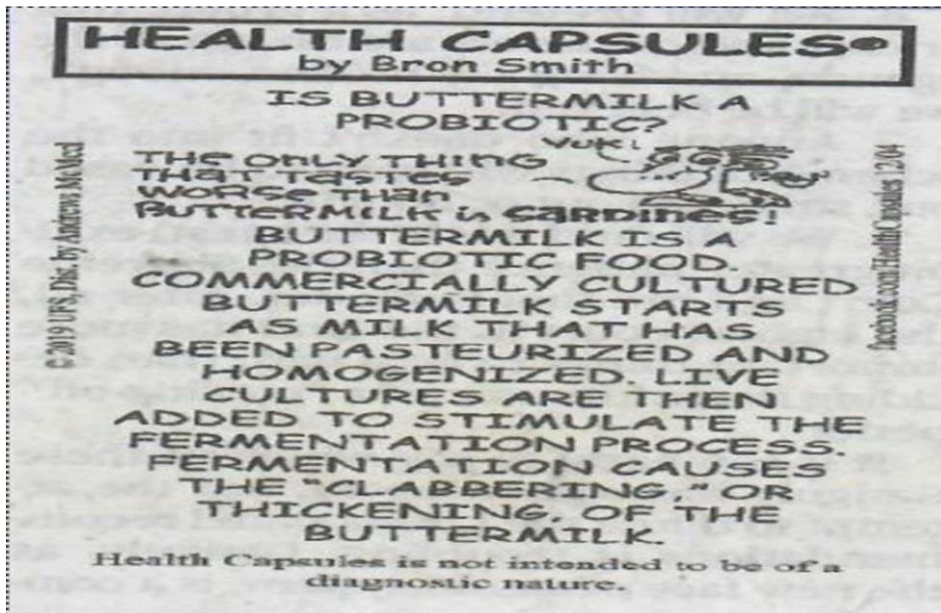# SUMMER HOLIDAY HOMEWORK (2023-24)
CLASS IX

SUBJECT: ENGLISH

Q1. Use the information in the clip below to answer the questions that follow:

1. 'Health Capsules' intend to

    a. Educate people about common health myths.

    b. provide diagnostic health information.

    c. teach important facts to school children.

    d. encourage use of traditional cuisines in diet.

2. Pasteurized milk is

    a. Raw milk that has been chemically treated to make it safe for consumption.

    b. raw milk that has been heated to a specific temperature and time to eliminate pathogens and extend shelf life.

    c. standard milk which is preferred for consumption of children.

    d. raw milk that is sterilized by applying low heat.

3. Arrange the steps given below in the correct sequence for preparation of buttermilk

4. Addition of live culture ii. Packaging iii. Clabbering iv. Procuring milk v. Pasteurization & homogenation vi. Fermentation

a. ii, iv, i, v, vi, iii   b iv, i, v, vi, iii, ii

c.iv, i, v, iii, vi, ii   d iv, v, i, vi, iii, ii

Q2. Write a paragraph describing the following prominent personalities in about 150 words on

  I.   ROLL No 1-15 Evelyn Glennie (Refer lesson 2 in Beehive)
 II.   ROLL No. 16-30APJ Abdul Kalam (Refer lesson 6 in Beehive)
III.   ROLL No. 31-40Santosh Yadav (Refer lesson 8 in Beehive)
 IV.   ROLL No.41-47 Maria Sharapova (Refer lesson 8 in Beehive)

Q3. Paste pictures reflecting difference between features of old schools and Margie's School.

Q4. Complete Unit 1 of the Book Words and Expressions -1. (To be done in Books only)

Q5. Complete the Art Integrated Activity (Story Board Making of the Poem- the Road not Taken).

