VACATION TIME

SURAJ SCHOOL

SURAJ

SUMMER HOLIDAY HOMEWORK
2024-25

GRADE- 9

<u>PREFACE</u>

Dear Parents and Students,

Once again it's summer break, a time to unwind and actively enjoy a variety of academic and co-curricular activities. We are thrilled to present an extra ordinary opportunity for your child to engage in a plethora of captivating activities, embracing a truly multidisciplinary learning approach.

Summer vacation is the most amazing and exciting part of school life. Our team teachers have crafted an exquisite variety of activities that exceeds traditional boundaries, facilitating your child's holistic development.

These activities will not only help you revise what was taught, but will also enrich your knowledge. By immersing yourselves in these carefully- crafted activities, the learners embark on a voyage of self- exploration, transcending traditional boundaries, and realizing their fullest potential. Each task serves as a conduit for boundless imagination, critical thinking, and creative expression, intertwining seamlessly to awaken dormant potential within. These projects will be assessed as Subject Enrichment Activity, Portfolio or Art Integrated Learning Activity.

May your summer break be an unforgettable chapter in the annals of your family's story, a testament to the transformative power of education and the bonds of love.

With Love,
Suraj School , Manesar

The journey of a thousand miles begins with one step

General instructions to be followed in summer vacation: -
- ❖ Revise and complete the whole work done till date.
- ❖ Display your creativity in holiday homework.
- ❖ Meditate for 10-15 minutes daily.
- ❖ Practice yoga for at least half an hour daily.
- ❖ As the summers are at its peak, start keeping water for the birds on regular basis.
- ❖ Increase your intake of fresh fruits and water to keep you well hydrated and energetic.
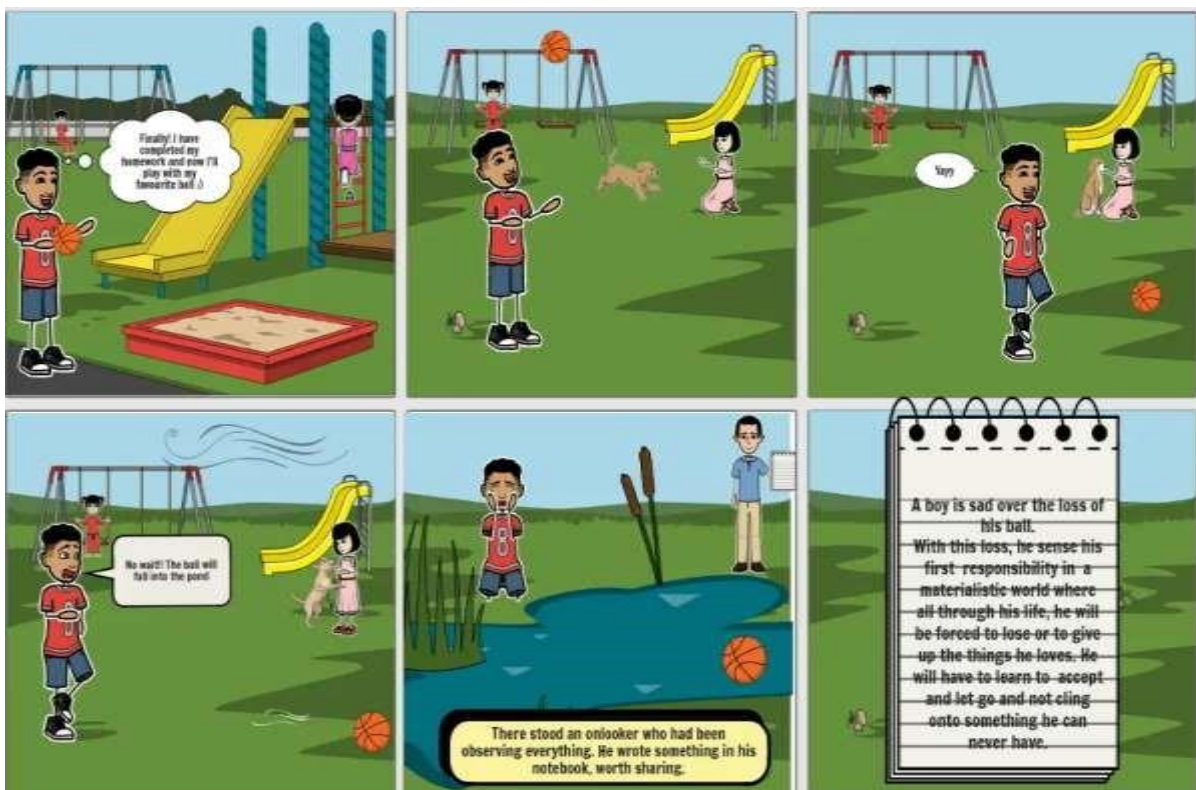
ENGLISH

