



Summer Vacation Home Work  
Class – IX<sup>th</sup> Session 2019-20



**Computer Science | Mr. A. K. Singh**

Complete all the exercises of chapter 3.

**Physics | Mr. B.K.**

1.
  - (a) Activity : 8.10 (Page – 107, Table – 8.5)
  - (b) Activity : 8.10 (Page – 105, Table – 8.3). On the graph paper.
2. Explain four different types of force.
3. Write five different types of questions with answers from chapter – 8.

**Chemistry | Mr. LK**

Make a project file on the contribution of John Dalton, J.J. Thomson, Ernest Rutherford and Neils Bohr in the field of science.

**Biology | Mr. ATH**

1. Prepare a project on "Butterfly acts as a pollution indicator."
2. Draw a colourful diagram (With proper labeling) of –
  - a) Animal cell
  - b) Plant cell

**History | Mrs. PR**

Do Activities 3, 4 and 5 given on page no. 13 in your text book.

**Geography | Miss. SCH**

Social science lab manual..pg no 7and 8.. and pg no 63(newspaper reading) and 64(question and answers)

**Maths | Mr. TBK**

1. Find a rational number between  $\frac{-3}{4}$  and  $\frac{-2}{5}$
2. Find an irrational number between 2 and 2.5
3. Simplify  $(\sqrt{3} + 2)^2$
4. Evaluate  $\left(\frac{81}{49}\right)^{-\frac{3}{2}}$
5. If  $P(x) = 5 - 4x + 2x^2$ , find the value of  $p(-2)$
6. Find three rational numbers lying between  $\frac{3}{5}$  and  $\frac{7}{8}$
7. Express  $0.\overline{3178}$  in to simplest form.
8. Express  $\sqrt{2}$  and  $\sqrt{3}$  on real line.
9. If  $x = 9 - 4\sqrt{5}$ , find the value of  $x^2 + \frac{1}{x^2}$
10. Using factor theorem, show that  $2x - 3$  is a factor of  $P(x) = 2x^4 + 8x^2 - x + 6$

11. The polynomial  $P(x) = x^4 - 2x^3 + 3x^2 - ax + b$  when divided by  $(x - 1)$  and  $(x + 1)$  and leaves the remainder 5 and 19 respectively. Find the values of  $a$  and  $b$ . Hence find the remainder when  $p(x)$  is divided by  $(x - 2)$

**English | Mrs. RM**

1. The little girl  
Page no. 38 : Question no. I, II & III  
Page no. 39 : Question no. 1 & 2.

**English | Mr. CKJ**

1. One page writing (English) everyday.
2. Solve all the questions given in
  - a) Unit 1 and Unit 2. (Words and Expressions)

**Hindi | Mr. CKN**

1. निम्नलिखित विषयों में से किसी दो पर 300 शब्दों में निबंध लिखें
  - i) 'कंप्यूटर बनाम रोजगार के नवीन अवसर'
  - ii) 'लोकतंत्र और साहित्यकार'
  - iii) 'मेरा प्रिय कवि कबीर दास'
  - iv) 'महंगाई का नहीं चरित्र का संकट है'
2. हिंदी की पांच चर्चित लघुकथाएं लिखें.

**Sanskrit | Mr. GJ**

1. निम्नलिखित शब्दों के रूप सभी विभक्तियों एवं वचनों में लिखकर याद करें -  
बालक, लता, मुनि, नदी, साधु, अस्मद्, युष्मद्, तद् (तीनों लिङ्गों में), किम् (तीनों लिङ्गों में)|
2. निम्नलिखित धातुओं के रूप लट, लङ्, लृट्, लोट तथा विधिलिङ्, लकारों में लिखकर याद करें -  
पठ्, अस्, कृ, पा, सेव्
3. अधिक से नीति - श्लोकों को अर्थ सहित लिखकर कंठस्थ करें |