**Mahendra Model School**

**Holidays’ Home Work**

Class X

**English:-**

1. Write any five stories.
2. Write and learn value based question answers of the chapter done in the class.
3. Write 100 News Headlines from English News paper.
4. Learn question answers of chapter -1 and 2.
5. Write analysis of the poem done in the class.

**Mathematics:-** Do the given assignment

**Science: -** Do the given assignment

**Hindi: -** Do the given assignment

**Social Science: -** Do the given assignment

**Mathematics Holidays’ Assignment-**

1.Introduction to trigonometry- include the following sub-topics:-

a) History of the Pythagoras theorem

b) State and infer the applications of trigonometry in 5 famous buildings and 5 examples of finding the long distances.

2. Arithmetic progressions

a) Give concept of A.P., G.P. and H.P(Harmonic Progression)

3. Pair of linear equations in two variables

a) Illustrate the different methods of solutions of pair of linear equations geometrically and algebraically.

b) Give various examples or situations where we use this mathematical concept in daily life.

4.NCERT Mathematics Class X

Exercise 3.1 Page No. 44 Q- 3

Exercise 3.2 Page No. 49 Q- 2(iii), 3(iii and v)

Exercise 3.3 Page No. 53 Q-1(v and vi), 2, 3(ii, iii, v, vi)

Exercise 3.4 Page No. 57 Q- 2(ii, iii, v)

Exercise 3.5 Page No. 62 Q-2(ii), 4(iii, iv, v)

Exercise 3.6 Page No. 67 Q-1(v, vii, viii), 2(ii and iii)

Exercise 5.1 Page No. 99 Q-1(ii), 2(iii and v), 3(iii), 4(v, xii, xiv)

Exercise 5.2 Page No. 106 Q- 3 (iii, iv, v), 4, 6, 7, 9, 11, 12, 15, 17, 20

Exercise 5.3 Page No. 111 Q- 3(v, vi, viii, x), 4, 6, 11, 14, 16, 18, 19

Exercise 1.1 Page 7 Q 1, 2 &4

Exercise 1.2 Page 11Q 1(iii), 2 (iii) 6,7

Exercise 1.3 Page 14 Q 2, 3(i , ii)

Exercise 1.4 Page 17 Q1 (vii, x) , 3(iii)

Exercise 2.1 Q: 1, 2

Exercise 2.3 Q : 3,4

**Science Holidays’ Assignment**

**PHYSICS**

1. A convex mirror is used as a safety mirror in a shop. It has a focal length of 15 m. A person is standing 12 m away from this mirror. Find the position of his image.
2. An object of height 6 cm is placed 18 cm away from a concave mirror. The image is formed 12 cm before the mirror. Find out the following: (i) Focal length of the mirror (f) (ii) Radius of curvature (R) (iii) Magnification of the mirror (m) (iv) Image height (HI)
3. Describe phenomenon of refraction of light?
4. A coin in a glass beaker appears to rise as the beaker is slowly filled with water. Why?
5. A convex lens has a focal length of 10 cm. If the image produced by it is 15 cm behind from the optical centre, then determine the distance at which the object is placed? Also, find the magnification produced by the lens

**CHEMISTRY**

Q1. Write and balance the following chemical equation:

a) nitric acid reacts with calcium hydroxide and forms calcium nitrate and water

b) sodium bicarbonate decomposes to give sodium carbonate ,carbon dioxide and water

c) sodium chloride reacts with water to give sodium hydroxide,hydrogen gas and chlorine molecule

d) aluminium metal reacts with sulphuric acid to give aluminium sulphate and hydrogen gas

e) phosphorus pentoxide reacts with water to give phosphoric acid

Q2. What change in colour is observed when white silver chloride is left exposed to sunlight?

State the type of chemical reaction in this change.Also writes the equation.

Q3. Solid CaO was taken in a container and water was added slowly to it

a) State the two observations made in the experiment.

b) Write the name and chemical formula of the product formed.

Q4.What changes in the colour of iron nails and copper sulphate solutions do you observe after keeping the iron nails dipped in copper sulphate solution for about 30 minutes?

Q5.What is corrosion? Give three example of corrosion.

Q6.What is rancidity? Write different methods of preventing rancidity.

Q7. PbO2+ 4HCl → PbCl 2 + Cl 2+2H2O

Identify the oxidizing agent and reducing agents

Q8. What is oxidation reaction? Give an example of oxidation reaction. Is oxidation an exothermic or endothermic reaction?

Q9.on what basis is a chemical equation balanced?

**BIOLOGY**

TRANSPORTATION IN HUMANS

Q1. What is the role of blood transportation of materials in our body?

