1. <u>Diary Entry</u>:
   You are a girl of the new generation and owing to the generation gap, your grandmother is different from other people in various aspects. Make a diary entry expressing your feeling and state how your grandmother is so different.

2. <u>Read the following conversation given below and complete the paragraph that follows</u>.

   Max   :   Where can we meet tomorrow?

   Aryan   :   I may not be able to meet you tomorrow.

   Max   :   Are you going to be busy?

   Aryan   :   Yes, I will be travelling tomorrow.

   Max asked Aryan (a) .... Aryan told (b)
   ……………................................... Max asked (c)... Aryan said
   (d).. .

3. The following passage has not been edited. There is an error in each of the lines against which a   blank is given. Identify the error and write it along with the correction in the answer sheet.   (Attempt any four)

	Incorrect		Correct
Neil Armstrong were the commander of Apollo II	....	(a)	....
He was the first to walk over	....	(b)	....
the moon. What many people do not knew	….............	(c)	....
is that unlike most of their fellow	....	(d)	....
astronauts, he was the civilian	....	(e)	....
and not part of the military			

4. <u>Rearrange the following words / phrases to form meaningful sentences</u>.

   (a)   before / calculate / exams / the / number / of / days / the

   (b)   for / each / divide / the / days / of / number / subject

   (C)   day / each / number / subject / of / allot / for / the / chapters / per

   (d)   and / notes / prepare / revise / concepts / finally.

5. <u>Answer the following questions</u>:

   a) What did Margie not want to dispute?

   b) What fun was there in the old school?

   c) Why was the County Inspecter sent for? What did the County Inspecter do at first?

   d) Describe the two roads that the poet finds. Which road did he choose?

   e) Find the poetic devices used in the poem,"The Road Not Taken

1. Every whole number is a natural number write true or false.

2. If $x = \dfrac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ and $y = \dfrac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$, find the value of $x^2 + y^2 + xy$.

3. If $x = \dfrac{2-\sqrt{5}}{2+\sqrt{5}}$ and $y = \dfrac{2+\sqrt{5}}{2-\sqrt{5}}$, find the value of $x^2 - y^2$.

4. Determine rational numbers p and q if

$$\frac{7+\sqrt{5}}{7-\sqrt{5}} - \frac{7-\sqrt{5}}{7+\sqrt{5}} = p - 7\sqrt{5}\,q .$$

5. Simplify: $\dfrac{6}{2\sqrt{3}-\sqrt{6}} + \dfrac{\sqrt{6}}{\sqrt{3}+\sqrt{2}} - \dfrac{4\sqrt{3}}{\sqrt{6}-\sqrt{2}}.$

6. Simplify: $\dfrac{3\sqrt{2}}{\sqrt{6}-\sqrt{3}} + \dfrac{2\sqrt{3}}{\sqrt{6}+2} - \dfrac{4\sqrt{3}}{\sqrt{6}-\sqrt{2}}.$

7. Show that:

$$\frac{1}{3-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} - \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-2} = 5$$

Chapter – 1 (Number Systems)

1. Express the following numbers in the form of p :

            q

(a) -25.6875

(b) 0.621621621..

(c) 15.712121212..

2. Write one rational & one fractional number between 0.515115111.... and 0.535335333....

3. Write one example each of two irrational numbers whose:

(a) Sum is a rational number

(b) Product is an irrational number

(c) Difference is an irrational number

(d) Quotient is a rational number

4. Simplify : $\left[\,\left\{\,(625)^{-1/2}\right\}^{-1/4}\,\right]^{2}$

5. (a) Find the value of x if $2^{x-7} \times 5^{x-4} = 1250$

  (b) Find the value of x and y if:

