MATA JAI KAUR PUBLIC SCHOOL	
CLASS X/HOLIDAYS H.W. 2017	
SUBJECT	**HOLIDAYS H.W.**
ENGLISH	1. Read the novel *'Story of my Life'* by Helen Keller. A follow up subject enrichment activity will be taken up. 2. Pick out 4 headlines each in active and passive voice from the newspaper. Paste the cutting in your notebook and expand them. 3. Write an interesting short story in your notebooks on any one of the following topics in about 250 words: a. Tragedies b. Adventure c. Mystery d. Childhood Memories The good ones may find a place in this year's school magazine. 4. TED Talks are popular worldwide for 'Ideas Worth Spreading'. Watch the following links. They are worth a watch. (You must watch the first one first) https://www.ted.com/talks/mathew_williams_special_olympics_let_me_be_myself_a_champion http://www.ted.com/talks/thomas_suarez_a_12_year_old_app_developer https://www.ted.com/talks/adora_svitak A follow up activity on the same will be taken up in the E-lab.
MATHS	**Subject Enrichment Activity:** To obtain the conditions for consistency of the following system of linear equations in two variables by graphical method. i) 3x + 4y = 2 , 5x – 3y = 13 ii) 2x – 3y = 7, 4x – 6y = 9 iii) 6x – 3y = 3, 2x – y =1 Note: Activity to be performed in the Mathematics Activity file. **) Solve the following assignment (based on chapters Real Numbers and Linear Equations in Two Variables) on separate A4 size sheets.** 1. Find HCF of 336 and 54 by prime factorization method

	2. If the HCF of 75 and 151 is expressed in the form 75n – 149, find n 3. Prove that $3 - \sqrt{5}$ is irrational. 4. Find the largest number which divides 546 and 764 leaving remainders 6 and 8 respectively. 5. Give an example of two irrationals whose product is rational. 6. For what values of k is the system of equations kx +3y = k – 2, 12x + ky = k inconsistent? 7. Show that the paths represented by the equations 2x + 3y = 5 and 4x + 6y = 20 are parallel. 8. Solve for x: 62x + 37y = 13 and 37x + 62y = - 112 9. If 1 is added to both the numerator and denominator of a fraction, it becomes 4/5. If however, 5 is subtracted from both numerator and denominator, the fraction becomes ½. Find the fraction. 10. Solve graphically the pair of linear equation 3x + y – 3 = 0 and 2x – y + 8 = 0 and write the vertices of the triangle formed by the lines and x –axis. Also shade the triangle and find its area. ***C) Mathematical Skill Based Activities:*** 1. Study about 'Synthetic Division'and draw the diagrammatical representation of it with the help of at least three examples. Write the references that helped you in completion of this activity. 2. The following activity covers concepts in Algebra, specifically the distributive property. Roll a pair of dice; call these A and B. Then calculate the following products. Product #1: Product of top numbers on dice Product #2: Product of bottom numbers on dice Product #3: Product of top of A and bottom of B Product #4: Product of bottom of B and top of A Then finally add the four products. What is the sum for your dice rolls? Repeat the same set of instructions five times and then answer the followings: a. What do you notice about the result after repetition of the steps? b. What do you think about this? c. Write a conjecture for our dice trick. d. Prove that your conjecture is correct *********
SCIENCE	**Note: To be done in assignment copy.** **Q1 Collect pictures and information on any 5 medical techniques/devices/equipments which are used to detect various ailments of human body. (For eg-Ultra sound, CT scan ECG, EEG Etc.)**

Q 2 A wire of resistivity ρ is pulled to double its length. What will be its new resistivity?

Q 3A TV set shoots out a beam of electrons .The beam current is 10 μA .How many electrons strike the TV screen in each second ? How much charge strikes the screen in a minute?

Q 4 A copper wire has radius 0.25 mm and resistivity 1.6 x 10 Ω m . What will be the length of thin wire to make its resistance 10 ohm ? How much does the resistance change if diameter is halved?