Q2. Draw and explain a well labeled diagram of section of human heart.

Q3. How does the exchange of oxygen and carbon dioxide take place in human body?

Q4. Justify the difference in the structure of heart of mammals, birds, reptiles, amphibians and fishes?

Q5. What is blood pressure? What is “Systolic” and ‘’Disytolic” pressure?

Q6. What is the role of platlets in our blood? Why is clotting of blood very important?

Q7. What is the composition of Lymph? What is its function?

Q8. What is the difference between blood plasma and lymh?

Q9. Given reason for the following:

(a)The blood pressure is much greater in arteries than in veins.

(b)The walls of ventricles are thicker

(c)The veins have valves

(d)Valves are present between auricles and ventricles.

(e)Right and left side of heart are separated by a wall (Septum)

Q10. What is Lymph? What is its role?

TRANSPORTATION IN PLANTS

Q1. Why is proper system of transport essential in plants?

Q2. Why do plants have low energy needs as compared to animals?

Q3. Differentiate between Transpiration and Translocation?

Q4. How do roots absorb water? Write the factors which help to do so?

Q5. What are the advantages of transpiration?

Q6. Differentiate between Xylem and Philon?

EXCRETION

Q1.What do you mean by Excretion? Why is it essential in living organism?

Q2. Draw a well labeled diagram of excretory system in humans?

Q3. How is urine produced? What is its composition?

Q4. Name the basic filtration unit in the kidney? Draw its labeled diagram AND explain its function?

Q5. How can we control the urge to urinate?

Q6. What are the functions of Kidneys?

Q7. What happens if the kidney fail to function? What are the causes of kidney failure? How can it cured?

Q8. What is Dialysis? How is it done?

Q9. Name the excretory products in plants? How are they excreted?

i. Make notes in your notebook of chapter sources of energy.

ii. Prepare a case study on 5 recent inventions of science that took place in year 2018 in a file on A4 sheets.

**Hindi Holidays’ Assignment**

1. निम्नलिखित पत्र लिखिए :-

१. अनियमित डाक वितरण में सुधार के लिए अपने क्षेत्र के डाकपाल को पत्र लिखिए।

२.खोई हुई वस्तु लौटाने क लिए किसी अपरिचित को पत्र लिखिए

३.अपने पसंदीदा समाचार पत्र के मुख्य संपादक को बढ़ती हुई महंगाई पर चिंता प्रकट करते हुए पत्र लिखिए।

2. निम्नलिखित निबंध लिखिए :-

१. प्रकृति और हम

२. मेक इन इंडिया

३. नोटबंदी से होने वाले लाभ व हानियाँ

४. शिक्षा : एक प्राथमिक ज़रूरत

५. राष्ट्रपति श्री रामनाथ कोविंद

3. अवकाश के दौरान प्रसिद्ध लेखकों की कोई भी पुस्तकें /नावेल पढ़े। साथ ही -

१. पुस्तक में से किन्ही दो पात्रों को चुनिए। उनके चित्र बनाएं या चिपकाएं।

२. पठन के आधार पर उन पात्रों का दस वाक्यों में विवरण दे।

३. दोनों पात्रों में तुलना स्पष्ट कीजिए। वह कैसे एक -दूसरे से अलग हैं।

4. 'बालगोबिन भगत' पाठ पढ़कर उसमें से दस सरल , दस मिश्र एवं दस सयुंक्त वाक्य लिखिए।

5.'नेताजी का चश्मा ' पाठ में से किन्हीं बीस वाक्यों का पद परिचय दीजिए।

6. 'वाच्य परिवर्तन' विषय पर एक चार्ट तैयार कीजिए।

7. learn the 1st PT syllabus

**Social Science Holidays’ Assignment**

1. Make a project report on the following topics :-

Disaster Management (Causes, Prone areas, Safety Measures and Role of Govt./ non-Govt functionaries )

1. Learn the Ist Periodic Syllabus.
2. Map work:- On a outline political map of India, locate and label the following:
3. History Lesson-3: Nationalism in India (1918-1930

Indian National Congress Sessions: Calcutta (Sep.1920), Nagpur (Dec.1920),Madras(1927),

Lahore (1929)

Important centres of Indian National Movement Champaran (Bihar)), Kheda (Gujrat), Ahmedabad (Gujrat), Amritsar (Punjab)Chauri Chaura (U.P.), Dandi ( Gujrat)

1. Geography : Lesson-2: Water Resource

On a outline political map of India, locate and label the following:

Dames: Salal, Bhakra Nangal, Tehri, Rana Pratap Sagar, Sardar Sarovar, Hirakund,Nagarjuna Sagar, Tungabhadra,( Along with rivers)

1. Answer the following questions :-

GEOGRAPHY:

* 1. Write any five measures to control land degradation .
  2. Describe any three features of arid soil.
  3. Which part of India is made up of alluvial soil ?
  4. Explain any 3 factors responsible for the formation of soil .

