NORTH-EX PUBLIC SCHOOL, JAIN NAGAR SUMMER BREAK ASSIGNMENT, 2018-19 CLASS- X

ENGLISH

- Make a file of 5 pages in which you have to draw a pen picture of Hellen Keller's childhood. (Novel-The story of my life)
- ➤ The two boys in the story (Two Gentlemen of Verona) manage their life on their own. They don't go for begging; instead they work very hard and earn their livelihood on their own. Based on your reading of the story write a paragraph on the topic: 'Importance of self-dependence in life'.
- ➤ Mobile phones, video games, internet and play stations have replaced the conventional outdoor games that children used to play. Do you agree? Write an article in about 100-120 words, expressing your agreement or disagreement with the same. (Use A-4 size sheet).
- > Draft a poster on the 'Importance of conservation of electricity. (Use A-4 size sheet).

MATHS

- 1. Show that the square of any positive integer cannot be of the form 6m+2 or 6m+5 for any integer m.
- 2. Find k so that $x^2 + 2x + k$ is a factor of $2x^4 + x^3 14x^2 + 5x + 6$. Also find all the zeroes of the two polynomials.
- 3. Two numbers are in the ratio 5:6. If 8 is subtracted from each of the numbers the ratio becomes 4:5 then find the numbers.
- 4. Find a natural number whose square diminished by 84 is equal to thrice of 8 more than the given number.,
- 5. Do activity no. 1,2,3, 5,9 and 12 from maths lab manual in practical notebook.

 Note: Revise chapter 1,2,3 and 4 from NCERT TEXT BOOK and NCERT EXAMPLAR PROBLEMS for periodic test I.

SCIENCE

- 1. A cable of resistance of resistance 12Ω carries electric power from a generator producing 250 kW at 10,000 V. Calculate
 - (i) The current in the cable,
 - (ii) The power lost in the cable during transmission, and
 - (iii) The potential difference across the ends of the cable.
- 2. Answers the following
 - (a) State the ohms law.
 - (b) Derive an expression for equivalent resistance for three resistors having value R₁, R₂ and R₃ when connected in parallel combination.
 - (c) A piece of wire of resistance R is cut into five equal parts. These parts are then connected in parallel. If the equivalent resistance of this combination is R*, then find the ratio R/R*.

- 3. "A solution of potassium chloride when mixed with silver nitrate solution, an insoluble white substance is formed."
 - (a) Translate the above statement into a chemical equation.
 - (b) What type of reaction is this?
- 4. A magnesium ribbon is burnt in oxygen to give a white compound X accompanied by emission of light. If the burning ribbon is now placed in an atmosphere of nitrogen, it continues to burn and forms a compound Y.
 - (i) Write the chemical formulae of X and Y.
 - (ii) Write the balanced chemical equation when X is dissolved in water.
- 5. A strip of copper was placed in a beaker containing zinc sulphate solution. On observing the strip next day, was there any colour change in the strip? Give reason for your answer.
- 6. Prepare a working model on conventional and non conventional sources of energy.
- 7. Out of a cow and lion, which has a longer small intestine and why?
- 8. Describe the structure and functioning of nephron.
- 9. Make a 3D model of
 - i) excretory system(Roll No 1 to 10)
 - ii) Heart (Roll No 11 to 20)
 - iii) Respiration System (Roll No 21 to 30)

SST

- 1. Illustrate the contribution of Italian revolutionary Guiseppe Mazzini in spreading revolutionary ideas in Europe?
- 2. Why is it essential to have resource planning? Explain any three reasons?
- 3. Explain common, different and conflicting goals by giving suitable example?
- 4. Explain the concept of underemployment in the urban areas with the help of suitable examples?
- 5. Maintain a project on any one topic in project file.
- a.Popular struggle and movement(civics)
- b.Money and credit (eco)

FIT

- Q1. Prepare a project report on the topic: Internet & Web Services. Submit a printed copy of the same.
- Q2. Prepare a poster to emphasize on the advantages of Internet. Use your creativity to make it as attractive as possible.
- Q3. Revise Chapter -1, 2 for the upcoming periodic test.

ARTS

TREASURE OF ART

- 1. Draw and color on page no 70 on brown colored handmade sheet. (Mexican Fold Painting)
- 2. Draw and color on page no 48 on A3 size sheet.
- 3. Make paper sculpture page no 50 (any one) with big and thick pastel sheet.

CRAFT

- 1. Bring one flower pot and decorate with clay and colour it with acralic colour, glitter, stones etc(like pg 71,72,73,74)
- 2. Five beautiful and attractive envelopes with handmade sheet and decorate it.
- 3. Make one painting (as per your choice) with hanging and binding.

NOTE: Search on Google Images

HINDI

