DAV CENTENARY PUBLIC SCHOOL, ROHTAK
HOLIDAY HOMEWORK (SUMMER - 2023)
CLASS –IX
Subject – English

PROJECT

NOTE-

*Do any 4 of the following activities. Read the instructions & key points carefully given against each activity.
*Present your all sheets of Holidays Homework in spiral binding project file after completion.

ACTIVITY-1   MANIPUR   - MARVEL OF INDIA

Manipur is a state located in North eastern part of India. It's Economy centers on Agriculture and Forestry. The nature loving people crave to visit it as crystal clear lakes, rivers, flora & fauna with Cascades adds to the charm of its Scenic beauty. A Guidebook is very helpful to know a place better when you visit it.

Design a Guidebook (a small, handy & of 7-8 pages only) of Manipur using your creativity. Page wise description of the book is as follows-

Page 1-Title & Cover page designing

Page 2- Area, location & capital

Page 3-Historic background of Manipur (80-100 words only)

Page 4-Flora & fauna

Page 5, 6 & 7- any 3 famous tourist spots with photographs, significance lodging & boarding etc.

WHERE TO DO - CUT THE PAGES YOUR OLD PROJECT FILE IN SMALL SIZEOF 2'X3' inch only & PASTE THIS SMALL BOOKLET IN HOLIDAYS' HOMEWORK FILE.

ACTIVITY – 2   COLLATE & COLLABORATE

In a group of 4-5 students, search passionately on social media & choose any 3 tasks from the following-

Task 1   Compare & contrast

Write the biography & bibliography of any two Poets/Authors/philanthropist/Artist of Haryana &Manipur both).Paste their photographs.

Task 2   let's be - literati

Search some basic courteous Manipuri sentences/ phrases/words of day to day life (at least 20) & make a chart.

Write In all the three languages- English, Manipuri & Hindi. Some sample sentences/words are given below-

1. Hello

2. Good morning

3. Thank you

4. I am thankful

5. Sorry

Task 3 Write Manipuri numbers in a clean & legible manner along with your page numbers in the ncert book BEEHIVE.   (Take help of Google Guru)

Task 4   Gossip session

 Listen to any famous Manipuri Legend on you tube; share it with your parents/ any elderly member of the family.

Ask them to tell you any Haryanvi legend in return.

Share your feelings in the form of a descriptive paragraph.

Click photographs of your memorable conversations with parents/ grandparents & paste any one along with.

Where to do- A3 size sheet.

ACTIVITY- 3   DESIGN A NEWSPAPER

HOW TO DO – The Newspaper should have three sections as below-
1. Quotes by famous poets with their names. (Any 3)
2. Entertainment – English jokes, short stories, poems recipes, etc.(Any three)
3. Games and puzzle based on tenses verbs, preposition or conjunctions (Any one).

WHERE TO DO – A3 SIZE SHEETS

(Note – Give a suitable title of your own choice to your newspaper.)

ACTIVITY - 4

C – Write 2 Diary Entries describing your experience of the following important days falling in the month of June, in the proper format on A3 sheets-

I.   How did you celebrate Father's Day which falls in June month?
II.   How did you celebrate International Yoga Day 21st June.

D – Learn all the chapters & poems covered till date. Lay stress on short 2 marker questions.

ACTIVITY –5 I CAN &I WILL...

*Get up early in the morning. See sunrise daily.

*Develop friendship with a plant. Prune & water it daily.

Hug it & click a photograph.

*Leave any one bad habit that your parents are worried about.

*Spend quality time with paternal/ maternal grandparents.

Gossip about-

1. How did they spend their childhood?

2. The kinds of games they used to play.

3 The kind of home remedies for minor ailments.

Note- Write your experience of each activity in short paragraphs of 5-6 lines only. Paste photographs as evidence.

(हिंदी)