HISTORY:

1. Write 3 main characteristics of Trieu Au , the rebel women of Vietnam ?
2. Give any 4 features of HO Chi Minh Trail.
3. Who was Ho Chi Minh? What was his contribution of Vietnam?
4. What had happened in the Indo China by the middle of 1880s?

POLITICAL SCIENCE:

* 1. What were the two main causes of resentment in Belgium in 1960? How was the conflict solved?
  2. Write three provisions of the act passed in Sri Lanka in 1956 ?
  3. Mention any three demands of Sri Lankan Tamils?
  4. What is the prudential reason behind power sharing ?

ECONOMICS:

1. Define :-1. I.M.R. 2. Literacy rate 3. Net attendance ratio
2. “The Earth has enough resources to meet the needs of all but not enough to meet the greed of one “ how is the statement relevant to the discussion of the development ?
3. What is per capita income ? what is demerits to be taken as index comparision ?
4. What is the main criteria used by the world bank in classifying different countries? What are the limitation of this criteria?

**NOTE:-** Do the assignment in your social science note book.

1. . निम्नलिखित  पर एक परियोजना रिपोर्ट तैयार करें-
2. आपदा प्रबंधन ( कारण, प्रभावित क्षेत्र, बचाव के तरीके /सरकार द्वारा उठाए गए कदम)
3. . पहले आवधिक पाठ्यक्रम को याद करें|
4. . मानचित्र कार्य :- इतिहास : पाठ -3 (भारतीय राष्ट्रीय कांग्रेस के विभिन्न सत्र भारत के मानचित्र पर अंकित करें |) भूगोल : पाठ 2 (भारत के राजनीतिक मानचित्र पर पाठ में दिए गए बांध संबंधित नदियों पर दर्शाए |)
5. . निम्नलिखित प्रश्न लिखें: -

GEOGRAPHY:

1. भूमि अपकर्षण को नियंत्रित करने के कोई भी पांच उपाय बताएं ।
2. शुष्क मिट्टी के किन्ही तीन विशेषताओं का वर्णन करें।
3. भारत का कौन सा हिस्सा जलोढ़ मिट्टी से बना है?
4. मिट्टी के गठन के लिए उत्तरदायी किन्ही भी 3 कारकों को समझाओ।

ECONOMICS:

1. परिभाषित करें: -1। I.M.R. 2. साक्षरता दर 3. उपस्थिति अनुपात
2. विभिन्न देशों के वर्गीकरण के लिए विश्व बैंक द्वारा उपयोग किए जाने वाले मुख्य मानदंड क्या हैं? इस मापदंड की सीमायें क्या है?
3. प्रति व्यक्ति आय क्या है? सूचक तुलना के रूप में लेने के लिए दोष क्या है?
4. "पृथ्वी के पास सभी जरूरतों को पूरा करने के लिए पर्याप्त संसाधन हैं, लेकिन एक के लालच को पूरा करने के लिए पर्याप्त नहीं है". विकास की चर्चा से यह कथन कैसे सम्बंधित है?

POLITICAL SCIENCE:

1. 1960 में बेल्जियम में असंतोष के दो मुख्य कारण क्या थे? संघर्ष का हल कैसे हुआ?
2. 1 9 56 में श्रीलंका में पारित अधिनियम के तीन प्रावधानों को लिखें?
3. श्रीलंकाई तमिलों की किन्ही भी तीन मांगों का उल्लेख करें?

HISTORY:

1. वियतनाम की विद्रोही महिलाओं, ट्रियू एयू के तीन मुख्य विशेषताओं को लिखें?
2. हो ची मिन्ह ट्रेल के किन्ही भी 4 विशेषताओं का वर्णन करे।
3. हो ची मिन्ह कौन था? वियतनाम के लिए उनका योगदान क्या था?
4. 1880 के दशक के मध्य तक इंडो चीन में क्या हुआ था?

नोट: - असाइनमेंट अपने सामाजिक विज्ञान नोट बुक में करें।

NOTE : SCHOOL WILL REMAIN CLOSED FOR SUMMER VACATION FROM 31.05.18 TO

03.07.18 SCHOOL WILL REOPEN ON 04.07.18