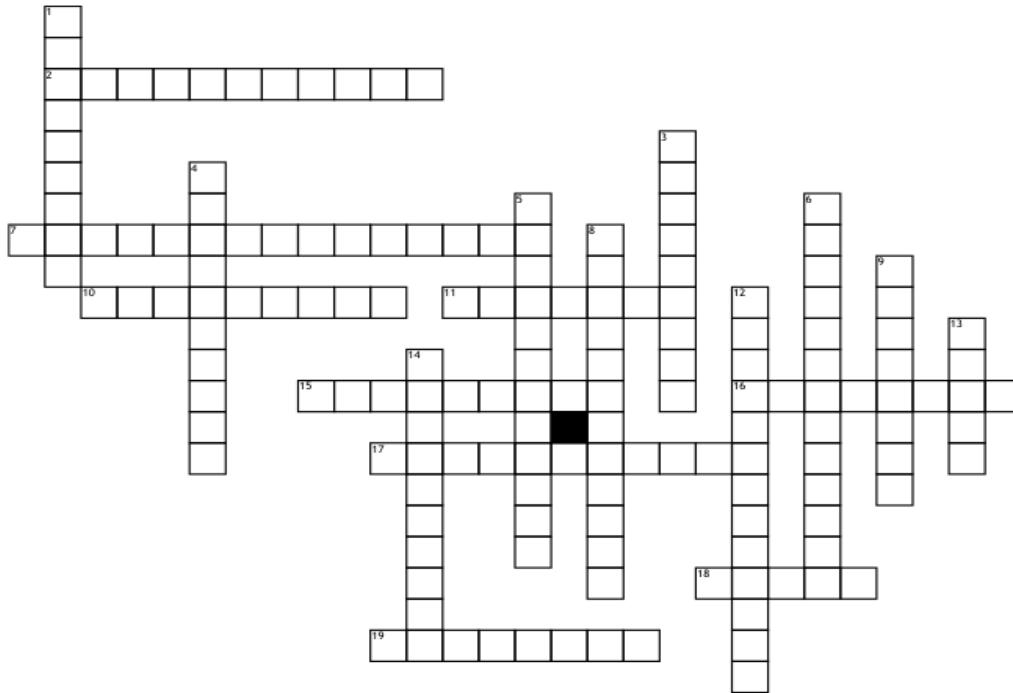
Across

2. The pattern in which rhyming happens.

7. Giving objects human characteristics.

10. To use the same vowel sound in a string of words.

11. Compare two things using like or as.

15. An over exaggeration to get a point across.

16. A Long, heroic poem.

17. Word that describes or can be attatched to another word.

18. To have two words that sound alike.

19. A rhyme that has to have both words rhyme at the end.

Down

1. Has a musical rhythm.

3. Verse or poem that does not rhyme.

4. The recurrence of similar sounds.

5. Words that make a sound.

6. Poetry that tells a story.

8. The repition of the first letter.

9. To compare two things without using like or as.

12. Rhyming involoving a word in the middle of a line and the next one at the end of the line.

13. The moral of the story that the author conveys.
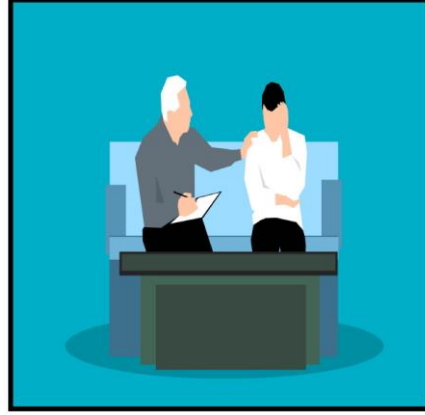
14. The literal meaning of a word.