Q 5 The following table gives the resistivity of three samples:

Sample	A	B	C
Resistivity (Ω m)	1.6×10^{-8}	100×10^{-8}	7.5×10^{15}

1. **Which sample is a good conductor and insulator? Give reason.**
2. **Which sample is suitable for heating element of electrical appliances? Give reason.**

Q 6. A compound `X` is used for drinking, has pH =7.Its acidified solution undergoes decomposition in presence of electricity to produce gases `Y` and `Z` The volume of Y is double than Z. Y is highly combustible whereas Z is supporter of combustion .Identify X, Y & Z and write the chemical reactions involved.

Q 7. An aqueous solution of metal nitrate P reacts with sodium bromide solution to form yellow precipitate of compound Q which is used in photography. Q on exposure to sunlight undergoes decomposition reaction to form metal present in P along with reddish brown gas. Identify P&Q. Write the chemical reaction & type of chemical reaction.

Q 8. A student burnt a metal A found in the form of ribbon. The ribbon burnt with a dazzling flame & a white powder B is formed which is basic in nature. Identify A & B. Write the balanced chemical equation

Q 9. A student dropped few pieces of marble in dilute HCl contained in a test tube. The gas evolved was passed through lime water. What change would be observed in lime water? Write chemical reactions for both the changes observed.

	Q 10. Grapes hanging on the plant do not ferment but after being plucked from the plant can be fermented. Under what conditions do these grapes ferment? Is it a chemical or a physical change? **Q 11. A substance X, which is an oxide used intensively in the cement industry. This element is present in bones also. On treatment with water it forms a solution which turns red litmus blue. Identify X and also write the chemical reactions involved.** **Q 12. A student took 2-3 g of a substance X in a glass beaker & poured water over it slowly. He observed bubbles along with hissing noise. The beaker becomes quite hot. Identify X. What type of reaction is it?**
HINDI	**1.** निम्नलिखित विषयों में से अपने अनुक्रमांक के अनुसार चयनित विषय पर ए–**3** शीट पर समुच्चित चित्र बनाएँ- क) देशप्रेम - सर्वोच्च भावना **(1 से 6 तक)** ख) स्वच्छ दिल्ली **(7 से 12 तक)** ग) नारी **(13 से 18 तक)** घ) बेटी बचाओ, बेटी पढ़ाओ **(19 से24 तक)** ड़) मानवता **(25 से 27तक)** **2.** व्याकरण अभ्यास पत्र गृह कार्य कापी में करें । **Hindi Grammar work Sheet – May 2017** **CLASS-TEN** **(1)** अशुदध वाक्यों को शुदध कीजिए –

1.) मै बस में आया हूँ
2.) अशुदधियाँ लिखने में मत करो
3.) उसकी तो तकदीर ही टूट गई है
4.) हम सब उनका दर्शन करने जाएँगे
5.) इतनी तेजी से गाड़ी मत चलाओ
6.) चारों का नाम बताओ
7.) मैं जल पिऊँगा
8.) क्या आप भोजन किए हैं?
9.) लड़कों आपस में लड़ रहा है
10.) हम आपके घर कल आएगा
11.) नेता जी के गले में एक गेंदे की माला है
12.) तुम हमेशा बेफिज़ूल की बातें करते हो
13.) वह अपराधी दंड देने योग्य है
14.) हमें आपका हस्ताक्षर चाहिए
15.) वहाँ भारी-भरकम भीड़ जमा हो गई