$3^{x-1} = 9$ & $4^{y+2} = 64$

6. Find the value of a & b if $\underline{5 + 2\sqrt{3}} = a + b\sqrt{3}$

$$7 + 4\sqrt{3}$$

7. If $x = 3 + \sqrt{8}$, then find the value of $x^2 + 1$.

TOPIC: NUMBER SYSTEM CLASS: IX SUBJECT: MATHEMATICS
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1. Visualize 3.756 on the number line, using successive magnification
2. Represent $\sqrt{3.5}$ on the number line
3. Express 1. 3 2 + 0.35 as a fraction in simplest form. (166/99)
4. Express 0.1254 in the form p/q (69/550)
5. If $x = 3+2\sqrt{2}$, find the value of $x^2 + 1/x^2$ (34)
6. If $x = 2 + \sqrt{5}$, Prove that $x^2 + 1 = 18$
   x^2
7. Rationalise the denominator 1
   $\sqrt{6} + \sqrt{5} - \sqrt{11}$
8. If a and b are rational numbers, find a and b
   a) $\sqrt{2} + \sqrt{3} = a + b \sqrt{6}$ (a=2, b=5/6)
$3\sqrt{2} - 2\sqrt{3}$
   b) $\sqrt{5} - 2 - \sqrt{5} + 2 = a + b \sqrt{5}$ (a = 0, b = - 8)
   $\sqrt{5} + 2 \sqrt{5} - 2$
9. Simplify: a) 1 + 1 + 1
   $1 + \sqrt{2} \sqrt{2} + \sqrt{3} \sqrt{3} + \sqrt{4}$ (1)
10. If $a = \sqrt{3}+\sqrt{2}$ and $b = \sqrt{3} - \sqrt{2}$, find the value of $a^2 + b^2$ (98)
   $\sqrt{3} - \sqrt{2} \sqrt{3} + \sqrt{2}$
 2
11. If $a = 9 - 4\sqrt{5}$, find the value of a – 1/a (320)
 3
12. If $x = 1 - \sqrt{2}$, find the value of x – 1/x (8)
13. If $x = 3 + 2 \sqrt{2}$, find the value of $\sqrt{x} - 1$ (8)
$\sqrt{x}$
14. If x = 0.125, find the value of $(1/x)^{1/3}$
15. If $x = \sqrt{3} + \sqrt{2}$ then find the value of x^2 (49 + 20$\sqrt{6}$)
   $\sqrt{3} - \sqrt{2}$
16. If x = 1 , find the value of $x^3 - 2x^2 - 7x + 5$ (3)
   $2 - \sqrt{3}$
17. Find four rational numbers between 3/5 and 4/5
18. Find two irrational numbers lying between $\sqrt{2}$ and $\sqrt{3}$
19. Find two rational and irrational numbers between 0.3101 and 0.3222
20. Simplify the following: a) $576^{-1/2}$ b) $343^{-1/3}$ c) $(-1/27)^{-2/3}$ d) $(0.008)^{4/3}$ e) $(729)^{-1/6}$
625 1000
21. Simplify and express the result in the simplest form: $(25)^{3/2}$ x $(243)^{2/5}$ (1125/512)
$(16)^{5/4}$ x $(8)^{4/3}$
22. Find the value x, if 5^{x-3} x $3^{2x-8} = 225$ (x = 5)
23. Solve: a) 49 x $7^x = (343)^{1/3}$ (x = -1)
   b) $2^x = (128)^{1/7}$ x $(\sqrt{2})^4$ (3)
   c) If $3^x = 9$, find x (1/2)
   27^x
   d) $(1/7)^{4-2x} = \sqrt{7}$ (9/4)

24. Evaluate: a) $125^{-1/3} \times 27^{1/3} (6^2 + 8^2)^{1/2}$ (6)

b) $(17^2 - 8^2)^{1/2}$ (15)

c) $64^{1/3} (64^{1/3} - 64^{2/3})$

25. Simplify: a) $\sqrt{45} + \sqrt{80} - 3\sqrt{20}$ ($\sqrt{5}$)

b) $7\sqrt{6} - \sqrt{252} - \sqrt{294} + 6\sqrt{7}$ (0)

c) $4\sqrt{28} + 3\sqrt{7}$

26. Give an example of two irrational numbers whose: (A) Sum is rational (B) product is rational (C) quotient is rational

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Class IX   **Weekly Assignment 2020**

Subject – Physics

https://www.jagranjosh.com/articles/cbse-class-9-science-chapter-notes-on-motion-1499426348-1/
Assignment:01/04/2020 to 04/04/2020:read the lesson from NCERT n underline the main points.06/04/2020 to 14/04/2020:make notes of this lesson with the help of link provided here.For any help contact me on 9065314206.

