D.A.V. PUBLIC SCHOOL,CSPUR, BBSR - 21
HOLIDAY HOME WORK FOR SUMMER VACATION (2016 - 17)

CLASS : IX

S.N.	SUBJECT	HOME WORK
1	**ENGLISH**	1. Complete the question answers of literature units. "The Brook " and "The Road Not Taken" if completed in the clas) 2. Read & complete the question answers of Part - 1 of Gulliver's Travels in a separate copy. Write two articles in your long writing copy on any two current issues.
2	**ODIA**	1. 1st Prose & 1st poetry - All explanations and short questions 2.Essay - Bigyanara Baradana, Samaja O Ganamadhyama, Paribesha Surakshya
3	**HINDI**	1.Read the chapter Gillu from sanchayan and Q/A from Sparsh which taught in the class. Write the exercise of Varna - Biched in grammar copy,which is given in grammar book. 3. Paragraph writing Anusasan, Hindi ka Patrika
4	**SANSKRIT**	1. Solve 10 picture composition and 10 unseen passages from Grammar B.ook 2. Remember and write all Sabdarupas and Dhhaturupas.
5	**MATH**	1. Solve minium 100 questions of Ch- Number System from NCERT Exampler Mathematics/R.D. Sharma or any other reference books in holiday homework copy. 2. Download the assignments from website and solve the given assignments in assignment copy.
6	**PHYSICS**	olve 30 numericals based on concept Displacement, Average Speed & Solving (10) Accelearation(10) in holiday homework copy.
7	**CHEMISTRY**	1.Prepare a PPT on different states of matter. 2. Write 10 points of difference amongst Solid,Liquid and Gas.
8	**BIOLOGY**	1.Draw a neat labelled diagram of compound microscope. Write the function of each part. 2. Draw a neat labelled diagram of a) Plant Cell b) Animal Cell c) Prokoryotic Cell 3. Differentiate between a) Prokaryotic Cell and Eukaryotic Cell b) Diffusion and Osmosis c) Plant Cell and Animal Cell Hypertonic and Hypotonic Solution 4. Make a list of Scientists and their contribution in Cytology.
9	**HISTORY**	1. Solve 50 questions from the chapter :The French Revolution" and prepare 10 MCQ questions. 2. Complete NCERT Text Book questions from the chapter " The French Revolution "
10	**GEOGRAPHY**	In an outline map of India show the followings :- a) Physical division of India(put different colours) b) Major Peaks of Himalayas c)Major Himalayan Ranges Case different maps,make index and write Topic in Top

11	**ECONOMICS**	Make a collage on Economic Activities practised in Rural Areas (Fram & Non farm activities)

ASSIGNMENT

CHAPTER : NUMBER SYSTEM

CLASS-IX , MATHEMATICS ASSIGNMENT-1

CONCEPT: <u>Conversion of terminating/non-terminating repeating decimals in the form of p/q.</u>

Dt. of issue: Dt. of submission: Dt. of correction.

1. **Without actual division verify that following are terminating or non-terminating decimal representation. a)** $\frac{33}{375}$ **b)** $\frac{80}{27}$ **c)** $\frac{123}{1250}$
2. **Represent in the form of** $\frac{p}{q}$ **.a)** $0.\bar{8}$ **b)** $0.12\bar{3}$ **c)** $4.\overline{32}$
3. **Simplify** $0.\bar{4}+0.\overline{18}$
4. **Convert in the form of p/q.** $0.\bar{6}$ **x** $0.00\overline{27}$
5. **Simplify** $0.39\overline{285714}$ **x** $0.15\overline{90}$
6. **Find 5 rational and 5 irrational numbers between 2 and 3.**
7. **Find 5 rational and 5 irrational numbers between** $\frac{1}{2}$ **and** $\frac{1}{3}$**.**

CHAPTER : NUMBER SYSTEM

CLASS-IX , MATHEMATICS ASSIGNMENT-2

<u>CONCEPT: Representation of rational/irrational numbers on number line</u>.

Dt. of issue: Dt. of submission: Dt. of correction.

1. **Represent** $\sqrt{5}$ **on number line.**
2. **Representi)** $\sqrt{13}$ **ii)** $\sqrt{3}+1$ **on number line.**
3. **Represent** $\sqrt{5.2}$ **on number line.**
4. **Visualise 5.875 on number line using successive magnification.**
5. **Visualise** $6.12\bar{3}$ **on number line using successive magnification.**
6. **Find 3 rational and 3 irrational numbers between** $\sqrt{2}$ **and** $\sqrt{3}$**.**
7. **Find 4 rational and 4 irrational numbers between** $2.\bar{2}$ **and** $2.\bar{3}$**.**

8 Is 0 a rational number ?Can you write in the form of $\frac{p}{q}$**.**

CHAPTER : NUMBER SYSTEM

CLASS-IX , MATHEMATICS ASSIGNMENT-3

<u>CONCEPT: Properties of irrational numbers. (addition, subtraction, multiplication, division)</u>

Dt. of issue: Dt. of submission: Dt. of correction.