SUBJECT: HINDI

1. शिक्षण-अधिगम-उद्देश्य :-
   o लेखन-सृजनात्मकता तथा भावाभिव्यक्ति का पल्लवन।
   o लोक-सांस्कृतिक जागरूकता।
   o मनन-चिंतन का विकास।
   o मौलिकता में अभिवृद्धि।

'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 ग्रामीणा, रूपा, 'मँझली रानी', दो सखियाँ तथा 'बिआहा'' कहानियों का पठन-पाठन।

3. अप्रैल/मई माह की कार्यपत्रिका अपनी व्याकरण-पुस्तिका में पूर्ण करें।

संस्कृत

1. कस्यचित् दर्शनीयस्थलस्य/ पर्वतीयस्थलस्य यात्राम् वर्णयन् नव-दश वाक्येषु अनुच्छेदम्.संस्कृतेन लिखत । सम्बन्धितम् चित्रम् अपि रचयत । (A-4/A-3 Size Pastel Sheet).शिक्षण अधिगमः कौशलम् च - लेखन कौशलम्, कल्पनाशीलता, देशाटनम् प्रति रुचिः,देशस्य संस्कृतेः ज्ञानम् ।

2. रूपाणि लिखत स्मरत च -शब्दरूपाणि- साधु, मति, नदी, अस्मद्, युष्मद्, (किम्, यत्, इदम्- त्रिषु लिंगेषु) धातुरूपाणि-परस्मैपदी – गम्, भू, पा, अस् (पञ्चसु लकारेषु) आत्मनेपदी-सेव्, लभ् (लट्, लृट् लकारः च) सर्वम् कार्यम् उत्तरपुस्तिकायाम् लिखत स्मरत च। अप्रेल/मई कार्यपत्रिकायाः सर्वम् कार्यम् उत्तर-पुस्तिकायाम् लिखत स्मरत च।

3. प्रथमचक्रीय-परीक्षायाः कृते अभ्यासम् कुरुत ।

4. श्लोक- गायनस्य गतिविधेः हेतोः दश श्लोकान् सार्थान् स्मरत । शिक्षण अधिगमः कौशलम् च - परीक्षायाः गतिविधेः च कृते अभ्यासः अवबोधनम् च ।

SUBJECT - FRENCH

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

- Décrivez vos vacances d'été en dans votre cahier (à peu près 80 mots).

SUBJECT- HISTORY/ DP

WE THE PEOPLE….

"THE PREAMBLE OF THE CONSTITUTION READS LIKE A POEM ON DEMOCRACY. IT CONTAINS THE PHILOSOPHY ON WHICH THE ENTIRE CONSTITUTION HAS BEEN BUILT. IT PROVIDES A STANDARD TO EXAMINE AND EVALUATE ANY LAW AND ACTION OF GOVERNMENT, TO FIND OUT WHETHER IT IS GOOD OR BAD. IT IS THE SOUL OF THE INDIAN CONSTITUTION."

ACTIVITY: DESIGNING A POETIC PREAMBLE FOR SCHOOL

Design a poetic 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'.
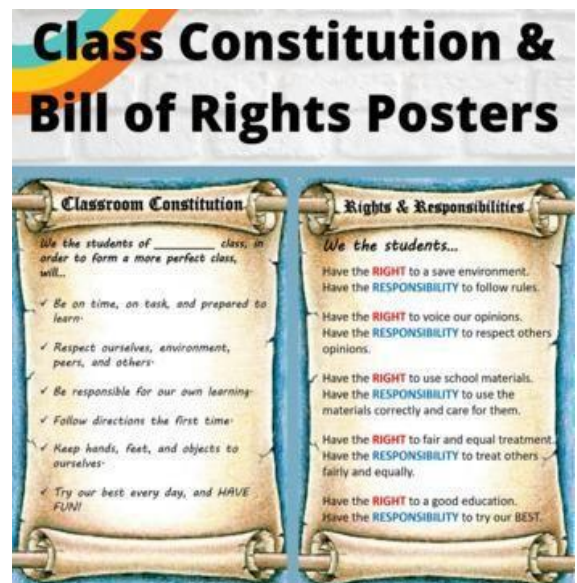
MODE OF SUBMISSION: hard copy to be submitted to the Subject teacher, best one to be displayed on the class board.

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.

