

**KRISHNA INTERNATIONAL SCHOOL, ALIGARH**  
**HOLIDAY ASSIGNMENT-2018-2019**  
**SUMMER VACATION**  
**CLASS – IX**

S. No.	SUBJECT	HOLIDAY HOMEWORK
1	<b>HINDI</b>	1. चार गद्य साहित्यकारों का चित्र सहित जीवन परिचय दीजिए। 2. उन्हीं के किसी एक के उपन्यास या कहानी की समीक्षा कीजिए। नोट- व्याकरण की अभ्यास पुस्तिका में कार्य किया जाय।
2	<b>ENGLISH</b>	1. Read chapter -2 ' <b>The Sound Of Music</b> '(part 1 & 2) of book ' <b>Beehive</b> '. * Write a chapter review for the same . * Pick up 20 words from the chapter . Find their dictionary meaning and use them in sentences of your own . NOTE:-Use only A4 size sheet and keep all papers in my clear bag. 2. Do worksheets of TENSES and DETERMINERS given in practice papers book.
3	<b>SCIENCE</b>	1. 'Today life without plastic cannot be imagined. Be it home or outside, Plastic is everywhere'. Collect information on the following plastics- (a) Teflon (b) Bakelite (c) PVC (d) Melamine Write about their methods of preparation, monomers, properties and uses. Also paste picture of any five things each made from the plastics in a project file. 2. Update your Lab-manual for Term-I (In all three subjects) 3. Practice NCERT questions of the chapters covered in all three subjects of science (In class work copy). 4. Do all NCERT questions and numerical from S. Chand of Ch-1. (Motion) in your class work copy. 5. In a project file prepare a report on the discovery of first antibiotic along with its source of extraction. Make a tabular sheet on various types of antibiotics that are used against common communicable diseases along with their duration and source of extraction.
4	<b>SOCIAL SCIENCE</b>	1. Make a project on 'Role of Media in a Democratic system'. It should include following points. (a) kind of media (print and electronic). (b) Freedom of media, its necessity and role in India. (c) Do the electronic media sometimes go overboard covering news to make them sensational? (d) Is media always fair in India- give example from recent time? 2. Revise complete syllabus done in class in all the subjects of Social Science.
5	<b>COMPUTER</b>	Revise all the topics included in Ch. 1, 2 and 3 and prepare well for the pre-midterm assessment to be held in July 2018.

6. **MATHS:**

**Solve the following problems in your class work copy.**

1. Define Rational Numbers and find five rational numbers between  $\frac{3}{5}$  and  $\frac{2}{3}$ .
2. Express in the form  $\frac{p}{q}$ ,  $q \neq 0$ , where  $p$  and  $q$  are integers
  - (i) 0.535353 ... ..
  - (ii) 0.3178178178.....
  - (iii) 32.123535.....
3. Prove that:  $\frac{1}{1+\sqrt{2}} + \frac{1}{\sqrt{2}+\sqrt{3}} + \frac{1}{\sqrt{4}+\sqrt{3}} + \frac{1}{\sqrt{4}+\sqrt{5}} + \frac{1}{\sqrt{5}+\sqrt{6}} + \frac{1}{\sqrt{6}+\sqrt{7}} + \frac{1}{\sqrt{7}+\sqrt{8}} + \frac{1}{\sqrt{8}+\sqrt{9}} = 2$
4. Represent  $\sqrt{3}, \sqrt{5}, \sqrt{7}, \sqrt{10}$  on number line.
5. If  $x = 1 - \sqrt{2}$ , find the value of  $\left(x - \frac{1}{x}\right)^3$
6. If  $x = \frac{\sqrt{3}+1}{2}$ , find the value of  $4x^3 + 2x^2 - 8x + 7$
7. Prove that:  $\frac{a^{-1}}{a^{-1}+b^{-1}} + \frac{a^{-1}}{a^{-1}-b^{-1}} = \frac{2b^2}{b^2-a^2}$
8. If  $x^4 + \frac{1}{x^4} = 47$ , find the value of  $x^3 + \frac{1}{x^3}$
9. Prove that:  $\frac{1}{1+x^{a-b}} + \frac{1}{1+x^{b-a}} = 1$
10. Represent  $\sqrt{9.3}$  on number line.
11. Factorise:  $64x^3 - 343y^3$ .
12. Find the value of  $p$  for which the polynomial  $2x^4 + 3x^3 + 2px^2 + 3x + 6$  is divisible by  $x + 2$ .
13. Factorise: (i)  $9x^2 + 18x + 8$                       (ii)  $8a^3 + b^3 + 12a^2b + 6ab^2$
14. Plot the points A (2,5), B (-2,-2) and C (4,2) on the graph paper. Join AB, BC and AC. Calculate the area of the  $\Delta ABC$ .
15. Plot the points and write the axis on which the given point lies: (2,0), (0,-5), (-4,0), (-2,5), (-2,-3), (2,3) and (0,-1)