**** All the work is to be done in Grammar Notebooks. ****

HINDI

शिक्षण-अधिगम-उद्देश्य :-

- लेखन-सृजनात्मकता तथा भावाभिव्यक्ति का पल्लवन।
- लोक-सांस्कृतिक जागरूकता।
- मनन-चिंतन का विकास।
- मौलिकता में अभिवृद्धि।

1- 'दुख का अधिकार' पाठ के आधार पर कल्पना कीजिए कि आप किसी ऐसे व्यक्ति से मिले हैं, जो अपनी विवशताओं को भूलकर आज अपना कर्तव्य निभा रहें हैं और कर्मरत हैं। आप उनका दुःख बाँटना चाहते हैं और सहारा बनना चाहते हैं। उनके साथ हुई बातचीत को संवाद के रूप में अपनी व्याकरण पुस्तिका में लिखिए।

2 - 'सरस्वती पब्लिकेशन' की 'अमृत संचय' से 'सुभद्राकुमारी चौहान की कहानियाँ' की 'मँझली रानी', दो सखियाँ तथा 'बिआहा" कहानियों का पठन-पाठन।
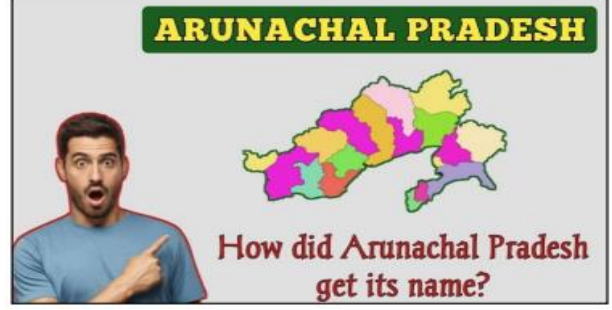
FRENCH

Les devoirs des vacances d'hiver

Préparez une brochure touristique d'une des villes de la France avec ses photos et ses descriptions.

SANSKRIT

1. अरुणाचल प्रदेशः /मेघालयः वा नाम कथं जातम् - तस्य नाम्नः सार्थकताम् प्रतिपादयन् तत्रत्यानि दर्शनीयस्थलानि संस्कृतिम् च वर्णयन् नव - दश वाक्येषु अनुच्छेदम् संस्कृतेन लिखत | सम्बन्धितम् चित्रम् अपि रचयत | (A-4/A-3 Size Pastel Sheet) (एक भारत श्रेष्ठ भारत गतिविधिः)

2. रूप याद करें-
   शब्दरूप- मातृ, पितृ , साधु, मति, नदी, (किम्, यत्, इदम् - तीनों लिंगों में)
   धातुरूप- गम्, भू, पा, दृश्, अस् (पाँचों लकार में)
3. श्लोक-गायन गतिविधि हेतु 15 श्लोक अर्थ सहित याद करें ।

PHYSICS

Activity:

Graphs are very powerful method of presenting the information.

Plan to go on a trip with your family (Trip act can be perform in nearby area). Take recording of odometer and speedometer after every 10 minutes, till you reach your destination. Record this observation in tabular form;

1. Plot graph between:
   a. distance- time and
   b. Speed- time.

2. From the graph calculate
   a. instantaneous speed/velocity
   b. the distance covered,
   c. acceleration

3. Study the nature of the graph and check whether the motion is uniform or non-uniform.

ASSIGNMENT

Q 1. Sparks coming out of a grinding stone move tangentially. How?

 Illustrate and explain few examples of uniform circular motion in everyday life.

Q2. A marble rolling on a smooth floor has an initial velocity of 0.4 m/s. If the floor offers a retardation of 0.02 m/s^2 .Calculate the time it will take to come to rest.

Q3. Rajeev went from Delhi to Chandigarh on his motor bike. The odometer of bike read 4,200 km at the start of trip and 4,460 km at the end of his trip. If Rajeev took 4h 20minutes to complete his trip, find the average speed in km/h as well as m/s.

Q4. Answer the following:
(a) State the type of motion shown by a freely falling stone.
(b)When a stone is vertically thrown upwards its velocity is continuously decreasing. Why? (c)Give an example of a motion in which average velocity is zero, but the average speed is not zero.