ACTIVITIES:

- Conventional school system versus Future school system. On the basis of your reading of the lesson **'The Fun They Had'** of Beehive, elaborate in your own words the difference between schools of the 21st century and those in the 22nd century. You can use self-drawn pictures or printed pictures to support the idea (Word limit: 200 to 250 words).

- **Storyboard:** A storyboard is a visual representation of a story as per the sequence of actions in which they occurred. It is a series of ordered drawings with dialogues just like a comic book.

- Read the lesson '**The Lost Child'** of Moments and create a storyboard of the whole story by drawing the images and writing the dialogues just like the one

Mentioned below for your reference:

- **Travelogue Writing:**

A Travelogue is a truthful account of an individual's experiences while travelling, which are usually told in the Past tense and in the first person.

Ek Bharat Shrestha Bharat:

You are a 'Freelance Travel Blogger'. You applied for the post of a permanent 'Travel Writer' for a leading travel magazine 'Wanderlust India'. After the interview, you were given a task to submit a Portfolio of your work in the form of a Travelogue in 500-600 words in order to qualify for the next round.

You have selected the state haryana for your portfolio and for travelling and showcasing your narration skills as a Travel Writer. Prepare your portfolio by writing a Travelogue on haryana by using attractive pictures, vivid description, imagination, and research.

The following points should be included in your Travelogue:
- Famous Resorts
- Handloom & Handicrafts
- Indigenous Sports
- Indigenous Cuisines
- Special Festivals
- Tourist Attractions
- Scenic Beauty

Follow the below mentioned guidelines for submission of homework:

- Attempt all three questions in the Art Integrated Project file.
- Make an attractive cover page and mention the following details on it:

  - ➤ Student's Name
  - ➤ School Name
  - ➤ Subject
  - ➤ Session

- A punch file should be used.
- Content should be written in a neat and clean handwriting.
- The written content should be supported by relevant pictures/ self- drawn figures/ visuals.

- Use A4 sized one- sided ruled coloured sheets. (Avoid dark colours to ensure complete visibility of the content).
- Paste pictures on the back side of the page so that it appears on left side and content on the right side while turning the pages.

Rubrics:
- Quality of the content.
- Originality (No plagiarism).
- Accuracy of information.
- Adherence to the specified timeline.
- Content with respect to spellings, grammar, and punctuation.
- Clarity of thoughts and ideas.
- Creativity.

Academic

Explore and Explain the figures of speech: Research about the commonly used figures of speech in Poems and other forms of fiction. Explain them by writing a short note on each device, quoting examples from the chapters and poems in your course and pasting/drawing the relevant pictures.

Note: This question also has to be attempted in the Project file.

Worksheet

1. _____ of the two sisters is married.
A. Both   B. Every   C. Each   D. Any

2. _____ of you should attend the conference.
A. Both   B. Each   C. Every   D. Many

3. We should inform _____ of them.
A. many   B. every   C. few   D. all

4. They have spent _____ for their son's wedding.
A. many   B. enough   C. all   D. the little

5. _____ of the candidates pass this exam.

A. Enough   B. Fewer   C. Either   D. Most

6. _____ of the deadlines is met.
A. Neither   B. No   C. None   D. Much

7. Can I borrow _____ sugar?
A. much   B. some   C. a little   D. a few

8. With this, you have lost _____ chance that you had.
A. a little   B. little   C. the little   D. slight

9. _____ participants left the meeting in between.
A. Several   B. Much   C. The few   D. Little

10. It seems that they would need _____ workers for the construction.
A. little   B. either   C. more   D. some

11.I _____ working all afternoon and have just finished the assignment.
A have been   B had been   C shall be   D am