LINK:
https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.pinterest.com%2Fpin%2F344243965238670734%2F&ps ig=AOvVaw1ZiuWDaPWlFSQBOeiDf701&ust=1653420588341000&source=images&cd=vfe&ved=0CAwQjRxqFwoT CLDQsu2t9vcCFQAAAAAdAAAAABA6

SUBJECT- 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**   6

☐ **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 7 No

SUBJECT - PHYSICS

ACTIVITY:

Graphs are very powerful method of presenting the information. Plan to go on a trip with your family (Trip act can be performing 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.
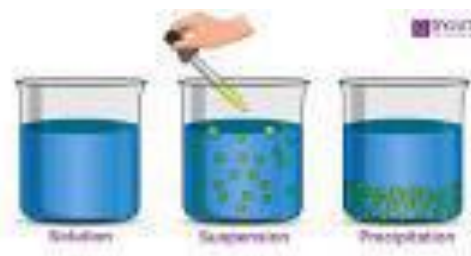
Complete above assignment in Physics note book and activity in Physics lab file.
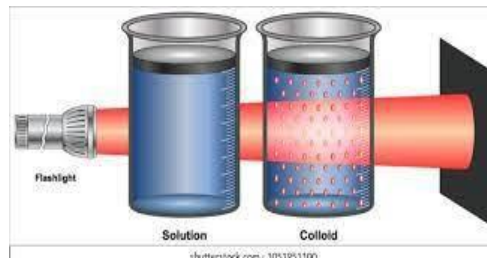
SUBJECT-CHEMISTRY

PROJECT ACTIVITY

● Identify the types of solutions (True solution, colloidal solution and suspension) in your home and compare the properties of at least of each in a tabular form.
● Stick at least five of each samples (in a small transparent sachet) of each type of solution on your sheet and specify their properties after identifying them.
● This project can be submitted in a folder or in a file.

ASSIGNMENT
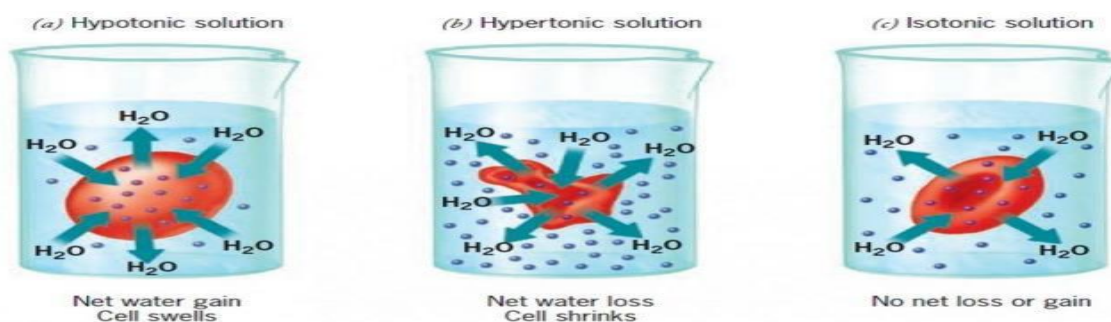
Complete your assignment questions in your register.

SUBJECT- BIOLOGY

Select any three fruits and vegetables of your choice and use these to show activity with hypertonic solutions, hypotonic solutions and isotonic solutions.