Q5. The minute hand of a wall clock is 10cm long. Find its displacement and the distance covered from 10:00 am to 10:30 am.

Q6. Usha swims in a 90m long pool. She covers 180 m in one minute by swimming from one end to the other end and back along the same straight path. Find the average speed and average velocity of Usha.

Complete above assignment in Physics note book activity in separate file/Physics lab file.
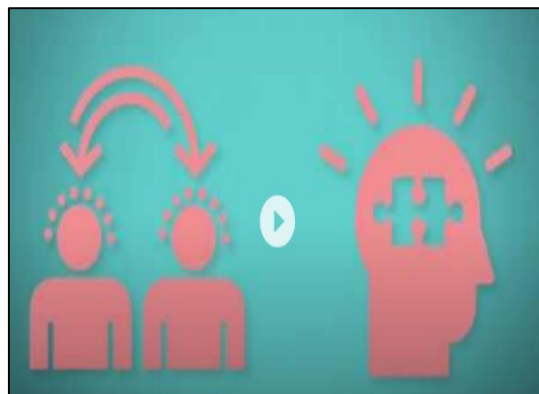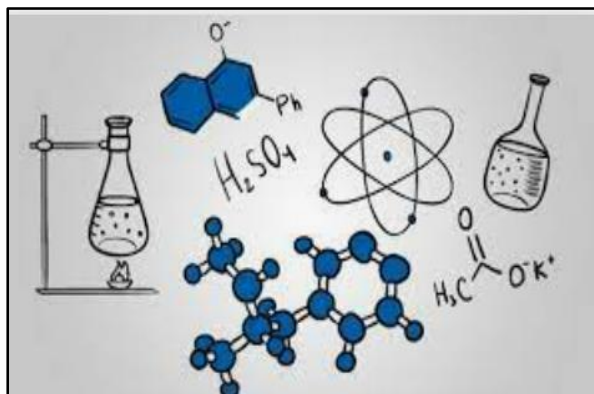
CHEMISTRY

Learning should be on. Help yourself to **test your ability to apply knowledge and concepts (for example, to determine, analyse, establish, predict, and solve) in practical work situations**.

Answer the given questions by applying concepts…

1. A sample of water under study was found to boil at 102°C at normal temperature and atmospheric pressure. Is the water pure? Will this water freeze at 0°C? Comment.

2. With the help of a schematic diagram show the position and motion of particles in the three states of matter.

3. You want to wear your favourite shirt to a party, but the problem is that it is still wet after a wash. What steps would you take to dry it faster?

4. What is a deposition? With the help of activity explain the process of deposition in ammonium chloride.

NOTE- Complete your Chapter 1 notes and question answers as discussed in classes.

BIOLOGY

1. Project work: All students will pick any one topic from Chapter 'Cell' and make a model/ chart. It is suggested to use biodegradable material for the Model.

Questions for practice on cells:

Two characteristics of living organisms are nutrition and respiration.

(a)   (i)   List **three** other characteristics of living organisms.

1.   ....

2.   ....

3.   ....[3]

(ii)   Name the process by which green plants produce carbohydrates.

....[1]

Core 2

Table 1 describes some of the characteristics of living organisms. Complete the table by identifying each characteristic described. The first one has been completed as an example.

Table 1

Description	Characteristic
Responding to stimuli in the environment	Irritability
Releasing energy from sugars	
Producing more organisms of the same type	
Getting rid of waste chemicals made in the organism	
Obtaining the materials for growth	

[4]