12. Rohan _____ the movie before he read the review.
A watches   B have watched   C had watched   D was watching

13. He _____ in the States but he still does not have a command over the English language.
A have been living   B has been living   C have lived   D living

14. By the next month, we shall _____ the project.
A has completed   B completing   C completed   D have completed

15. Every boy and girl _____ in the class today.
A are present   B is present   C have present   D had present

16. He _____ daily for a year now.
A exercises   B was exercising   C has been exercising   D have been exercising

17. I _____ this book since morning.
A had been reading   B has been reading
C have had read   D shall be reading

18. Which tense is used to express general truths and facts?
A Present continuous tense   B Present perfect tense
C Past perfect tense   D Present indefinite tense

19. According to the prevailing rate, two dozen _____ rupees one hundred.
A costs   B cost   C costing   D costed

20 The Council _____ made its decision.

A have   B have had   C has   D having

<mark>हिन्दी</mark>

कला एकीकृत शिक्षक परियोजना
पत्रिका/ विवरणिका
आपने यात्रा लेखक के रूप में यात्रा करने और अपने वर्णन कौशल को प्रदर्शित करने के लिए हरियाणा का चयन किया है। आकर्षक चित्रों विशद वर्णन कल्पना और शोध का उपयोग करके हरियाणा पर एक यात्रा वृतांत लिखकर अपना पोर्टफोलियो तैयार करें।
आपकी यात्रा वृतांत में निम्नलिखित बिंदुओं को शामिल किया जाना चाहिए:
- .प्रसिद्ध ऐतिहासिक धरोहर
- सांस्कृतिक विरासत
- लोक संगीत
- धार्मिक रीति रिवाज
- विशेष त्योहार
- लोक नृत्य
- प्राकृतिक सौंदर्य
- चित्रकारी एवं कला दृष्टिकोण
- हरियाणा के लोगों का पहनावा एवं व्यवसाय
- हथकरघा और हस्तशिल्प

गृह कार्य जमा करने के लिए नीचे दिए गए दिशा निर्देशों का पालन करें
1.कला एकीकृत परियोजना फ़ाइल में करें।
2.एक आकर्षक कवर पेज बनाए और उसे पर निम्नलिखित विवरणों का उल्लेख करें : विद्यार्थी का नाम विद्यालय का नाम विषय और सत्र
3.पच फाइल का प्रयोग करना चाहिए
4.विषय वस्तु साफ सुथरी लिखावट में लिखी जानी चाहिए
5.रंगीन A4 साइज शीट का प्रयोग किया जाना चाहिए
शैक्षिक साहित्यिक परियोजना
डिजिटल इंडिया अभियान क्या है ? इसका क्या उद्देश्य है? भारत की आर्थिक व तकनीकी समृद्धि में इसकी क्या उपयोगिता है ?इस संबंध में लगभग 150 से 200 शब्दों में चित्र सहित जानकारी दीजिए !

➢ पाठ्य पुस्तक क्षितिज से पाठ 'प्रेमचंद के फटे जूते 'को ध्यान पूर्वक पढ़े और उसके आधार पर प्रेमचंद के विषय में जानकारी एकत्रित करें और पाठ में आधारित घटनाओं पर एक व्याख्यात्मक फाइल तैयार कीजिए !

निर्णायक मापदंड

- कवर पेज आकर्षक होना चाहिए
- सामग्री की गुणवत्ता
- जानकारी की सटीकता
- निर्दिष्ट समय रेखा का पालन
- वर्तनी, व्याकरण, विराम चिन्हो का सही प्रयोग होना चाहिए।
- स्पष्टता प्रदान करने के लिए उदाहरण और चित्रों का उपयोग करें।