लेख सुंदर व स्पष्ट लिखें।
1. प्रतिदिन एक सुलेख लिखें। (लेखन सुधार हेतु)
2. निम्नलिखित विषयों पर अनुच्छेद लिखिए–
    साइबर युग, साइबर ठगी : सावधानियाँ एवं सुरक्षा उपाय
    विद्यार्थी जीवन में समय का महत्व
    जल संरक्षण – आज की आवश्यकता
    हमारी बहुमूल्य संपत्ति : हमारी वन संपदा
3. दो औपचारिक व दो अनौपचारिक पत्र लिखें।
4. हिंदी साहित्य के निर्गुण भक्ति के कवियों एवं उनके काव्य कृतियों की सूची बनाइए। (चित्र सहित)
5. लघु कथा लिखिए–
    'मन के हारे हार है, मन के जीते जीत' उक्ति को आधार मानकर लघु कथा लिखिए।
    'संगठन में शक्ति होती है' उक्ति को आधार मानकर लघु कथा लिखिए।
    अभिमान विनाश का कारण है।
6. संवाद लेखन–
    दो व्यक्तियों के बीच भ्रष्टाचार को लेकर बातचीत को संवाद के रूप में लिखिए।
    अरुण और उमेश नामक दो मित्र फिल्म देखने के बाद उस पर चर्चा करते हैं। उन दोनों के बीच होने वाली वार्तालाप को लिखिए।
7. सूचना लेखन–

विद्यालय में छुट्टी के दिनों में भी प्रातःकाल में योग की अभ्यास कक्षाएँ चलने की सूचना देते हुए इच्छुक विद्यार्थियों द्वारा अपना नाम देने के हेतु सूचना–पट्ट के लिए एक सूचना लगभग 30 शब्दों में लिखिए।

विद्यालय में आयोजित होने वाली वाद–विवाद प्रतियागिता के लिए हिंदी विभाग के संयोजक की ओर से 25–30 शब्दों में सूचना लिखिए।

रचनात्मक कार्य

हरियाणा एवं मणिपुर की भाषा, साहित्य एवं वेशभूषा का तुलनात्मक वर्णन करते हुए पीपीटी व फाइल बनाएँ।

पाठ्य पुस्तक (क्षितिज)

पाठ–1 दो बैलों की आत्मकथा

पाठ–2 ल्हासा की ओर

पाठ–3 उपभोक्तावाद की संस्कृति

(कक्षा कार्य दोहराएँ एवं कार्य प्रपत्र हल करें)

नोट–गृहकार्य रचनात्मकता का प्रस्तुतिकरण करते हुए फाइल अथवा नोटबुक में करें।

Subject – Mathematics

Holiday is the time that we all eagerly wait for. We all make plans to enjoy, to relax And to empower ourselves during these gala days. This summer vacation the Holiday Homework so designed by the mentors of the school is a medium for you all to achieve The motto of "Fun and Learn"

The activity based assignments will foster curiosity, develop creativity, enhance knowledge and instil the joy of learning among you all. They will certainly help you discover a new you who is more enriched and confident and performs every action to perfection.

-Mathematics Model-

ROLL NUMBERS	CHAPTERS
1,2,3,4,5,6,7,8	1.NUMBER SYSTEM
9,10,11,12,13,14,15,16	2. POLYNOMIALS
17,18,19,20,21,22,23,24	4. PAIR OF LINEAR EQAUTIONS IN TWO
33,34,35,36,37,38,39,40	

Question:2

Make a project on comparison of Haryana and Manipur based on

1) AREA
2) CULTURE
3) FOOD HABITS
4) POPULATION
5) RELIGION

Question 3:-Do assignments in separate notebook.

Assignment

Chapter – 1 (Number System)

Q1. Answer the following questions in one word or one sentence.

   a) A real number is either _____ or _____ .

   b) Find the number which is a whole number but not a natural number.

   c) √ is called the sign of _____ .

   d) What is the conjugate of 3+$\sqrt{5}\sqrt{5}$.

   e) $\sqrt{4}\sqrt{4}$ is _____number.(rational /irrational)

   f) 3.14014001400014……….. is an _____ number .(rational /irrational)

Q2. Express each of the following in the form p/q.

   a) -25.6875

   b) 15.7 12

   c) 0.05

   d) 0.3 178

Q3. Find simplest rationalizing factor of

   a) $\sqrt{64}$

   b) $\sqrt[3]{32}$

   c) $\sqrt[3]{5}$

   d) $\sqrt{3} - \sqrt{2}$

Q4.Simplify

   a) $(32)^{2/5}$

   b) $2^{2/3}.2^{1/5}$

   c) $\sqrt[4]{81^8}$

   d) $\sqrt[3]{16^{-3}}$

Q.5 Find a and b so that

$i)$ $\frac{5+2\sqrt{3}}{7+4\sqrt{3}}$ $i)$ $\frac{5+2\sqrt{3}}{7+4\sqrt{3}} = a + b\sqrt{3}$

$ii)\frac{\sqrt{7}-1\sqrt{7}+1}{\sqrt{7}+1\sqrt{7}-1} = a + b\sqrt{7}$

iii) $\dfrac{\sqrt{11}-\sqrt{7}}{\sqrt{11}+\sqrt{7}} = a - b\sqrt{77}$

Q6. If x= $\dfrac{\sqrt{3}+1}{2}$, find the value of $4x^3+2x^2-8x+7$.