Core 3

Fig. 1 shows a red blood cell and a root hair cell.
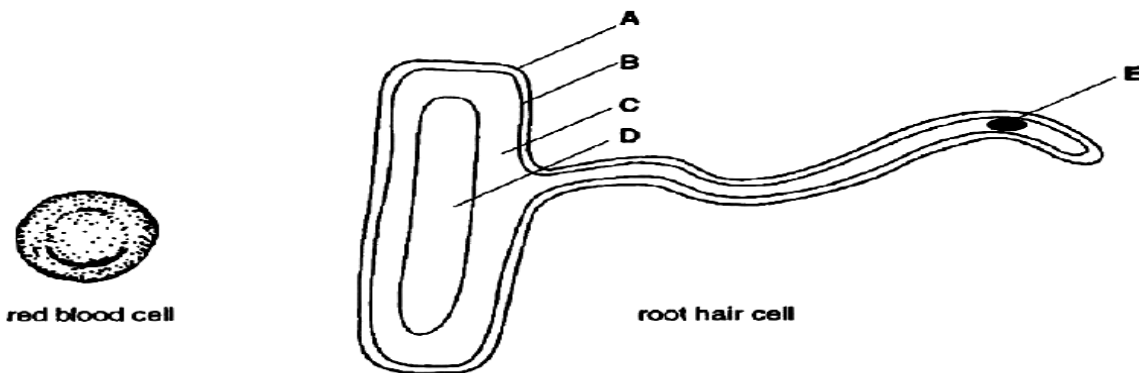
Fig 1

(a)   (i)   Select **two** structures in the root hair cell which are also present in the red blood cell. In each case state the letter, **A** to **E**, and name the structure.

1.   Letter..

Name of structure ....

2.   Letter ....

Name of structure ....[2]

(ii)   Name **one** structure which is typical of many plant cells but which is not present in the root hair cell.

.... [1]

Core 3

(b)   State **one** major function of each cell and describe **one** way in which the cell is adapted to carry out this function.

   (i)   Red blood cell.

   Function ....

   ....

   Adaptation ....

   .... [2]

   (ii)   Root hair cell.

   Function ....

   ....

   Adaptation ....

   .... [2]

An experiment was carried out to investigate the effect of different concentrations of sucrose solution on the length of potato strips.

Five test-tubes were set up, each containing a different concentration of sucrose solution. Another tube was set up containing the same volume of distilled water.

A strip of potato tissue was placed in each tube. The strips were of equal size and as shown in Fig. 2
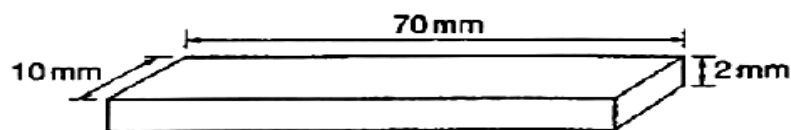
Fig. 2

These strips were completely covered by the solutions and were left in the tubes for 30 minutes. The potato strips were removed and measured. The results are shown in Table 2

Table 2

concentration of sucrose solution (mol dm^{-3})	initial length (mm)	final length (mm)	change in length (mm)
0	70	73.0	
0.2	70	71.5	
0.4	70	69.0	
0.6	70	67.0	
0.8	70	66.0	
1.0	70	64.5	

(a) (i) Complete Table 2 to show the change in length of each strip.

(ii) Plot the changes in length against the concentration of sucrose solution on the axes provided. Join the points using ruled lines.

change in length (mm)

sucrose concentration (mol. dm^{-3})

[3]