अभ्यास पत्रिका

1. निम्नलिखित उपसर्गों से दो-दो शब्द बनाएँ -

निर -   अति-

अनु-   दुर-

2. निम्नलिखित प्रत्ययों से दो-दो शब्द बनाएँ -

इया-   लु-

ईय-   इन -

3. निम्नलिखित समस्त पदों का समास विग्रह करके समास का नाम लिखे -

भरपेट-

दिन -रात-

नीलकंठ-

घुड़सवार-

4. अर्थ के आधार पर वाक्यों की पहचान कर उनके भेद लिखिए-

(क) राम ने भोजन नहीं किया ।

(ख)धूप में मत खेलो ।

(ग) यदि वर्षा होती तो फसल अच्छी होती ।

(घ) सूर्य पूरब से निकलता है ।

5. निम्नलिखित वाक्यों को संयुक्त वाक्य में बदलिए-

(क) वह चौराहे पर खड़ा होकर उसकी प्रतीक्षा करने लगा ।

(ख) धनी होने पर भी उसमें अभिमान नहीं है ।

(ग)मेहनती होने के कारण वह हार स्वीकार नहीं करता ।

(घ)वह फल खरीदने के लिए बाजार गया ।

6.निम्नलिखित उपसर्गों से दो-दो शब्द बनाएँ -

अधि-   क-

ला-   परा-

7.निम्नलिखित प्रत्ययों से दो-दो शब्द बनाएँ -

आन-   हार-

कर-   आइन-

8.निम्नलिखित समस्त पदों का समास विग्रह करके समास का नाम लिखे -

कुलश्रेष्ठ-   कनकलता-

धर्मवीर-   त्रिफला-

9.अर्थ के आधार पर वाक्यों की पहचान कर उनके भेद लिखिए-

(क) अरे! वह गिर पड़ा।

(ख) उसने पढ़ लिया होगा।

(ग) गीता सीता से बड़ी नहीं है।

(घ) वर्षा आएगी।

10.निम्नलिखित वाक्यों को संयुक्त वाक्य में बदलिए-

(क) आलसी होने के करण वह विफल हुआ।

(ख) कठोर बनकर भी सहदय रहो।

(ग) लगातार चलते हुए कछुए ने दौड़ जीत ली।

(घ) सूर्योदय होने पर पक्षी बोलने लगे।

SCIENCE

PROJECT: I

- Read the chapter 'Food production' and prepare a report on it. Instructions to be followed for making the report

    - Page-1(Name of the topic)
    - Page-2 (Name, class, section, subject, session)
    - Page-3 (Index/ Contents)
    - Page-4 (Acknowledgment)
    - Page-5 (Required at least 10 pages)
    - Page -6 (bibliography)

    A sample format on how to properly write the project report is given as follows:

Front Page / Cover Page

- On this page you will have to write the Title of the project or name of the project that you are working on.
- It also should contain other information such as the name of the student; roll number; subject name and subject code; name of the guide teacher/supervisor along with his/her designation; School name and address.

Acknowledgement

- This is typically the third page that acknowledges individuals that have played a direct or indirect role in completing the project work.
- You should put your full signature at the end of this page.

Table of Contents/ Index

- This is the fourth page containing all the major headings and subheadings of your project.
- It should contain the respective page numbers also.

Objective / Aim of the project

You can make the project file basis the following points on improvement on food resources:
* Types of Crops – Kharif and rabi crops
* Green Revolution
* Sustainable Practices
* Crop variety improvement- Hybridisation
* Crop production management
* Irrigation
* Crop protection improvement- Weeding
* Animal Husbandry