1. **Give examples of 2 irrational numbers**
   - **i) whose sum is a rational number.**
   - **ii) product is a rational number.iii)quotient is a rational number.**
2. **Give examples of two irrational numbers**
   - **i) whose sum is an irrational number.**
   - **ii) whose product is an irrational number.**
   - **iii) quotient is an irrational number.**
3. **Simplify** $\sqrt{8}+16\sqrt{2}-\sqrt{128}$**.**
4. **Simplify** $\sqrt{128}$ **x** $\sqrt{45}$ **x** $\sqrt{5}$**.**

5. **Express** $\frac{9}{7}\sqrt[4]{1250}$ **into simplest form.**

CHAPTER : NUMBER SYSTEM

CLASS-IX , MATHEMATICS ASSIGNMENT-4

CONCEPT: Surds.

Dt. of issue: **Dt. of submission:** **Dt. of correction.**

1. **Find the rationalise factor of** $\sqrt{50}$**,** $\sqrt{72}$**,** $\sqrt{108}$**,** $\sqrt{18}$

2. **Find the rationalise factor of** $\sqrt{2}+\sqrt{3}$ **.**

3. **Which is greater ?** $\sqrt[4]{3}$ **or** $\sqrt[3]{2}$ **.**

4. **Arrange in ascending order.** $\sqrt{2}$ **,** $\sqrt[8]{3}$ **,** $\sqrt[16]{5}$ **,** $\sqrt[4]{4}$ **.**

5. **Evaluate** **i)** $\sqrt[4]{5}$ **x** $\sqrt[6]{3}$ **ii)** $\sqrt[6]{12} \,/\, \sqrt[12]{36}$

CHAPTER : NUMBER SYSTEM

CLASS-IX , MATHEMATICS ASSIGNMENT-5

CONCEPT : Rationalize the denominator of surds.

Dt. of issue: **Dt. of submission:** **Dt. of correction.**

1. **Rationalise the denominator.** $\frac{7+3\sqrt{5}}{7-3\sqrt{5}}$ **.**

2. **Find a and b .** **a)** $\frac{5+2\sqrt{3}}{7+4\sqrt{3}} = a+b\sqrt{3}$ **b)** $\frac{7+\sqrt{5}}{7-\sqrt{5}} - \frac{7-\sqrt{5}}{7+\sqrt{5}} = a+7\sqrt{5}b$

3. **If** $x = 9+4\sqrt{5}$ **find** $\sqrt{x} - \frac{1}{\sqrt{x}}$ **.**

4. **If** $x = 3+2\sqrt{2}$ **find** **a)** $x^2 + \frac{1}{x^2}$ **b)** $x^4 + \frac{1}{x^4}$

5. **If** $x = \frac{1}{2-\sqrt{3}}$ **find** $x^3-2x^2-7x+5=3$

CHAPTER : NUMBER SYSTEM

CLASS-IX , MATHEMATICS ASSIGNMENT-6

CONCEPT: Exponent, laws of exponents.

Dt. of issue: **Dt. of submission:** **Dt. of correction.**

1. **Solve the equation.** $2^{2x+2} = 2^{3x-1}$ **.**

2. **Simplify** $\frac{2^{n}+2^{n-1}}{2^{n+1}-2^{n}}$ **.**

3. **If** $a^{\frac{1}{x}} = b^{\frac{1}{y}} = c^{\frac{1}{z}}$ **and abc = 1 prove that x+y+z = 0.**

4. **Solve for x and y .** $(5)^{x} = 5^{y-1}$ **and** $(2)^{y} =$ **4 x** 8^{x} **.**

5. **Simplify** $\frac{1}{1+x^{b-c}+x^{c-a}} + \frac{1}{1+x^{a-b}+x^{c-b}} + \frac{1}{1+x^{a-c}+x^{b-c}}$

6. **Simplify** $\left(\frac{x^{a}}{x^{b}}\right)^{a^2+ab+b^2} \left(\frac{x^{b}}{x^{c}}\right)^{b^{2+bc+c^2}} \left(\frac{x^{c}}{x^{a}}\right)^{c^{2+ca+a}}$