

**ST. MARK'S SR. SEC. PUBLIC SCHOOL, JANAKPURI**

**HOLIDAY HOMEWORK SESSION 2018- 2019**

**CLASS – X**

**ENGLISH**

1. Read the novel 'The Diary of a Young Girl' and answer the following questions :
  - a) Why was being sick in the Annexe dreadful? How did Anne suffer due to fire?
  - b) What does Anne write in her diary of 22 January 1944? Is she philosophical in her views? Elucidate.
  - c) "I can't be unhappy when there is the sun and the sky". Explain.
  - d) What is 'Food Cycle'? What does Anne write about it in her diary?
  - e) How did Anne's wish that she should be remembered even after her death materialize?
2. Do Units I – V in Work – Book.

**MATHS**

1. Collect the material and information to prepare a model on any one of the following topics :
  - (i) Maths in architecture
  - (ii) Geometry used in daily life
  - (iii) Clinometer, an instrument used to find the angle of elevation and depression using the principles of trigonometry.
  - (iv) Theorems on similar triangles
  - (v) 9 x 9 SUDOKU
  - (vi) Fibonacci sequence
  - (vii) Trigonometric Ratio
  - (viii) Maths in Disaster Management

Models to be submitted after holidays for further selection in Maths Exhibition.

2. Maths lab activities to be done through paper cutting and pasting .
  - **Activity 1** : To obtain the condition of consistency of a system of linear equations in two variables by graphical method.
  - **Activity 2** : To verify graphically  $x = 1$  and  $x = 3$  are the zeroes of the quadratic equations  $x^2 - 4x + 3$ .
  - **Activity 3** : To verify the fundamental identity  $\sin^2\theta + \cos^2\theta = 1$
  - **Activity 4** : To verify the Pythagoras theorem i.e. in a right triangle the square of hypotenuse is equal to the sum of the square of other two sides by the method of paper cutting and padding.
  - **Activity 5** : To verify basic proportionality theorem i.e. if a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.

## **SCIENCE**

Students can work on any one of the following topics for making models / project based research work :

- |                                       |                             |
|---------------------------------------|-----------------------------|
| 1. Energy                             | 2. Bio Degradable Resources |
| 3. Sustainable Development            | 4. Communication            |
| 5. Space Technology                   | 6. Food Resources           |
| 7. Modern Preservation Techniques     | 8. Genetics                 |
| 9. Robotics / Artificial Intelligence | 10. Modern Agriculture      |
| 11. Health Sector                     | 12. E-waste management      |

Research papers to be submitted after holidays for further selection in the Science Exhibition.

## **SOCIAL STUDIES**

### **ECONOMICS**

#### **Conduct interview with a banker on functions of banking.**

The interview should focus on the following aspects related to banking

Introductory

1. Position held by the person concerned – his/ her duties or functions.
2. Ask queries related to the following heads
  - Loans
  - Deposits
  - Internet banking
  - Relation of the concerned bank with RBI
  - Centralized banking system
  - Spread of Banking system to rural areas and credit schemes (Grameen Bank)
  - Miscellaneous : Saving A/c, F.D.S
  - Make a project on the above mentioned guidelines.

### **POLITICAL SCIENCE**

#### **Hot Question From Power Sharing and Federalism**

1. Latest trends in the political system prevalent in various countries – where power sharing model is being followed.
2. Find out names of countries following the model of “Holding Together’ and ‘Coming Together’ Federations.
3. “India is federal in form and unitary in soul”. Discuss.

## GEOGRAPHY

Prepare a project on any one topic which should not exceed 15 pages and should include the following heads.

### **Format of the Project :**

1. Preface
2. Acknowledgement
3. Contents / Index
4. Detailed Report of the Topic
5. Glossary
6. Teachers Evaluation Sheet

### **Topics**

1. Alternative Communication System during disasters
2. Survival Skills
3. Safe Constructions Practices
4. Sharing Responsibilities
5. Tsunami

Highlights of the Project must be :

- a) Meaning of disaster and also disaster management
- b) Various department of Disaster management at
  - Regional Level
  - State Level
  - National Level
- c) Elaborate description of the topic accompanied with pictures, diagrams, map work, pie & bar diagram and other disaster reports.
- d) A case study on the topic taken for the project eg. Earthquake in Uttarakhand

## हिंदी

- वचन कौशल – पाठ्यपुस्तक स्पर्श में पाठ्यक्रम पर आधारित पाठों का सार याद कर छात्रों द्वारा कक्षा में प्रस्तुत किया जाएगा। जिसके अंतर्गत छात्रों की उच्चारण शक्ति, स्मरण शक्ति तथा वाणी के प्रस्तुतिकरण का मूल्यांकन किया जाएगा।
- हिंदी की पुस्तकों की प्रदर्शनी में आधे मूल्य पर बिक रही महत्वपूर्ण पुस्तकों को खरीदकर लाभ उठाने के लिए लगभग 25 शब्दों में एक विज्ञापन लिखिए। (विज्ञापन को आकर्षक बनाने के लिए पेंसिल कलर्स का उपयोग करें।)
- अनुच्छेद लेखन – **मधुर वचन है औषधि**
  - मधुर वचनों का महत्त्व
  - मधुर वचनों का लाभ
  - स्थायी संबंधों का आधार
- खाद्य पदार्थों में मिलावट के कारण होने वाली स्वास्थ्य संबंधी समस्याओं के संबंध में मित्र से हुए संवाद को लगभग 50 शब्दों में प्रस्तुत कीजिए।