Class: IX

I.Solve the following:

1. Define a rational number . Find $\frac{3}{7}$ + $\left(\frac{-6}{11}\right)$ + $\left(\frac{-8}{11}\right)$ + $\frac{5}{22}$

2. Find 5 rational numbers between $\frac{3}{5}$ and $\frac{1}{4}$

3. Solve $\frac{x}{3}$ + 1 = $\frac{7}{15}$

4. Ravi's father is 26 years younger than Ravi's grandfather and 29 years older than Ravi. The sum of the ages of all the three is 135 years. What is the age of each one of them?

5. Find the square root of each of the following by prime factorisation.
   (a) 7056   (b 3136   (c) 5929   (d) 7921   (e) 4489

6. Add 5m (3-m) and $6m^2 - 13m$.
   Subtract pq (p-q) from 2pq (p+q)

7. Find the product of (a) (x + 3y + z) and (x-3y –z)   (b) $(3a - \frac{1}{2}b)$ $(3a + \frac{1}{2}b)$

8. A closed cylindrical tank of radius 7m and height 3m is made from a sheet of metal. How much sheet of metal is required?

9. Find height of a cuboid whose base area is $180cm^2$ and volume is 900 cm^3.

10. Find the value of $(2^{-1} X 4^{-1}) \div 2^{-2}$

11. Find m so that $(-3)^{m+1} X (-3)^5 = (-3)^7$.

12. If the angles of a triangle are in the ratio 1:2:3, then find all angles of the triangle.

13. Factorise $4p^2 - 7q^2$ using identity,

14. Factorise $x^2 - 7x + 12$

15. Define (a0 Acute angle (b) Right angle (c) Obtuse angle (d) Reflex angle (e) Complete angle

16. Explain about quadrilaterals using diagrams.
    (a) Parallelogram (b) Rectangle (c) Square (d) Rhombus (e) Trapezium

17. Write the formula to find area of (a) Parallelogram (b) Rectangle (c) Square (d) Rhombus
    (e) Trapezium (f) Triangle (g) Circle

18. Write the formula to find LSA, TSA and volume of (a) cuboid (b) cube   (c) cylinder (d) cone

19. Expand the following
    (a) $(a+b)^2$ (b) $(a-b)^2$ (c) $a^2 - b^2$ (d) (x +a) (x+b)

20. **Fill in the blanks:**
    (a) $1cm^3$ = _____ ml.
    (b) 1 litre = _____ cm^3.
    (c) 1 m^3 = _____cm^3.
    (d) 1000 litres = _____ cm^3 .
    (e) 1 Km = _____m.

`:: THE END::

Class: IX

I.Read the following passage and answer the questions that follow :

My introduction to the world of Nature was a painful one. Aged five, I was coming down the spiral staircase from the roof of our bungalow in Jamnagar State, when inadvertently I dislodged a beehive under one of the steps. I was immediately attacked by a swarm of angry bees, who proceeded to sting me on my face, arms and legs. I got down the stairs and ran indoors, screaming for help.

Help came in the form of my father, who calmed me down and bathed me in a solution of potassium permanganate. After two feverish days in bed, I was up and about again. But I'd learnt that Nature isn't always birdsong and dew-drenched daffodils.

There were other, more pleasant, aspects of the natural world that remain in my memory: collecting seashells on the beach, feeding the turkeys on the State's turkey farm, wandering through a glade of tall cosmos flowers, watching the village boys wash down their buffaloes at the edge of the lake.

I grew up with an awareness of my natural surroundings—bee stings and all—and later this was buttressed by the sort of books and stories that I enjoyed reading—*Peter Pan in Kensington Gardens*, the wonderland of Alice, the Mowgli stories, Ballantyne's *Coral Island* and *Hudson Bay*, Jack London's *White Fang*, the *Panchatantra* and *Jataka Tales* . . . The literature that came my way between the ages of five and fifteen was of a kind that is rare today, for most modern writers appear to be preoccupied with urban backgrounds and concerns. I wish there was a Thoreau around, or a Richard Jefferies, or an H.E. Bates: writers who lived close to Nature and made it a part of their creative work.