Bibliography / References

- This should be the last page of your project.
- Here you should mention all the resources that you have used in terms of articles/books while working on the project.
- If you are giving reference to a book, it must contain the name of the author, publisher, and year of publication.
- If you are giving reference to an article, it must contain the web address (URL) and the date when you had accessed the website.
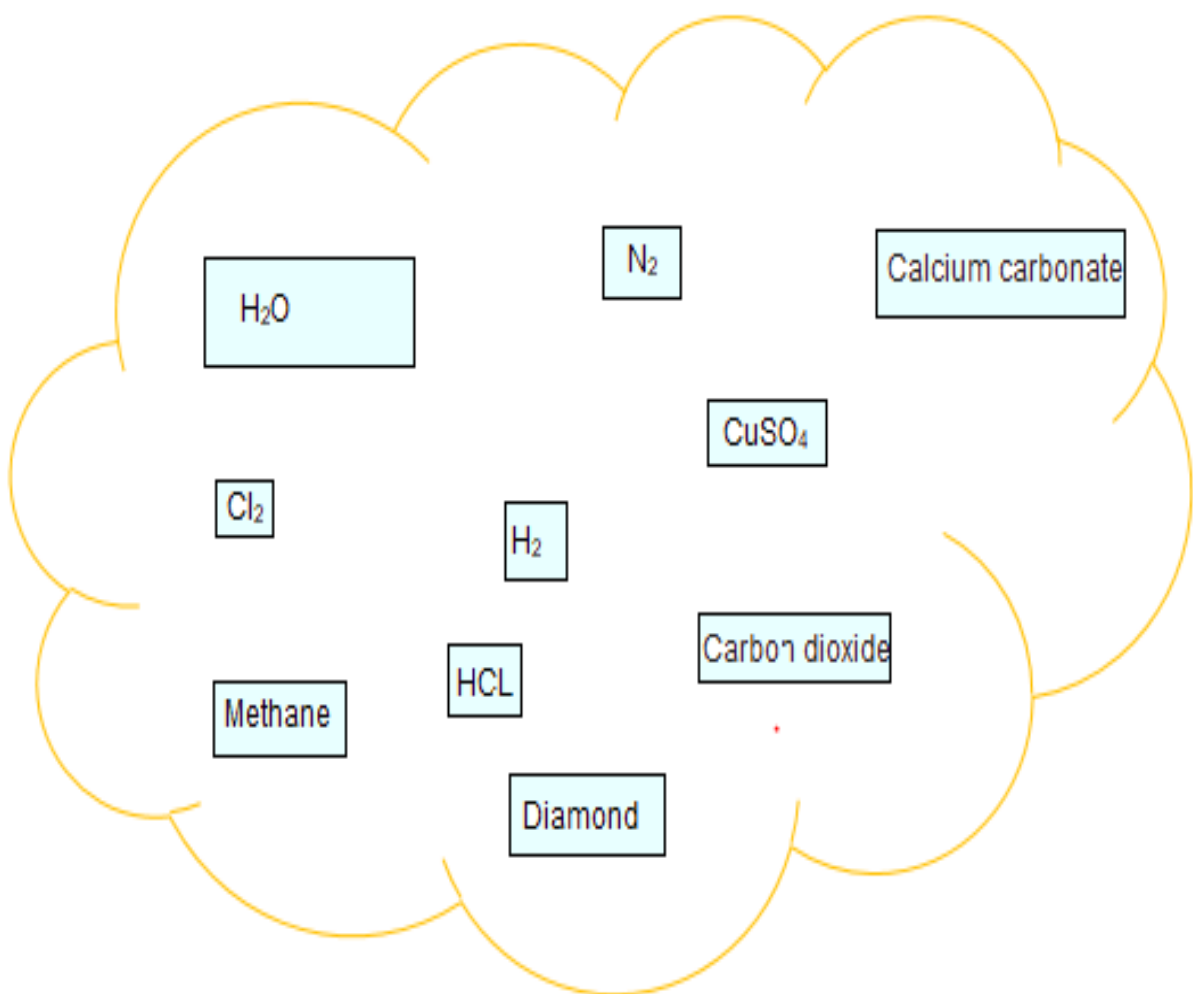
Science Worksheet

1. A scooter travelling at 10 m/s speed up to 20 m/s in 4 sec. Find the acceleration of scooter.

2. A train starts from rest and accelerate uniformly at the rate of 5 m/s^2 for 5 sec. Calculate the velocity of train in 5 sec

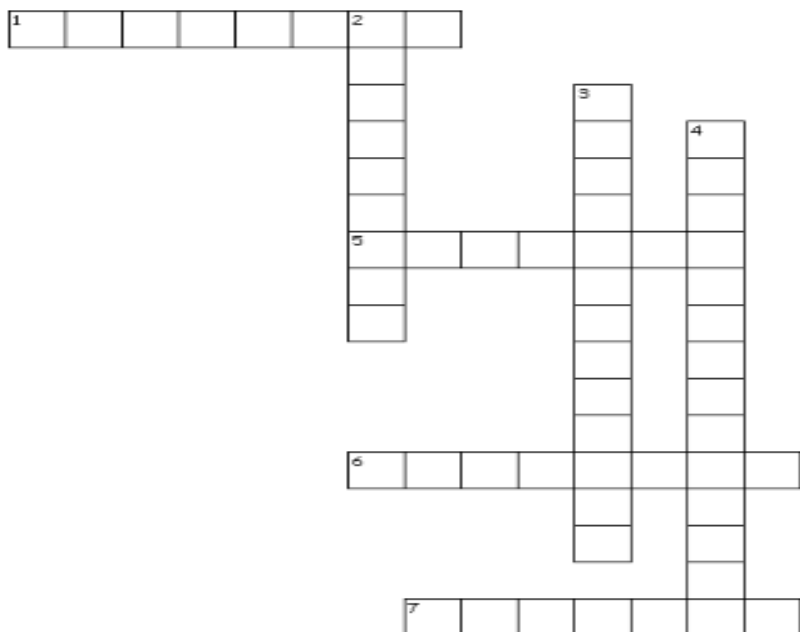3. A car starts from rest and acquire a velocity of 54 km/h in 2 sec. Find