Answer the following questions –

1. The displacement of a moving object in a given time interval is zero. What the distance travelled by the object also be zero. Justify your answer.
2. Define average speed and its unit.
3. What will be the equation of motion of an object moving with a uniform velocity changes?
4. A particle is moving in a circular path of radius(r). What would be the displacement after half a circle?
5. Differentiate between distance and displacement.
6. What are the uses of distance time graph?
7. How will you show that the slope of displacement time graph gives velocity of the body?
8. Derive the expression for equation of motion by graphical method.
9. Distinguish between speed and velocity.
10. What does the odometer of an automobile measure?
11. What is the nature of the distance time graph for uniform and non uniform motion of an object.
12. Obtain a relation for the distance travelled by an object moving with a uniform acceleration in the interval 4th and 5th seconds.
13. (a) what do you understand by instantaneous velocity? (b) what is negative acceleration?
14. Express average velocity when the velocity of a body changes at non-uniform rate and a uniform rate.
15. Draw a velocity versus time graph of a stone thrown vertically upwards and then coming downwards after attaining the maximum height.

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Class IX   **Weekly Assignment 2020**

Subject – Biology

Important Topic:

- Prokaryotic cell

- Eukaryotic cell

- Cell theory

- Hypotonic Solution

- Hypertonic Solution

• Mitochondria

• Nucleus

• Plastids

• Endoplasmic reticulum

• Golgi Apparatus

• Vacuoles

[Write short notes on the above mentioned topics]

Answer the following question:

1. What would happen if the plasma membrane ruptures or breaks down?

2. What would happen to the life of cell if there was no Golgi apparatus?

3. Define osmosis.

4. How does Amoeba obtains it's food?

5. Mention the various difference between plant cell and animal cell.

6. Why mitochondria is known as the power house of the cell?

7. Where are protein synthesized inside the cell?

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Class IX   **Weekly Assignment 2020**

Subject – Hist./Civics

1. Enlist the merits and demerits of Green Revolution in India.
2. What are the different ways of increasing production on a same piece of land? Explain.
3. Modern farming methods require inputs which are manufactured in industry. Do you agree?
4. Distinguish between physical and human capital.
5. Briefly explain about the non-farming activities of the village Palampur.

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Class IX   **Weekly Assignment 2020**

Subject – Geography

1. In which hemisphere India is located question mark?
2. Which country is the largest in the world?
3. What is the north-south and east-west distance of India?
4. What is the length of the land boundary and length of the coastline of India?
5. Which latitude divides India into almost two equal parts?
6. Which Canal reduced the distance between India and Europe?
7. Which water body separates India and Sri Lanka?

8. Name the two landlocked states of India .
9. Which is the largest and smallest state of India?
10. How many states and union territory in India?
11. Before 1947, what types of states where in India?
12. Name two water bodies lying on the eastern and western coast of India.

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Class IX   **Weekly Assignment 2020**

Subject – V. I.T.

Q 1. Fill in the blanks with personal pronouns to correctly address the people being talked about. The first is done for you –

a. Sheela lies to go to the park in the evenings. _She_ plays there with her friends.
b. Manoj loves studying. _____ has stood first in class in the annual exams.
c. My sister and mother are watching a movie on TV. _____ will have lunch together.
d. The students wish their class teacher by saying "good morning" every day. _____ respect her a lot.
e. Neha is wearing a blue frock. _____ frock is very pretty.
f. My cousins were happy to see me. _____ love me a lot.
g. My friends and I are planning to go to picnic on Sunday. _____ want to have a good time together.
h. My mother takes care of the entire house. _____ is very organized lady.

Q. 2. Frame 2 questions by using following words-

a. What   b. When   c. Where   d. Which   e. Who   f. Whom
g. Why   h. How   i. Are   j. Have   k. Do   l. Can

Q. 3. Write full form –

a. CPU   b. ALU   c. MU   d. CU   e URL   f. RAM   g. ROM
h. DVD   i. OS   J. HTML   k. CD

Q. 4. Write difference between –

a. RAM and ROM .
b. Input and Output devices.
c. LAN and MAN.
d. Data and Information

Q. 5. Write ansers in brief –

a. Explain at least 5 characteristics of computers.
b. Explain different applications of computers.

d. What is Operating system. Why do we need it ?

e. What is Internet ? How does it work ?

f. Write in brief the history of Internet ?

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