(2) उचित मुहावरों दवारा रिक्त स्थान भरें -
1.) अपने ही बेटे को चोरी करते देख पिताजी आग----------हो गए
2.) पलिस के लाठी -चार्ज करते ही भीड़ ---------- हो गई
3.) हिमालय पर्वत की चढ़ाई करते हुए दाँतों ----------है
4.) गोपियाँ मुरली की धुन सुनते ही अपनी ---------- खो बैठती थी
5.) कक्षा में अध्यापिका दवारा मेरा मोबाइल ले लेने पर मेरे---------- गए
6.) जब से मेरे मित्र के पास पैसा आया है,उसके पाँव ----------पड़ते
7.) बच्चों को मनमानी करत देखकर माता-पिता मन--------कर रह जाते हैं
8.) गणित के सवाल हल करना मेरे लिए दाएँ----------है
9.) तुम अपने पिताजी की आँखों ----------झोंक करअपनी हानि कर रहे हो
10.) आपने इतनी सुंदर कविता लिखकर----------तोड़ दी
11.) उसकी बातों पर विश्वास न करना, वह तो आस्तीन----------है
12.) चोरी पकड़ी जाने पर मेरा मित्र ---------हो गया
13.) माधव ने अपने दिल ----------अपने बेटे को विदेश भेजा
14.) सी ए की परीक्षा उत्तीर्ण करना लोहे ---------है
15.) अच्छी नौकरी प्राप्त करने के लिए कई----------पड़ते हैं

(3) समस्तपद का विग्रह करके समास का नाम लिखें –

नवरत्न गजानन रात-दिन राहखर्च राजभाषा क्रय-विक्रय गुणहीन देशनिकाला

धर्मानुसार कृष्णसर्प स्त्रीरत्न नरसिंह त्रिलोचन प्रतिदिन पीतांबर हाथोंहाथ

बेखटके चंद्रभाल पंचतत्व चौमासा भाई-बहन घनश्याम अंशुमाली ऋषि-मुनि

सप्ताह

(4) समस्तपद बनाकर समास का नाम लिखें-

1.) सात स्वरों का समूह
2.) तीन लोकों का समाहार
3.) एक हाथ से दूसरे हाथ
4.) परम है जो आनंद
5.) सत्य के लिए आग्रह
6.) चार मुख हैं जिसके अर्थात ब्रहमा
7.) वीणा है पाणि में जिसके अर्थात सरस्वती
8.) कमल के समान नयन
9.) रोग से मुक्त
10.) लंबा है उदर जिसका अर्थात गणेश
11.) नीला है जो अंबर
12.) अकाल से पीड़ित
13.) शोक से आकुल
14.) वचन रूपी अमृत
15.) वन में वास

(5) प्रत्येक विषय पर लगभग पचास- साठ शब्दों में संवाद लिखिए ---

- दो सैनिको में <u>देशप्रेम</u> विषय पर
- दो विदयार्थियों में <u>इंटरनेट से मिलने वाली सुविधाए</u> विषय पर
- पिताजी और पुत्र में <u>सड़क दुर्घटनाऔ से बचाव</u> विषय पर

<table>
<tr><td></td><td></td></tr>
<tr><td>PUNJABI</td><td>1. ਕਾੱਪੀ ਵਿੱਚ ਕਰਵਾਏ ਗਏ ਸਾਰੇ ਕੰਮ ਦੀ ਮੌਖਿਕ ਤੇ ਲਿਖਿਤ ਦੁਹਰਾਈ ਕਰੋ।
2. ਕਿਸੇ ਗੁਰੂ ਕੇ ਮਹਿਲ (ਗੁਰੂ ਪਤਨੀ) ਦੀ ਜੀਵਨੀ ਲਿਖੋ (A-4 Size Sheet) ਅਤੇ (A-4 Size Sheet) ਤੇ ਕੱਟਆਊਟ ਬਣਾਓ।
3. ਕੋਈ ਮੌਲਿਕ (ਸਵੈ-ਰਚਿਤ) ਕਵਿਤਾ/ਕਹਾਣੀ/ਲੇਖ/ਅਨੁਭਵ ਆਦਿ ਲਿਖੋ।</td></tr>
<tr><td>SOCIAL SCIENCE</td><td>(As Per New CBSE Guidelines)
• Choose any one country where a popular struggle or a movement had taken place. Research on the following lines:
1. The issues or problems faced by the people of that country.
2. Starting of the movement or struggle.
3. Main participants, i.e., political parties, organizations, etc.
4. Course of the movement (events).
5. Results or consequences.
• The project must be supported by relevant pictures and maps.
• The project must contain 15 pages (A-4 size).
Pg. one-Acknowledgement
Pg. two-Contents/Index
Pg. three-Introduction
Pg. four to thirteen-Explanations with the help of relevant pictures and maps
Pg. fourteen-Conclusion
Pg. fifteen-Bibliography