9
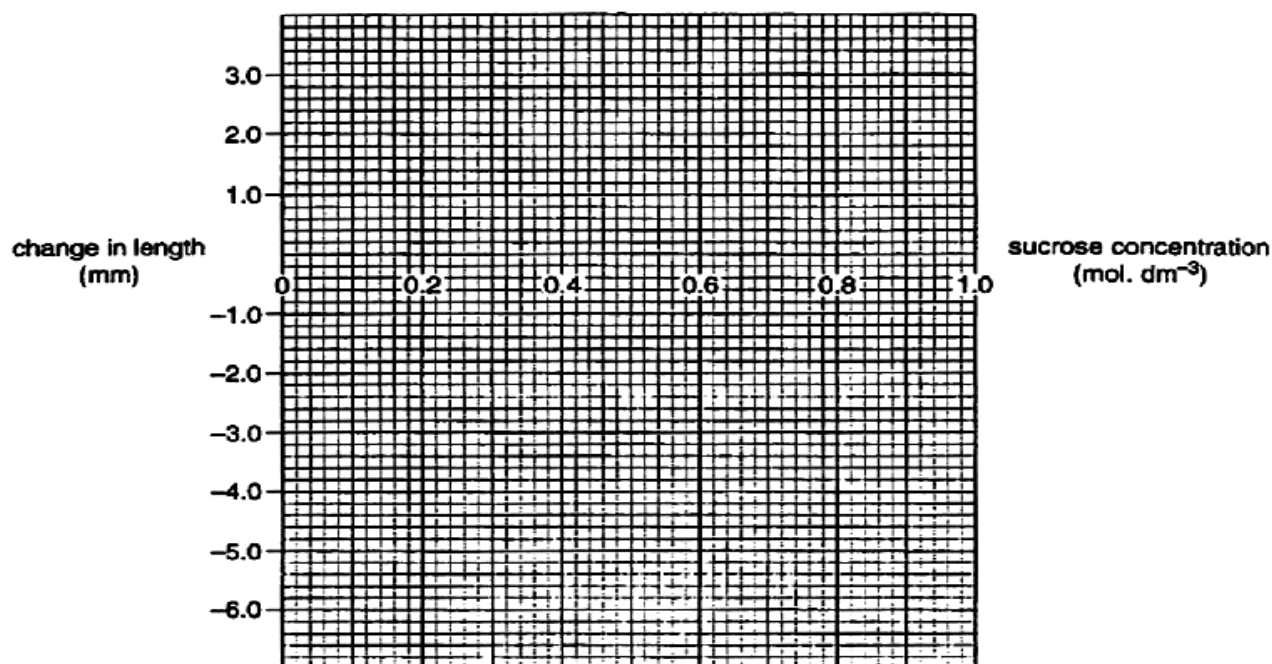
(b) (i) **What conclusions can be drawn from these results?**

....

....

....

....

....**[3]**
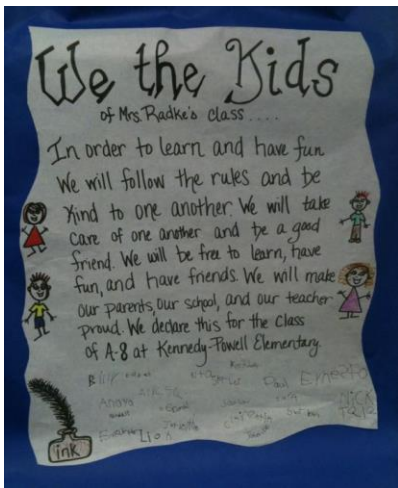
(ii) **Name the process that has taken place to bring about these changes in the lengths of the potato strips.**

....**[1]**

HISTORY/DP

CONSTITUTION IS A SET OF RULES AND REGULATIONS WHICH IS TO BE FOLLOWED BY ALL THE CITIZENS OF COUNTRY. IT SHOWS THE RELATION BETWEEN GOVERNMENT AND CITIZENS."

ACTIVITY: DESIGNING PREAMBLE

Design a preamble for your school abiding by all the students' rights and duties in school. You can also take hints from the preamble of 'Constitution of India'.

Mode of Submission: hard copy to be submitted to the Subject teacher, best one to be displayed on the class board.