Record your activity in the form of a video of not more than 2 minutes. Also Prepare P.P.T to explain your observation and conclusion.
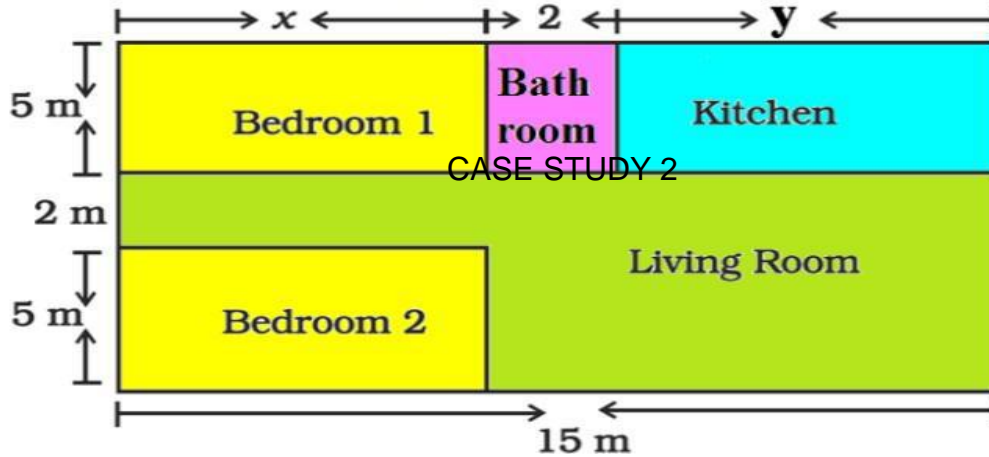
Explain disadvantages and advantages of both Exosmosis as well as endosmosis.

SUBJECT- MATHEMATICS

CASE STUDY-1

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

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.
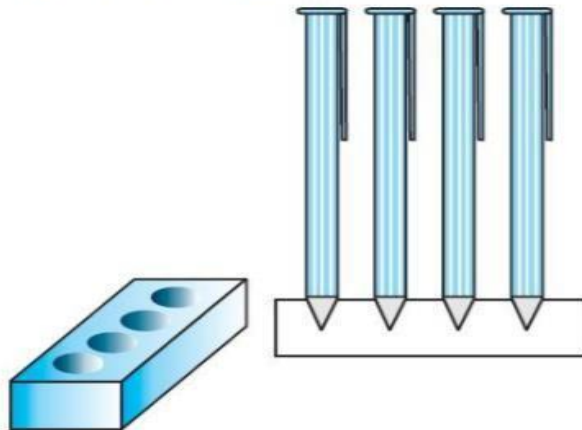
CASE STUDY 2

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.

A student made a wooden pen stand which is in the shape of a cuboid with four conical depressions to hold pens. The dimensions of the cuboid are 15 cm by 10 cm by 3.5 cm. The radius of each of the depressions is 0.5 cm and the depth is 1.4 cm. Find the volume of wood in the entire stand (see the below figure).

(a) What is the volume of cuboid?
   (i) 525 cm³ (ii) 225 cm³ (iii) 552 cm³ (iv) 255 cm³.

(b) What is the volume of cone?
   (i) $\dfrac{11}{3}$ cm³ (ii) $\dfrac{11}{30}$ cm³ (iii) $\dfrac{3}{11}$ cm³ (iv) $\dfrac{30}{11}$ cm³.

(c) What is the total volume of conical depressions?
   (i) 1.74 cm³ (ii) 1.44 cm³ (iii) 1.47 cm³ (iv) 1.77 cm³

(d) What is the volume of wood in the entire stand?
   (i) 522.35 cm³ (ii) 532.53 cm³ (iii) 523.35 cm³ (iv) 523.53 cm³

(e) The given problem is based on which mathematical concept?
   (i) Triangle (ii) Surface Areas & Volumes (iii) Height & Distances (iv) None of these

Square Root

To construct a square root spiral of natural numbers   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. For reference: https://youtu.be/euBWEpJ5DSk

EXEMPLER PROBLEMS

Chapter 1: Number system, Chapter 2: Polynomials Each from NCERT

COMPETENCY BASED

Question 1

Fill in the blanks with the correct numbers to match with the operation, and by obeying the rules of the game.

Sl.No.	No. given by Player 1	Number is	Operation	No. selected by Player 2	Answer	Answer is
1	$\frac{2}{3}$	Rational	$\div$	$\sqrt{2}$	$\frac{\sqrt{2}}{3}$	Irrational
2	$\sqrt{36}$		$\times$			
3	$-\sqrt{21}$		$+$			
4	0.15		$-$			
5	$\frac{8\pi}{5}$		$\times$			
6	$\frac{\sqrt{225}}{7}$		$\div$			

Table 1.1. Rational and irrational numbers

LEARNING OUTCOMES /SKILLS ACQUIRED: Presentation, Logical reasoning, Numerical ability, Problem-solving Creativity

Question 5

Tsering got the information that the total tiled area including the strips of tiles on the walls is 468 square metres. If he assumes the side of a tile to be x metres, which of the following is the correct option of total area of the tiles installed in terms of x ?