(i) the acceleration

(ii) distance travelled by car assume motion of car is uniform?

4. An object moves along a straight line with an acceleration of 2 m/s². If its initial speed is 10 m/s, what will be its speed 2 s later?

5. A motorcyclist travels from A to B at 30 km/h and returns at 20 km/h. Find the average speed.

6. Classify the substances given in below figure into elements and compounds

H_2O

N_2

Calcium carbonate

$CuSO_4$

Cl_2

H_2

HCL

Carbon dioxide

Methane

Diamond

7. Crossword Puzzle

Across

1. hydrogen _____ is a colour gas with a smell of rotten eggs
5. The major components in solution
6. Melting point and boiling point are _____ properties
7. Two elements are liquid at room temperature are mercury and _____

Down

2. In colliads, The particles are called the _____ phase and the medium in which they are distributed is called the dispersion medium.
3. amount of solute present per unit volume or mass of the solution or solvent
4. denser particles are forced to the bottom and the lighter particles stay at the top when spun rapidly

SOCIAL SCIENCE

Activities:

Objective –'Unity In Diversity'
Aim—To promote own cultural and heritage.

Explore Haryana state ..

- Use A-4 sized, one side ruled sheets.
- Use blue or black pen to write your project.
- Design the cover page in such a way that it reflects your topic.
- Write the topic of the project, name, class, and roll no. on the cover page in bold letters.
- Use the bottom space for your name, class and roll no.
- The project work should not be less than 15 pages (including the cover page) □ Viva or written assignments will be conducted based on your project.
- Clear, relevant and coloured pictures.

Basis of State
- Location
- Economy
- Agriculture
- Language
- Per Capita Income
- Tourism
- Resources
- Dance and music
- Area, size and location
- Rivers
- Climatic conditions
- Attire
- Districts
- Peaks
- Latitude and longitudinal extent

MAP SKILLS (fill on the outline map of India)
- The highest mountain peak of the Himalayas in India. (Minimum 5 peaks)
- A mountain pass in Sikkim.
- A mountain pass in Arunachal Pradesh.
- Naga hills
- Mizo hills
- Nanda Devi peak
- Anai Mudi
- Aravali range
- Mahendergiri range

PROJECT WORK   -

Disaster Management Project

According to the United Nations, a disaster is a major disruption of a community or society's ability to function that involves extensive affects on people, property, the economy, or the environment and beyond the capacity of the affected community or society to deal using its own resources.

There are different types of disasters (Man-Made Disasters or Natural disasters) and that is why the Government of India has made it compulsory for every student to make a project on **Disaster Management** in Grade 9th.

The Disaster Management Act of 2005 acknowledges **Disaster Management** as a crucial process of planning, organizing, coordinating, and implementing measures that are necessary for-

- Prevention of the threat of any disaster
- Reduction of risk of any disaster or its consequences
- Readiness to deal with any disaster
- Promptness in dealing with a disaster
- Assessing the severity of the effects of any disaster
- Rescue and relief
- Rehabilitation and reconstruction.

So let us check what you should do to make your project:

- Choose any one topic for the disaster management project (Man-Made Disasters or Natural disasters)
- Use A4 sized sheets for writing the project. Any other sheet should not be used.
- The project should be handwritten.