Learning Outcome:

- It will develop an understanding of the Constitution, Its Significance.
- It will reflect the creativity and thinking of students
- Application & Analytical Skills: Based on the Constitution of India, children will design the Preamble for their class and will implement them.
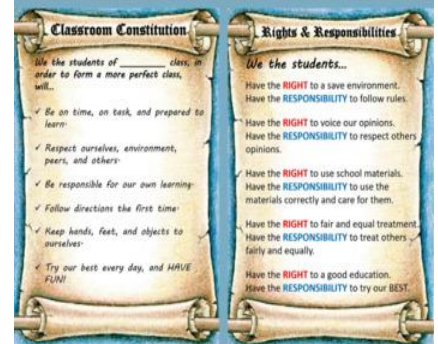
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GEOGRAPHY

Learning Outcome-:

- Understanding foundations of hazards, disasters and associated natural/social phenomena
- Familiarity with disaster management theory (cycle, phases)
- Knowledge about existing global frameworks and existing agreements (e.g. Sendai)
- Methods of community involvement as an essential part of successful DRR
- Humanitarian Assistance before and after disaster
- Technological innovations in Disaster Risk Reduction: Advantages and problems
- Experience on conducting independent DM study including data search, analysis and presentation of disaster case study

Choose an earthquake-hit area and study the following in that region (preferably recently hit areas)

1. Extent of damage and location of the epicenter.
2. Areas affected.
3. Ways of minimizing the damage.
4. Measures to be adopted to keep the inhabitants and tourists safe.
5. Guidelines to be followed by the people so that they can prevent losses in the future.

A. Suggest operations and action plan of a Rescue and Disaster Management Team in disaster-prone areas. Show the probable areas of damage on a map. Also, highlight the kind of infrastructural and structural facilities required in such areas.
B. What could be the early warning symptoms that could be best used in that area?
C. How can students play a vital role in creating physically and economically healthier areas?
D. Students to make a video while surveying a nearby community/ society referring to the questionnaire and making a video. The questionnaire is attached in the next page .

DISASTER PREPAREDNESS SURVEY

Subject ID # _____   Date: _____

1) Do you live in an area which is prone to disasters? (Ex: a hurricane prone zone, area prone to floods, large city prone to terrorist attack)

☐ **Yes**   ☐ **No**

2) Have you faced any of the following disasters? (Check if you faced any one of the below)

☐ Hurricane	☐ Dam failure	☐ Volcano
☐ Tornado	☐ Landslide	☐ Fire (home fire, wild fire)
☐ Flood	☐ Earthquake	☐ Nuclear emergency (Nuclear power plant accident)
☐ Tsunami	☐ Winter storm	☐ Terrorist attack

3) How many disasters have you faced in your lifetime? (any of the above mentioned)

☐ **None**

☐ **One**

☐ **More than one**

4) Do you have a family disaster plan to deal with disasters and emergencies? (a list of things to be done to be prepared in the event of a disaster)

☐ Yes   ☐ No

5) Do you have an emergency contact at a distant location in a case of evacuation due to a disaster/emergency? (Ex: A relative or friend's house in another city)

☐ Yes   ☐ No

6) Do you have an emergency communication plan in the event of a disaster? (Ex: how to contact family members located at different places in an emergency situation, through phone or any other source)

☐ Yes   ☐ No

17) Do you have an emergency evacuation plan to deal with disasters? (Like a place to meet, how to meet, a safer place to move in the event of a disaster)

☐ Yes   ☐ No

8) Do you know about the emergency helpline number (311) for information on evacuation routes, shelters and special needs transportation?
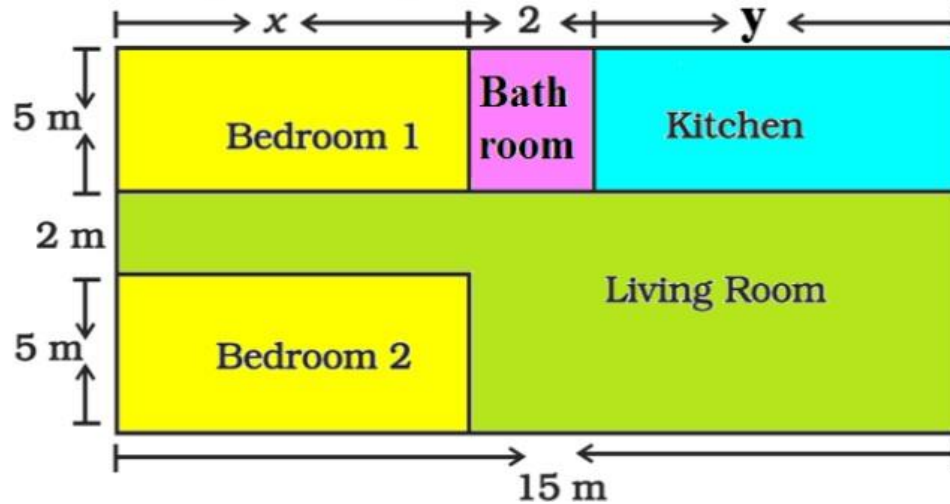
☐ Yes   ☐ No