Choose the correct options:
1. Which of these words is the closest synonym of "dislodged"?

    A) Removed B) Dislocated C) Displaced D) Moved

2. What part type of a word is "Swarm of bees"?

    A) Compound noun B) Collective noun C) Both B&C D) Neither B nor C

3. What is the meaning of "Nature isn't always birdsongs and dew-drenched daffodils"?

    A) Nature is not always pleasant B) Nature is not always beautiful

    C) Flowers are not a part of nature D) Birdsongs are not natural

4. Which of these characters has been to Kensington Gardens?

    A) Mowgli B) Alice C) Hudson D) Peter Pan

5. What is the opposite of the word "Urban"?
    A) Underdeveloped B) Natural C) Remote D) Townish

Answer these questions.

1) What does the passage talk about? Ans:

2) Was the narrator's experience with nature always pleasant? Ans:

3) Name a few authors mentioned in the passage. Ans:

II. Fill in the blanks with the correct degree of comparison.

1. Which is _____ for you? English or Math? (Easy)
2. May is the _____ month of all. (Hot)
3. You are not as _____ as you think. (Funny)

III. Fill in the blanks with the correct option.

1. The film was _____. I was _____. (Interested/ interesting)
2. I think they are from _____ European country. (A/ an/ the)
3. I didn't know that you could sing so _____. (Captivatingly/ interestingly)

4. She is superior _____ her husband in intelligence. (Than/ to)
5. _____ people shouldn't have a _____. (Vice/ wise)

IV. Join the sentences using a relative pronoun

1. I know a professor from Hyderabad University. I met him yesterday. Ans:

2. You lost the book. I gave it to you on your birthday. Ans:

3. Hashtag is widely used on Twitter. It is a common symbol on social media platforms. Ans:

4. I talked to a woman yesterday. She looked suspicious. Ans:

5. This is the horse. It won the race. Ans:

V) Change the following sentences to indirect speech.

1. After I returned from school, my brother asked me, "Do you have any chocolates?". I said to him, "I had one but I already ate it." He was not happy about it and stared shouting. I then said, "I will tell your teacher if you do this." 1. My brother asked me _____
   2. I told him _____ 3. I said that
   _____

2. "I want to go on a trip", I announced to my family. My father said, "You don't need to go anywhere. Go and study." My mother said, "You should be at home and help me." So, my holiday plans are to stay at home and complain about it. 1. I told my family
   that_____ 2. My father said that
   _____ 3. My mother said that
   _____

VI. Identify the errors in the sentences and write the correct answer. Use 'x' if there are no errors.

1. My friends had gave me a surprise before I went home.

   Error:

   Correction:

2. Everyone in the class were shouting loudly.

   Error:

   Correction:

3. It is every children's dream to play all day long.

   Error:

   Correction:

4. You followed an unique method

   Error:

   Correction:

5. We should help our friends in there times of need.
   Error:
   Correction:

:: THE END::

Science Assignment - 2024-25

Class: IX

Physical Science

1. Write names, symbols, atomic weights of elements from1 to 30 and learn them.

2. Collect some information about the differences among solid, liquid and gaseous substances on the basis of their properties.

3. Gather some information and pictures related to evaporation, condensation, freezing, melting, boiling and sublimation in our daily life.

Biological science

Note : Draw the following diagrams.

1. Compound microscope

2. Various cells from the human body

3. Prokaryotic cell

4. Animal cell

5. Plant cell

6. Location of meristematic tissue in plant body

7. Various types of simple tissues   (i) parenchyma   (ii) collenchymas   (iii) sclerenchyma

8. Types of complex tissue

9. Different types of epithelial tissues

10. Types of muscles fibres   (i) striated muscle   (ii) smooth muscle   (iii) cardiac muscle

11. Neuron-unit of nervous tissue

:: THE END::