Q7. Represent the following numbers on the number line

a) $1+\sqrt{2}$

b) $3\sqrt{3}$

c) $\sqrt{2.3}$

Q8. Visualise 3.5757………. on the number line upto 4 decimal places using successive magnification.

Q9. If x= $\dfrac{\sqrt{2}+1}{\sqrt{2}-1}$ and y=$\dfrac{\sqrt{2}-1}{\sqrt{2}+1}$ find the value of $x^2 +x\,y +y^2$.

Q10.If x $=3+\sqrt{8}$ find the value of $x^2 +\dfrac{1}{x^2}$

Q11.Simplify the following

a) $\dfrac{1}{\sqrt{3}+\sqrt{2}+1} + \dfrac{1}{\sqrt{3}-\sqrt{2}-1}$.

b) $\dfrac{\sqrt{2}}{\sqrt{2}+\sqrt{3}-\sqrt{5}}$

Q12.Prove that $\dfrac{1}{1+\sqrt{2}} + \dfrac{1}{\sqrt{2}+\sqrt{3}} + \dfrac{1}{\sqrt{3}+\sqrt{4}} \cdots \cdots + \dfrac{1}{\sqrt{8}+\sqrt{9}} = 2$

Q13.If $\sqrt{18 - 6\sqrt{5}} = \sqrt{a} - \sqrt{b}$ then Prove that a+b=18.

Chapter :-2
POLYNOMIALS

1. Which of the following is a polynomial?
   (i) $x + 1$ (ii) $3\sqrt{x} + \sqrt{3}x$ (iii) $5x^3 - \frac{3}{4}x^2 + \sqrt{7}x - 2$
   (iv) $x -\frac{3}{4} + x^{2\!/\!3}$
        x

2. Degree of the polynomial : $2u (u + 4) (u – 5)$ is-
   (i) 1   (ii) 2   (iii) 3   (iv) 4

3. Which of the following is a polynomial which when divided by (x - 2) gives ($x^2 + x - 6$) as quotient and 3 as remainder?
   (i) x + 3   (ii) x - 3   (iii) $x^3 - x^2 - 8x + 15$ (iv) $x^3 - x^2 - 4x - 9$

4. $\dfrac{z^2 - 8z + 15}{z - 5}$ = _____
   (i) z + 5   (ii) z – 5   (iii) z + 3   (iv) z – 3

5. If $x + \dfrac{1}{x} = 5$, then, $x^2 + \dfrac{1}{x^2}$ = ____.
   (i) 20   (ii) 23   (iii) 27   (iv) 30

6. (x + 8)(x – 10) in the expanded form is:
   (i) $x^2 – 8x – 80$ (ii) $x^2 – 2x – 80$ (iii) $x^2 + 2x + 80$ (iv) $x^2 – 2x + 80$

7. If x – 2 is a factor of $x^3 – 2ax^2 + ax – 1$ then the value of a is:
   (i) 7/6   (ii) -7/6   (iii) - 6/7   (iv) 6/7

8. If $p(x) = 5x^2 – 3x + 7$, then p(1) equals
   (i) –10   (ii) 9   (iii) –9   (iv) 10

9. If (x + 2) and (x – 2) are factors of $ax^4 + 2x – 3x^2 + bx – 4$, then the value of a + b is
   (i) –7   (ii) 7   (iii) 14   (iv) –8

10. Without actual calculating the cubes the value of $28^3 + (–15)^3 + (–13)^3$ is:
   (i) 16380   (ii) –16380   (iii) 15380   (iv) –15380

11. Compute the perimeter of a rectangle whose area is $25x^2 – 35x + 12$.

12. Factorise:- $2x^2 + y^2 + z^2 – 2\sqrt{2}xy + 4\sqrt{2}yz – 8xz$

13. If a + b + c = 15 and $a^2 + b^2 + c^2 = 83$, find the value of $a^3 + b^3 + c^3 – 3abc$.

14. If (x – 1/x) = 4, then evaluate (x^2 + 1/x^2) and (x + 1/x).

15. Find values of a and b so that ($2x^3 + ax^2 + x + b$) has (x + 2) and (2x-1) as factors.

Case Study Questions
Question 1:

On one day, principal of a particular school visited the classroom. Class teacher was teaching the concept of polynomial to students. He was very much impressed by her way of teaching. To check, whether the students also

understand the concept taught by her or not, he asked various questions to students. Some of them are given below. Answer them.

