



# SARALA BIRLA PUBLIC SCHOOL

## SUMMER ASSIGNMENT (2019-20)

### STD – X

Name : \_\_\_\_\_ Class and Section : \_\_\_\_\_ UID No. : \_\_\_\_\_

## ENGLISH

1. Write character sketches of these from the stories:-

1. 'A Triumbh of Surgery'

- a. Mrs Pumphery
- b. Tricki

2. The Thief's story

- c. Hari Singh

3. The midnight visitor

- d. Agent Ausable
- e. Max

2. Write a letter to the editor of a newspaper expressing your views on the importance of saving water as you have seen people wasting water carelessly on one hand and on the other people fight for a single drop of water and farmers die because of drought.

3. Video games, Internet, cell phones and other high-tech gear are just part of growing up in a digital world. But parents are concerned about the amount of time their children spend with these and worry it might be distracting and cramping academic and social development.

## HINDI-

1 'लखनवी अंदाज' पाठ का प्रश्नोत्तर लिखें ।

2- 'छाया मत छूना पाठ का प्रश्नोत्तर प्रश्नोत्तर लिखें ।

3- परियोजना कार्य-'रस' की परिभाषा एवं उसके अंगों की परिभाषा के साथ रस के भेद A4 साइज पेपर में लिखें और क्राफ्ट से सुसज्जित कर एक परियोजना तैयार करें।

## SANSKRIT

## परियोजना-कार्य

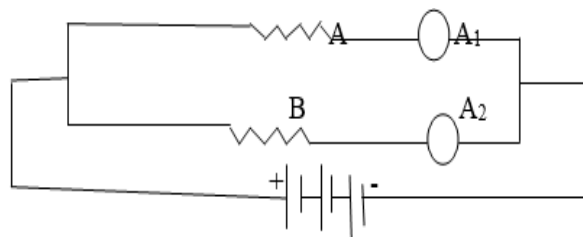
'भूकम्प विभिषिका' को मॉडल के रूप में अथवा चार्ट पेपर पर चित्र द्वारा प्रस्तुत करें।

## **MATHEMATICS**

1. Show that the system of equations  $4x+6y=7$ ,  $12x+18y=21$  has infinitely many solutions.
2. Find the value of  $k$  for which the system of equations  $kx-y=2$ ,  $6x-2y=3$  has unique solution.
3. The sum of the digits of a two digit number is 12. The number obtained by interchanging its digit exceeds the given number by 18. Find the number.
4. Solve for  $x$  and  $y$ :  $\frac{15}{x-y} + \frac{22}{x+y} = 5$ ,  $\frac{40}{x-y} + \frac{55}{x+y} = 13$   $x \neq y$  and  $x \neq -y$ .
5. Solve  $\frac{x}{a} + \frac{y}{b} = 2$ ,  $ax-by=(a^2-b^2)$  by cross multiplication method.
6. 8 men and 12 boys finish a piece of work in 5 days, while 6 men and 8 boys finish it in 7 days. Find the time taken by 1 man alone and that by 1 boy alone to finish the work.
7. Ten years hence, a man's age will be twice the age of his son. 10 years ago, the man was 4 times as old as his son. Find their present ages.
8. Solve the following system of equations graphically  $3x+2y-11=0$  and  $2x-3y+10=0$
9. Lab activity 1.2 do
10. Lab activity 1.3 do

## **PHYSICS**

1. Define potential difference. Write down the relation between the potential difference between two points A and B in a conductor, work done  $W$  in moving a unit charge from point B to A and the charge  $q$ .
2. In the circuit diagram shown, the two resistance wires A and B are of the same length and same material, but A is thicker than B. Which ammeter  $A_1$  and  $A_2$  will indicate higher reading for current? Give reason.



3. (a) With the help of a labelled circuit diagram, deduce the expression for equivalent resistance of combination of three resistors, of resistances  $R_1$ ,  $R_2$  and  $R_3$  joined in parallel.
4. (a) Derive the expression for the heat produced due to current ' $I$ ' flowing for a time interval ' $T$ ' through a resistor ' $R$ ' having a potential difference ' $V$ ' across its ends. With which name is this relation known?

- (b) State the commercial unit of electrical energy and its relation with its S.I. unit.
- (c) Calculate the time required to produce 24000 J of heat when a current of 2 A flows through an electric kettle under a supply of 240 V.
- (d) An electric iron of 1 kW is operated at 220 V. Find which of the following fuses that respectively rated at 1 A, 3 A and 5 A can be used in it.

## **CHEMISTRY**

1. Write chemical equations for the reactions taking place when
  - a. Magnesium reacts with dilute  $\text{HNO}_3$
  - b. Sodium reacts with water
2. What is the information conveyed by a chemical equation?
3. Give some points of distinction between rusting and burning.
4. Why respiration is considered as exothermic?

## **BIOLOGY**

1. Draw the diagram to show nutrition in amoeba.
2. Describe double circulation in human beings with suitable diagram.
3. Draw a labelled diagram of Human brain.
4. Draw a labelled diagram of a nephron.

## **SOCIAL SCIENCE**

### **(History/Civics)**

1. What was the Rowlatt Act?
2. How did the people of India protest against the Act?
3. What was the khilafat issue?
4. Mention three ways in which the Sri Lankan govt. followed majoritarian policies.
5. The ethnic composition of Belgium is very complex. Explain using a pie-chart.

### **Geography**

1. Show major soil types of India in map work book.
2. 'Soil erosion is a major crisis to the environment.' What are the steps to be taken to solve this problem?

## **ECONOMICS**

1. Write a paragraph on what India should do to become a developed country?
2. Why do different people have different goals for development?
3. Why average income is taken into consideration instead of total income while making comparison between countries?

## **COMPUTER APPLICATION**

Prepare a PowerPoint presentation on "INTERNET AND CYBER SAFETY"