Distribution of marks is as follows:
<table><tr><th>S. NO.</th><th>ASPECTS</th><th>MARKS</th></tr><tr><td>1.</td><td>Content accuracy and originality.</td><td>1</td></tr><tr><td>2.</td><td>Presentation and creativity.</td><td>1</td></tr><tr><td>3.</td><td>Process of Project Completion: Initiative, cooperativeness, participation and punctuality.</td><td>1</td></tr><tr><td>4.</td><td>Viva or written test for content assimilation.</td><td>2</td></tr></table></td></tr>
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Geography

General Instructions-

1. Every student has to compulsorily undertake one project on Disaster management.
2. Project report should be hand written and comprise of 12-15 pages.
3. The project should have student Performa, Index, Acknowledgement, Bibliography, Conclusion, Aims and objectives.
4. Project should be supported by pictures, maps, diagrams and newspaper clippings.
5. Project will be evaluated on the basis of content, accuracy, presentation, creativity and regularity in submission.
6. Refer to NCERT book on Disaster management.

- Roll no. 1-7 (Tsunami)
  Hints- Definition, features, causes and effects areas prone to tsunami preparedness measures before, during and after tsunami
- Roll no. 8-15 (Pocket guide on first Aid)
  Hints: Meaning, goals and objectives- first aid for fainting, burns, bleeding, heatstroke and fractures.
- Roll no. 16-23(Alternative communications during disaster)
  Hints- Need of alternative communication -modes of emergency communication -satellite based communication and their role in disseminating information prime networks of communication of government of India.
- Roll no. 24-31 (Safe construction practices and disaster resilient structures)
  Hints: Need for safe construction practices in areas prone to earthquakes and landslides vulnerable home designs and structural norms to be followed in construction of buildings.
- Roll no. 32-39 (Safe construction practices and disaster resilient structures)
  Hints: Need for safe construction practices in areas prone to floods and cyclones vulnerable home designs and structural norms to be followed in construction of buildings.
- Roll no 41 onwards(sharing responsibility)
  Hints: How disaster are managed by different levels of the government – National, state, District, village and block level –important government organizations set up in India to manage different disaster.

ART	• Make a Worli painting by using gel pen technique on A3 Sheet. • Draw a poster on A3 sheet on the Topic - Save Water

COMPUTER SCIENCE	**1.** Write the following C++ Programs in your notebooks. Try the programs at home and write the output of each program.
	
	1. To display the message 'My first program' on the screen.
	2. To display your name, and address on the computer screen.
	3. To input two numbers and find their sum.
	4. To input the values of Principal, Rate, and Time and calculate SI.
	5. To input a number and find its square and cube.
	6. To input the values of distance and speed and find the time taken to cover the given distance at the given speed.
	
	Program 1 & 2 (also done in class) are given as examples for practice:
	Program 1
	
	`#include <iostream.h>`
	
	`#include <conio.h>`
	
	`void main()`
	
	`{`
	
	`clrscr();`
	
	`cout<<"My First Program";`
	
	`getch();`
	
	`}`
	
	Program 2
	
	`#include <iostream.h>`
	
	`#include <conio.h>`
	
	`void main()`
	
	`{`
	
	`clrscr();`
	
	`cout<<"Chander Mohan\n";`

```
        cout<<"33, Patel Road,\nChennai"

        getch();

}
```

2. Read Chapter 1 of your book (Knowing the Computer System) and do all the questions given in the back exercise in your Computer Sc. notebook.
3. Plan the HTML website that your group is creating. Divide the work to be done amongst all the partners and complete your share of task during vacation.