(i) Which one of the following is not a polynomial?
(a) $4x^2 + 2x - 1$
(b) $y + (3/y)$
(c) $x^3 - 1$

(d) $y^2 + 5y + 1$

(ii) The polynomial of the type $ax^2 + bx + c$, a = 0 is called
(a) Linear polynomial
(b) Quadratic polynomial
(c) Cubic polynomial
(d) Biquadratic polynomial

(iii) The value of k, if $(x - 1)$ is a factor of $4x^3 + 3x^2 - 4x + k$, is
(a) 1
(b) –2
(c) –3
(d) 3

(iv) If x + 2 is the factor of $x^3 - 2ax^2 + 16$, then value of a is
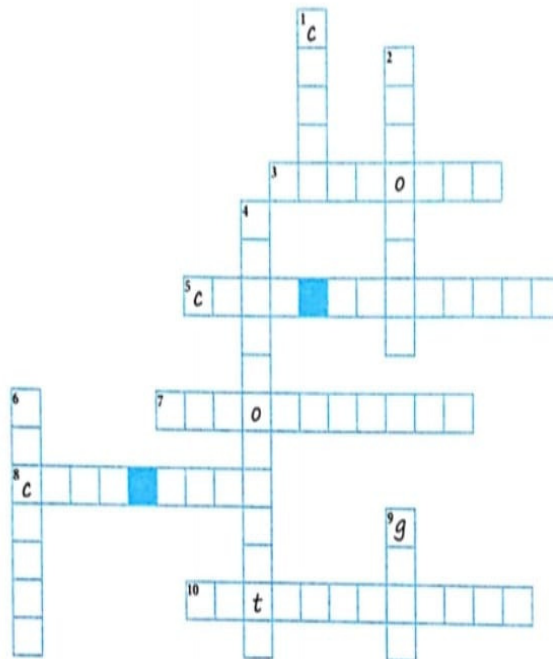(a) –7
(b) 1
(c) –1
(d) 7

(v) The number of zeroes of the polynomial $x^2 + 4x + 2$ is

(a) 1

(b) 2

(c) 3

(d) 4

CHAPTER-4
LINEAR EQUATIONS IN TWO VARIABLES

1. Draw the graph of equation 2x+3y-6=0:
    a. From the graph determine whether x=3 and y=0 is a solution.
    b. Find the value of y if x=-3
    c. Find the value of x if y= -2 , From the graph.
2. The age of Mohit exceeds the age of Rahul by 2 years. Write the linear equation in 2 variables to represent this statement.
3. Plot the graph of the following linear equation: 2(x+3)-3(y+!) =0. Write the quadrant in which the line segment intercepted between the axes lie. Shade the triangular region formed by the line and the axes.
4. Write the equation of: i) x-axis   ii) y-axis
5. The cost of a table is seven times the cost of chairs. Write linear equation in 2 variables in the form ax+by+c=0. Write the values of a,b and c also.
6. Write the linear equation such that each on its graph has an ordinate 3 times its abscissa. Write one solution also.
7. Express the following statement as linear equation in 2 variables:
    a. The cost of 2 oranges and 3 apples is Rs.45. From the equation, find the cost of an apple if the cost of an orange is Rs.7.50.
8. Write two solutions for the following equations:
    a. i) 2x+y=8   ii) x-3y=18
9. Solve the equation 4x-3 = x+21 and represent the solution(s) on:
    a. i) number line   ii) the Cartesian plane
10. Draw the graph of linear equation 2x-y=4. From the graph, find the co-ordinates of the point where the line intersect y-axis.
11. If (1,-2) is a solution of the equation 2x-y= then, find the value of P.
12. Find the equation of a line passing through (-1,3) and
     a. (i) parallel to x-axis   (ii) parallel to y-axis   (iii) neither parallel to x-axis and y-axis
13. Write linear equation representing a line which is parallel to y-axis and is at a distance of 2 units on left side of y-axis.
14. Weight of a table is two and a half times the weight of a chair. Represent this situation in linear equation in 2 variables and draw its graph.
15. Total runs scored in a one day match by Dhoni and Raina are 180. Represent this situation as a linear equation in 2 variables. Also draw its graph.

