**MILESTONE ACADEMY**

 **VACATION HOME-WORK**

**CLASS – IX SUBMISSION DATE – 17.06.19**

**PC/MS/2019-20/IX/ 014**

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**ENGLISH –1.** Prepareillustrated report or PPT on Robert Frost or William Wordsworth with reference

 to you book.

 **2.** Write an article on the topic - “Our Country Our Responsibility”.

 **3.** Create an encyclopedia (5 pictures and explanation for each letter) A to Z.

**HINDI** -1. 1- vuqPNsn fyf[k,%& 1- fo|kFkhZ thou 2- ioksZa dk cnyrk Lo:i

2- Ik= fyf[k,%&

i- fdlh izfl) f[kykM+h ls gqbZ viuh eqykdkr ds vuqHkoksa dh ppkZ djrs gq, viuh l[kh@ vius

 fe= dks i= fyf[k,A

 ii- vius NksVs HkkbZ dks i= fy[kdj ofj"V ukxfjdksa ds çfr lEeku vkSj lnO;ogkj dh lh[k nhft,A

3- o.kZ&foPNsn ds 15 & 15 mnkgj.k fyf[k, A

**SANSKRIT** - 1-lafU/k &1- ifjHkk"kk 2- izdkj 3- izR;sd izdkj ds 10 mnkgj.k

2- ydkj ifjorZu izR;sd ds 5 mnkgj.k

3- vuqPNsn ys[kue~ & 1- vkn'kZ Nk=k% 2- Ik;kZ;oj.kL; egRoe~

4- izR;; iz;ksx & 1- Y;i~ 2- DRok 3- rqequ~ (izR;sd ds 5)

5- milxZ iz;ksx & fuj~ ] ijk ] iz ] vi ] nqj~ ] (izR;sd ds 5)

**MATHS** –

Q1. Represent $\sqrt{8.6}$ on the number line.

Q2. Find three irrational number between 0.2101 and $0.\overbar{2}$

Q3. If $\frac{x}{9}=0.\overbar{6}+0.\overbar{4}$. find the value of x

Q4. if 2x = 3y = 12z . then prove that $\frac{1}{z}$ = $\frac{1}{y}$ + $\frac{2}{x}$

Q5. Find the value of x , if ($ \frac{3}{5}$ )x × ( $\frac{5}{3}$)2x = $\frac{125}{27}$ .

Q6. Prove that $\frac{5^{28}+5^{27}+5^{26}}{5^{29}+5^{28}-5^{27}}=\frac{31}{145}$

Q7. Determine a and b if $\frac{5+ \sqrt{3}}{7-4 \sqrt{3}}$ = 94 a + 3 $\sqrt{3 }$ b.

Q8. If x = 7 + 4$\sqrt{3}$ , find the value of $\sqrt{x}$ +$\frac{1}{\sqrt{x}}$ .

Q9. Find the remainder when p(x) = x3 – 6x2 + 2x – 4 is divided by (1 – 2x), by using remainder theorem

 and verify the result by actual division.

Q10. Find the value of k , if the polynomial p(x) = kx3 + 9x2 + 4x -10 is divided by (x - 3) leaves remainder -22.

Q11. What must be added to x3 – 3x2 – 12x + 19 so that the result is exactly divisible by x2 + x - 6 .

Q12. If $x+\frac{1}{x}=\sqrt{5}$ find (i) x - $\frac{1}{x}$ ,(ii) $x^{2}-\frac{1}{x^{2}}$ , (iii) $x^{3}+ \frac{1}{x^{3}}$ , (iv) $x^{3}- \frac{1}{x^{3}}$ (v) $x^{4}+ \frac{1}{x^{4}}$ .

Q13. Simplify : (i) $\left(p+q+r\right)^{2}$ +$\left(p+q+r\right)^{2}$

 (ii) $\left(a+b+c\right)^{2}$ – $\left(a-b+c\right)^{2}$

 (iii) 453 – 253 – 203 .

 Q14. If 2a + 3b = 15 and ab =10. Find the value of $8a^{3}+27b^{3}$

 Q15. Plot the point on the graph paper and name the quadrant of the following points.

1. (-5,3).
2. (3,3).
3. (3,0)
4. (-5,0)
5. (0,0)
6. (0,-7).

**SCIENCE** –

**Chemistry** – 1. Collect matter on diffusion and its consequences in everyday life.

 2. Comparision of 3 states of matter along with diagram.

**Physics** – 1. To verify Newton’s law of motion with practical illustrations.

 2. To prove that sound needs a material medium to travel.

**Biology** – 1. Draw a well lablled diagram of plant cell /animal cell in a full size chart paper.

2. Collect leaves of 5 dicot and 5 monocot plants and prepare a herbarium file.

**SOCIAL SCIENCE** –

 1. Prepare a project on Natural Disaster (Types and Management)

 2. Make a dictionary on important dates and events from

 History Chapter 1 - French Revolution, Chapter 2 - Russian Revolution

 3. Civics – Chapter 2 - What is Democracy? Why Democracy? (prepare objective questions)

 Chapter 3 - Constitutional Design (prepare objective questions)

 4. Geography Chapter 2 - The Physical Features of India (Do the Map of Back exercise)

**COMPUTER** – Project (Submit hard copy and soft copy)

Create PPT on the following topics (any one)

 (1) Digital Jewellery

 (2) E-cash payment system

 (3) Driverless car

 (4) Biometric technology

 (5) Smartcard Technology

**CREATIVE EXPRESSION**-**.**

Record and write the conversation between you and the travel agent for a complete package

(food, lodging, sight view, transport, etc.) a complete trip planned for summer vacation.

**For Eg. :- Written Conversation**

Child :- Sir please brief about the tour packages for different cities.

Agent :- Well ! Just come down to our office and I will give you all the details.

**LIFE SKILLS-** Think of situations where you can “give” yourself to others, gifts which money cannot

buy – such as kindness, thoughtfulness, courtesy, consideration, good nature, courage, tolerance, appreciation. Do not make up stories. Talk about a genuine act - do not boast. Write the incident and your experience of situations where you had given yourself.

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