- Blue or black pen should be used for writing.
- To make a project more interesting, information from newspapers, pictures, diagrams, etc. can be used.
- Begin the project by writing down what exactly disaster means.
- Use bold letters where required. Use proper headings, bullet points etc.
- Dive deep into the subject and explain why disasters are so harmful for everyone.
- Explain how to survive a disaster.
- Explain the steps taken by the Government.
- Problems faced by victims.
- Helping guidelines post disaster.
- Opinion on how to control HID
- Conclusion

Worksheet

MCQs
1. 'To treaties of government' was written by:
   A. Rousseau. B. John locke. C. Montesquieu.   D. none of these
2. Which Russian monarch was overthrown during the February revolution of 1917?
   A. Catherine the great.   B. Nicholas II.
   C. Ivan the terrible.   D. Peter the great

3. Which ocean lies to the south of India?
   A. Atlantic Ocean.   B. Pacific Ocean.   C. Arctic Ocean.   D. Indian Ocean
4. Namami gange plan was started in:
   A. 2011.   B. 2012.   C. 2013.   D. 2014
5. The main animal of Sundarbans is:
   A. Lion.   B. Tiger.   C. Leopard.   D. Cheetah
6. A lake formed when a meandering is cut from the mainstream is known as:
   A. Oxbow lakes. B. Glacial lakes.   C. Lagoon lakes.   D. Man made lakes
7. Which of these is not a salient feature of Indian preamble:
   A. Justice.   B. Secular.   C. Sovereign.   D. Planning
8. If the head of the state is elected person and not a hereditary position, it is called:
   A. Republic.   B. Secular.   C. Sovereign.   D. Communalism

9. Which one of the following is not a factor of production?
   A. Capital.   B. Labour.   C. Ships.   D. All of these
10. Quarrying and manufacturing is included in the:
    A. Primary sector.   B. Secondary sector.
    C. Tertiary sector   D. Government sector

FILL UPS
1. The main activity of the village Palampur is_____.
2. Active factor of production is_____.
3. Presidential form of democracy is practised in_____.
4. The president of constituent assembly was_____.
5. The president of drafting committee was_____.
6. The state having the largest coastline in Indian ocean is_____.
7. The largest saltwater lake of India is_____.
8. The Marina trench, the deepest part of the world's oceans is not found in Indian ocean but in the_____.
9. The primary reason for the unique coloration of the Chambal river in India is

_____.
10. Louis XVI belonged to _____ dynast

MATHEMATICS

ASSIGNMENT

1. Locate $\sqrt{3}$ on the number line.
2. Find the value of $x^3 + y^3 + z^3 - 3xyz$ if $x^2 + y^2 + z^2 = 83$ and $x + y + z = 15$
3. If $(x - 1/x) = 4$, then evaluate $(x^2 + 1/x^2)$ and $(x^4 + 1/x^4)$.
4. Find the values of a and b so that $(2x^3 + ax^2 + x + b)$ has $(x + 2)$ and $(2x - 1)$ as factors
5. Compute the value of $9x^2 + 4y^2$ if $xy = 6$ and $3x + 2y = 12$.
6. Factorize:
   i) $8a^3+b^3+12a^2b+6ab^2$ ii) $x^2 - 1 - 2a - a^2$ iii) $125x^3 - 64y^3$

   iv) $64a^3 - 27b^3 - 144a^2b + 108ab^2$
7. Express 1.8181… in the form p/q where p and q are integers and q ≠ 0.
8. Evaluate:
   $$(\sqrt{5} + \sqrt{2})^2 + (\sqrt{8} - \sqrt{5})^2 \, 8.$$

9. If $a = 1/3 - \sqrt{11}$ and $b = 1/a$, then find $a^2 - b^2$
10. Prove that:
$$\frac{1}{1+\sqrt{2}} + \frac{1}{\sqrt{2}+\sqrt{3}} + \frac{1}{\sqrt{3}+\sqrt{4}} + \ldots + \frac{1}{\sqrt{8}+3} = 2.$$
11. Prove that:
$$\frac{x^{-1}}{x^{-1}+y^{-1}} + \frac{x^{-1}}{x^{-1}-y^{-1}} = \frac{2y^2}{y^2-x^2}.$$

12. Find the value of $(x + y)^2 + (x - y)^2$

13. Show that $p - 1$ is a factor of $p^{10} + p^8 + p^6 - p^4 - p^2 - 1$.

14. Find a and b so that the polynomial $x^3 - 10x^2 + ax + b$ is exactly divisible by the polynomials
$(x - 1)$ and $(x - 2)$.

15. What must be added to polynomial $f(x) = x^4 + 2x^2 - 2x^2 + x - 1$ so that resulting polynomial is exactly divisible by $x^2 + 2x - 3$?