16. Write the equations of linear draw in the following graph. Also, find the area enclosed between these lines.
17. If x+3y =25, Write y in terms of x and also find the two solutions of this equation.
18. ABCD is a rectangle. Find the coordinates of its vertices. Also, write the equation of its sides.
19. Write two integral solutions of: (i) $11x+12y=13^2$.
    a. Represent this equation graphically. Write the coordinates of the point where it meets
    b. (a) x-axis   (b) y-axis
20. Find three integral solutions of 2x+9y+18=0. Represent this equation by a graph. Does it pass through the origin.
21. Express in the form:- ax+by+c=0
    (i) 5x=-8y   (ii) y=2x

Subject - Science

1. Prepare a scrap file comparing food, scientist and crops grown of Haryana and Manipur.
2. Prepare your own video showing any activity of property of solid liquid or gas.
3. Paste or draw different pictures showing different types of motion. Make collage.
4. Learn the covered syllabus of physics, chemistry and biology.
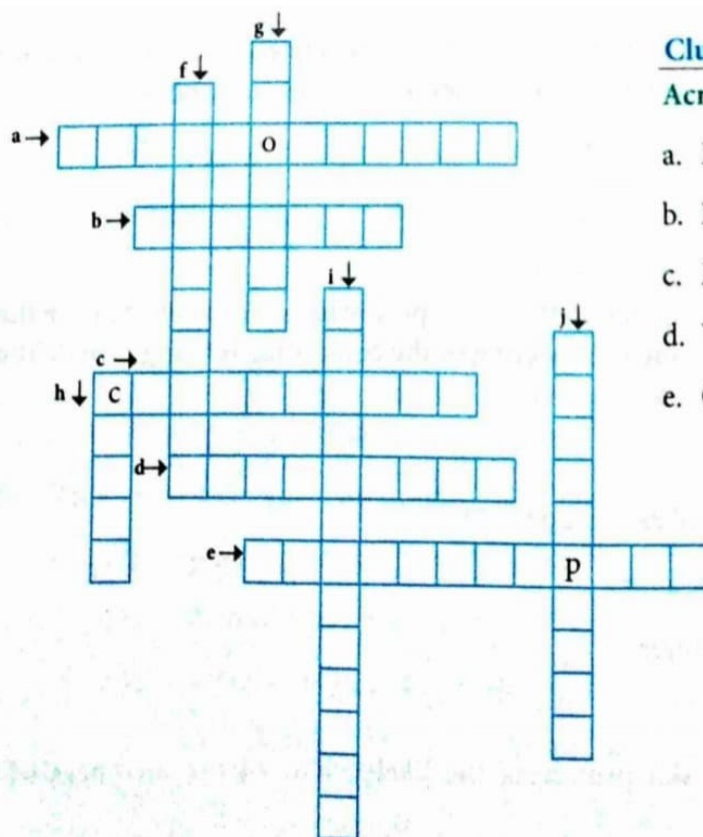5. Do any 1 crossword puzzle out of given 5.

Across →

3. storage structures of a cell.

5. regulates the entry and exit of materials in and out of the cell.

7. impart colour to flowers and fruits.

8. provides shape and rigidity to a plant cell.

10. powerhouse of the cell.

Down ↓

1. help *Paramoecium* in locomotion.

2. structure that helps in protein synthesis.

4. help plant cells in converting solar energy into usable form.

6. control centre of the cell.

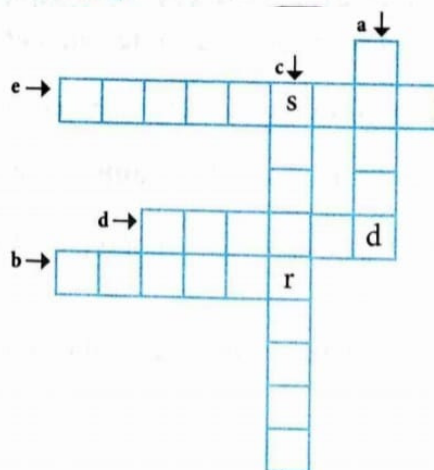9. responsible for transferring traits from one generation to next.

Clues

Across →

a. Do not make their own food.

b. Non-living components.

c. Meat eaters.

d. Vulture is a _____.

e. Compost prepared by worms.

Down ↓

f. Plant eaters.

g. Morning glory.

h. A desert animal.

i. Decomposable material.

j. Helps in recycling of minerals.

Across →

b. It has mass and occupies space.

d. It has a definite volume but no fixed shape.

e. Particles of two materials mixing on their own.

Down ↓

a. It has a definite volume and a fixed shape.

c. The solution that has the maximum amount of a substance, dissolved, in a given volume of it.