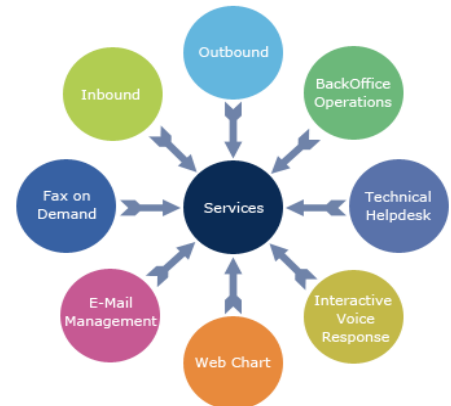|		Answer
a. $1800x^2 + 360x = 468$	b. $180x^2 + 360x = 468$	
c. $1800x^2 + 36x = 468$	d. $180x^2 + 360x = 46$	

SUBJECT - INFORMATION TECHNOLOGY

Prepare a document in MS Word on IT enabled services. Page should be well formatted with the following

1. Page Number
2. Page Border
3. Page colour
4. Formatted table showing the different types of IT enabled services and applications.
5. Insert 2-3 relevant pictures and wrap text

SUBJECT – ARTIFICIAL INTELLIGENCE

RESEARCH BASED ACTIVITY

Project Document must comprise:
- Cover Page with the names of the group along with members
- Index
- Basic Intro/ About the research topic
- How it Works/ What's happening around
- Research Core Area
- Data Visualizations
- Infographics
- Data Privacy Issues
- Inferences/Conclusions
- Citations/References

PROJECT TOPICS:
- Recommendation models
- Natural Language Processing Applications
- Sentiment Analysis in Text/Voice
- Humanoids Vs Humans
- Big Data - How apps collect data
- ChatGPT - A revolutionary bot
- Autonomous Cars – Future of Transportation
- AI shaking up the Job Market
- AI shaping the Entertainment Sector
- AI in Gamin

PROJECT DETAILS:
- The project has to be made with collaborative effort of all team members. Each team/group can have 2-4 members.
- The team shall submit the project document hardcopy in the first week of July,2023.
- The students can select any one or more companies or brands to have a focussed research.
- The team shall present their project with the help of presentations and other support materials.

VALUABLE LINKS:
For data visualization and finding correlations
https://codap.concord.org/

For making charts and infographics
https://infograph.venngage.com/

For Data
Kaggle: Your Machine Learning and Data Science Community

SUBJECT -FINANCIAL MARKET MANAGEMENT

Unit1: Money-What it is?

1.What is money?
2.What is symbolic money?
3.What is Minting?
4.What is plastic money?
5.What do you mean by barter system? State its limitation.
6.Which country first invented paper money and when it was discontinued?
7.Who introduced paper money in India and when?
8.Why creation of money was made possible? Explain the sequence of evolution of money.

PROJECT WORK
Students are required to prepare a Power Point Presentation on the TOPIC

"FOUR PROMINENT CURRENCIES IN THE WORLD".

TOPICS TO BE COVERED: -

1. Evolution
2. Importance
3. Change in currency design pattern.

Schedule of Submission/Presentation of Holiday H.W.

NOTE: Weightage of holiday homework is 20 marks for each subject.

S.No.	SUBJECT/S	DATE OF SUBMISSION
1.	Science (Physics, Chem. & Bio.), AI	5 July 2023
2.	Eng., French, Hindi, Sanskrit, FMM	6 July 2023
3	Social Science (Geo., Hist. & Eco.), Maths	7 -14 July 2023

STAY SAFE, STAY HEALTHY,

AND HAPPY LEARNING

☺ ☺ ☺