ENGLISH

1. Pick up any article from "The Times of India" or "The Hindu" and write a letter to the editor in response to the article, giving your views. Attach the article along with the letter (to be written on a A4 size sheet).

2. Write a letter to the editor informing him about any problem your locality is facing, and asking him to print the same along with the photos, for bringing it in limelight and for necessary actions to be taken by the Municipal Corporation or the government.

3. Listen to the video and answer the following questions.

     Link : https://www.youtube.com/watch?v=5a5VSkkdpB4&feature=youtu.be

1. The term 'tuning in' means _____

2. According to Mr. Obama, the students are nervous because _____

3. The senior students are happy because _____

4. Write about the childhood memories shared by Mr. Obama to the students.

5. The government, parents, and the teachers have always contributed sincerely for the cause of education, but yet the outcome in the field of education is lacking. Why?

6. Why are Jazmin, Andoni and Shantel referred by Mr. Obama in his speech?

7. What practices should the children do to be successful in any of the fields they choose as their profession?

8. How is the country benefited by the students who are the future citizens of the country?

SOCIAL STUDIES (ECONOMICS) (PROJECT WORK)

Q.1   Write & explain five points of Development and Growth of your family or family

        members. Write all the parameters of your analysis.

Q.2   Collect any recent ten ratios of our country.

BIOLOGY

1.   Draw the diagram of HUMAN DIGESTIVE SYSTEM OR HUMAN RESPIRATORY SYSTEM or HUMAN CIRCULATORY SYSTEM on chart paper and label it.

2.   Write 5 points of differences between following in tabular form in your note book:-

     (a)   Xylem and phloem tissue.   (b)   Artery and vein.

     (c)   Respiration and photosynthesis.   (d)   Blood and lymph.

(e)   Aerobic and anaerobic respiration.   (f)   Inhalation and Exhalation.

3.   Revise chapter-6 from NCERT OR any other reference book.(Nutrition and respiration in plants and animals)

SUBJECT: PHYSICS

CHAPTER : ELECTRICITY

1.   When does the current flow in an electric circuit?

2.   What is the difference between resistance and resistor?

3.   What are the factors on which the resistance of conductor depends? Give the corresponding relation.

4.   Calculate the resistance of a 2m long nichrome wire of radius 0.321mm. Resistivity of nichrome is $15 \times 10^{-6} \Omega$ m If the potential difference of 10V is applied across this wire, what will be the current in the wire?

5.   Derive an expression for the equivalent resistance of three resistances connected in series?

6.   Derive an expression for the combination of three resistances connected in parallel.

7.   Derive an expression for the heat produced in a resistor R when a voltage drop across it is V. Hence state Joule's law of heating.

8.   Describe some practical applications of heating effect of the electric current.

9.   An electrical heater is used on a 220V supply and takes a current of 5A

   1.   What is its power

   2.   What is the cost of using the heater for 50 hours if 1 KWh costs Rs. 1.50?

10.   A house hold uses the following electric appliances :

   i) Refrigerator of rating 400 W for 10 hours each day.

   ii) Two electric fans of rating 80 W each for 12 hours each day. iii) Six electric tubes of rating 18 W each for 6 hours each day. Calculate the electricity bill of the house hold for the month of June if the cost per unit of electric energy is Rs. 3

11.   Distinguish between kilowatt and kilowatt hour.

12.   Define the term electric energy. Write an expression of the electric energy consumed in an electric circuit.

13.   Define the term electric power. Write an expression for it.

14. Define kilowatt hour. How many joules are equal to 1 KWh.

15. Two identical resistors, each of resistance 10 Ohms are connected

    i) in series   ii) in parallel, in turns to a battery of 6 volts. Calculate the ratio of power consumed in the combination of resistors in two cases.

16. The V-I graph is a straight line that passes through the origin of graph . What do you conclude from this observation?

Note – Write Answer of given question in your note book

CHEMISTRY

Watch the video carefully, available on the below link and answer the following questions.

Link-https://www.youtube.com/watch?v=NaGQ9VI5mwg

1. Justify that the following reactions are an example of redox reactions:-

    a) $2H_2S + SO_2 \longrightarrow 2H_2O + 3S$

    b) $Fe_2O_3 + 2Al \longrightarrow 2Fe + Al_2O_3$

2. Identify the oxidising agent (oxidant) in the following reactions:-

    a) $Pb_3O_4 + 8HCl \longrightarrow 3PbCl_2 + Cl_2 + 4H_2O$

    b) $CuSO_4 + Zn \longrightarrow ZnSO_4 + Cu$

    c) $3Fe + 4H_2O \longrightarrow Fe_3O_4 + 4H_2$

3. Identify the reducing agent in the following reaction:-

    a) $4NH_3 + 5O_2 \longrightarrow 4NO + 6H_2O$

    b) $2H_2 + O_2 \longrightarrow 2H_2O$

    c) $Fe_2O_3 + 3CO \longrightarrow 2Fe + 3CO_2$

4. Write any three examples of natural redox reaction.

5. How would you explain that displacement reactions are also the example of redox reaction?

6. How is corrosion a redox reaction?

7. $Zn + 2HCl \longrightarrow ZnCl_2 + H_2$

    Explain that the given reaction is an example of displacement as well as redox reaction.

Revise Chapter – 1

Note :- Write answer of given questions in your Note Book

MATHEMATICS

1. Repeat Chapter No. 2, 3 11 & 15 in note book.

2. Complete R.D. Sharma of these chapters

fo"k;%& fgUnh

i=1   l;ijnkl dsifBr inkads vk/kkj ij mueavyadkj ;kstuk Li"V dhft,A

i=2   ^^ekrk dk vkpy** uked dFkk ea lsnksfuckkRed iz'u dk fuekZk djdsmÙkj Li"V djA

                                                        ¼mÙkj lhek 80&100 'kCn½

i=3   l jy] l a;qDr rFkk feJ okD;ka dsmnkgj.k xn~; [kaM ea ls<~pdj fy[ksrFkk okD; jpukUrj.k Hkh djA   ¼xn~; [kaM izdj.k ea lsokD; NkaVs½

i=4   fodkjh RkFkk vfodkjh 'kCnkadksfoLrkj :i lsle>kb,A

i=5   xh"e _rqeaiş ty lcdV dk [krjk eMjk jgk gSA işty lcdV dsfuokj.k grqviuh rjQ ls lq>ko nhft,A   ¼mÙkj dk iz:i fucak 'kSyh eagksuk pkfg,½

i=6   ty laj{k.k dh mi;ksfxrk crkrsgq ,d 40&50 'kCnka eafoKkiu fyf[k,A

        leLr fyf[kr dk;Z fgUnh dkWih ea dhft,A