3. Identify different types of motion from the 'Word Puzzle' given below. 'Circular' motion has been identified as an example for you.

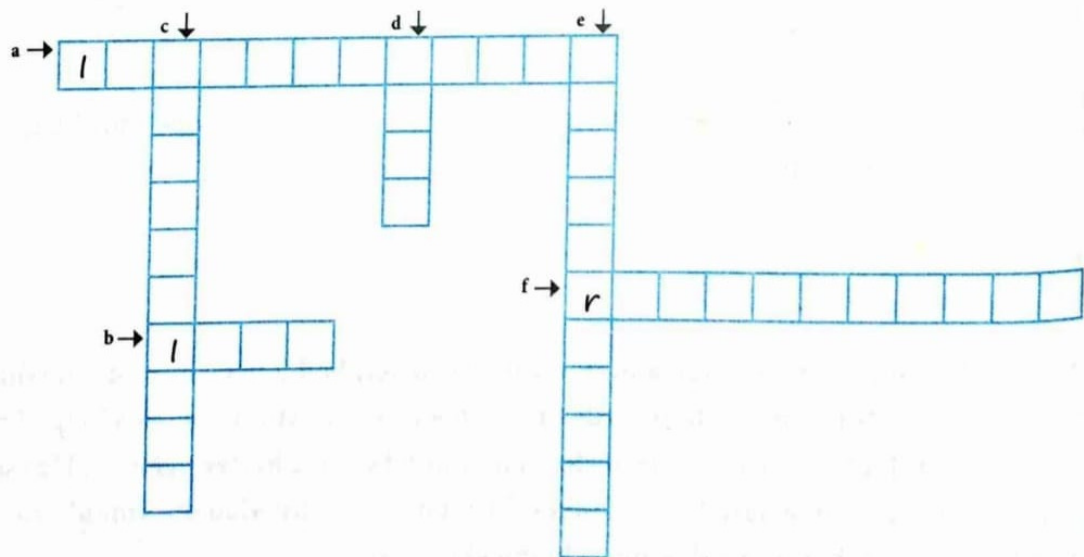| o	g	c	g	q	p	b	d
s	r	i	v	p	o	g	b
p	e	r	i	o	d	i	c
o	c	c	b	s	p	r	u
e	t	u	a	c	v	g	r
k	i	l	c	i	h	r	v
f	l	a	b	l	a	r	i
c	i	r	m	l	m	p	l
u	n	a	n	a	p	d	i
d	e	l	r	t	r	m	n
m	a	q	t	o	q	n	e
i	r	m	o	r	p	s	a
n	o	a	b	y	t	u	r

1. **Solve the puzzle with the help of clues given below:**

   Across →

   a. A change which cannot be reversed.

   b. A metal which gets rusted.

   f. An example of a chemical change in which energy is released.

   Down ↓

   c. A change in which original condition can be re-attained.

   d. The change which takes place in long duration of time.

   e. A reversible change involving change of liquid into gas.

6. Complete your practical file.
7. Prepare a working model of any topic.
8. Case study: A Simple image is given to you. You have to paragraph comprising of 400-500 words describing it. Then write 10 questions relevant to the image and paragraph written by you.

Subject   -   Social Studies

1. Prepare 10 objective type (1 mark) questions each from these chapters:

    (i) The French Revolution
    (ii) India- Size and location
    (iii) What is Democracy? Why Democracy?
    (iv) The Story of Palampur

2. Prepare map work from these chapters:

    (i) India Size and Location
        (a) The Island groups of India lying in the Arabian Sea and the Bay of Bengal
        (b) The States through which the Tropic of Cancer passes
        (c) The Strait separating Sri Lanka from India
        (d) The place situated on the three seas

   (ii) Physical Features of India
        (a)   Mountain Ranges- The Karakoram, The Zaskar,TheShivalik, The Vindhya Range, The Aravalli, The Western and Eastern Ghats.
        (b) Peaks- Mt.K2, Kanchan Junga, AnaiMudi and Mahendragiri.

(c) Coastal Plains - Konkan, Malabar, Coromandel Coast & Northern Circars.

(d) Plateaus- Deccan Plateau, Chotanagpur Plateau and Malwa Plateau

3. Revise and learn the questions and answers from the topic completed.

4. Every student has to compulsorily undertake one project on Disaster Management.

5. Each student will prepare combine project

On Haryana and Manipur mentioned in the holiday H.W. of English. This project will be assessed by English as well as Social Science teachers both.