9) Do you know about your community emergency plan for disasters?

☐ Yes   ☐ No

MATHEMATICS

<div align="center"><u>CASE STUDY-1</u></div>

In the below given layout, the design and measurements has been made such that area of two bedrooms and Kitchen together is 95 sq. m.

Based on the above information, answer the following questions: (Attempt any four)
(i)   Form the pair of linear equations in two variables from this situation.
(ii) Find the length of the outer boundary of the layout.
(iii) Find the area of each bedroom and kitchen in the layout.
(iv) Find the area of living room in the layout.
(v)   Find the cost of laying tiles in Kitchen at the rate of Rs. 50 per sq. m

<div align="center"><u>CASE STUDY-2</u></div>

The department of Computer Science and Technology is conducting an International Seminar. In the seminar, the number of participants in Mathematics, Science and Computer Science are 60, 84 and 108 respectively. The coordinator has made the arrangement such that in each room, the same number of participants are to be seated and all of them being in the same subject. Also, they allotted the separate room for all the official other than participants.

Based on the above information, answer the following questions: (Attempt any four)
(i)   Find the total number of participants.
(ii) Find the LCM of 60, 84 and 108.
(iii) Find the HCF of 60, 84 and 108.
(iv) Find the minimum number of rooms required, if in each room, the same number of participants are to be seated and all of them being in the same subject.
(v)   Based on (iv) conditions, find the minimum number of rooms required for all the participants and officials.

Square Root Spiral

ACTIVITY:1

To construct a square root spiral of natural numbers

1. Students will make square root spiral is a spiral formed by right angle triangles placed edge-to-edge, where the hypotenuse of each triangle is the square root of natural number.

2. For reference: https://youtu.be/euBWEpJ5DSk

3. Square Root Spiral - YouTube

ACTIVITY:2

Verification of the Identity $(a+b+c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$

EXEMPLER PROBLEMS
Solve
Chapter 1: Number system
Chapter 2: Polynomials
Each from NCERT Exemplar Problems
Learning outcomes /Skills acquired

- Presentation

- Logical reasoning

- Numerical ability

- Problem-solving

- Creativity

ARTIFICIAL INTELLIGENCE

1.   Choose any one topic and make a flipbook:

a). Types of threats

b). Cyberbullying

c). Safety tips while using Internet Banking

FMM

➢ Banks play an important role in financial stability and the economy of a country. Prepare a project on banking highlighting different aspects of banking i.e. How to open a Bank Account, different types of deposits and accounts, importance of electronic banking.

➢ Watch the series Scam 1992 and identify any 15 terms related to the stock market and define them in the fmm register to be discussed in the class .

➢ Attempt the questions provided in the assignment for the month of May-June in your registers.

NOTE: THE WEIGHTAGE OF HOLIDAY HOMEWORK IS 20 MARKS IN PRE TERM ASSESSMENT.

SUBJECT	DATE
HINDI, FRENCH & FMM	5 JULY 2022
ENGLISH, SANSKRIT & AI	6 JULY 2022
HISTORY, GEOGRAPHY & ECONOMICS	7 JULY 2022
MATHS & PHYSICS	8 JULY 2022
CHEMISTRY & BIOLOGY	11 JULY 2022

STAY SAFE, STAY HEALTHY,

AND HAPPY LEARNING

😊 😊 😊