16. Find the value of $\sqrt{(3)^{-2}}$.

17. Let 'a' be a non-zero rational number and 'b' be an irrational number. Is 'ab' necessarily an irrational? Justify your answer with example.

18. Express $1.323232\ldots\ldots + 0.35353535\ldots\ldots$ as a fraction in the simplest form.

19. State Remainder and Factor theorem.

20. Represent $\sqrt{9.3}$ on number line.

21. Simplify:
$$\frac{1+\sqrt{2}}{1-\sqrt{3}} + \frac{1-\sqrt{2}}{1+\sqrt{3}}$$

22. State whether the following statements are true or false, justify.
  (i) $2\sqrt{5}$ is a rational number.
  (ii) There are infinitely many integers between any two integers.
  (iii) Number of rational numbers between 11 and 13 is finite.
  (iv) There are numbers which cannot be written in the form p/q, $q \neq 0$, p, q both are integers.
  (v) The square of an irrational number is always rational.

23. Insert 16 rational numbers. between 2.1 and 2.2 24.

24. Plot (5,2), (6, -3), (0, -8), (4,0) on Cartesian plane.

25. Express $0.9999999\ldots..$ as a fraction in simplest form

26. Add $(2\sqrt{2} + 5\sqrt{3})$ and $(\sqrt{2} - 3\sqrt{3})$

27. Is 0 a rational number? Give reason.

28. Write the degree of 5, 100, x+2, 1/x

29. Find p (0) for the polynomial $p(x) = 5x+3$

30. Check whether x= $\frac{-1}{3}$ is a zero of the polynomial $p(x) = 3x+1$.

31. Find the remainder when $x^3 - ax^2 + 6x -$ is divided by $(x - a)$.

32. If $x = (4 - \overline{}\sqrt{15})$, find the value of $\left(x + \frac{1}{x}\right)$

33. Represent $\frac{5}{4}$ on number line.

34. Express $0.33333333\ldots\ldots$ in the form of $\frac{p}{q}, where\ q \neq 0$.

35. Find the zeros of the polynomial $p(x) = 3x-2$

36. If $f(x) = x^4 - 2x^3 + 3x^2 - ax + b$ is a polynomial such that when it is divided by x-1 and x+1, the remainders are respectively 5 and 19. Find the values of a and b and find the remainder when p(x) is divided by x-2.

37. Evaluate : i) $125)^{\frac{-1}{3}}($ ii) $(64)^{\frac{1}{2}}$

38. Find the values of a and b if $\dfrac{5+2\sqrt{3}}{7+4\sqrt{3}} = a\text{-}b\sqrt{3}$.

39. Find four solutions for these linear equations.

    i) $2x = 4y$ ii) $x+y = 6$ iii) $3x-6y +6 = 0$ iv) $4/5\ x\ \text{-}2y = 7$

40. Draw the graph of the linear equation $3x + 4y = 6$. At what points, the graph cuts x and y-axis?

41. Draw the graph of each of the following linear equations in two variables: (i) $y = 3x$ (ii) $3 = 2x + y$

42. If the point (3, 4) lies on the graph of the equation $3y = ax + 7$, find the value of a.

43. Show that the points A (1, 2), B (– 1, – 16) and C (0, – 7) lie on the graph of the linear equation $y = 9x – 7$.

44. Find m, if point (7, -3) lies on the equation $(y\text{-}3/7) = m\ (x\text{-}2/7)$.

45. A fraction becomes 1/3, if 2 is added to both numerator and denominator. If 3 is added to both numerator and denominator it becomes 2/5. Assuming the original fraction to be x/y, form a pair of linear equations in two variables for the problem.

46. Write the linear equation such that each point on its graph has an ordinate 3 times its abscissa.

47. Write all the algebraic identities and laws of exponents

48. A and B are friends. A is elder to B by 5 years. B's sister C is half the age of B while A's father D is 8 years older than twice the age of B. If the present age of D is 48 years, find the present ages of A, B and C.

49. The parking charge for vehicles in super Delhi Metro is ₹20 for first two hrs and ₹10 for subsequent hr. Assume total parking time to be x hrs. (where x≥ 2) and total parking charge as y. Write the linear equation for above relation and draw graph. Find the parking charges for 5 hrs from Graph.

THE END