Every day we generate so much of waste water, Isn't this such a disgrace? There is so much of waste all around, Drain of sewage lying on the ground. These are an open invite, To all vectors who spread diseases via their bite. All this is harming the environment at an alarming rate, Let us keep a check before it is too late.

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ENGLISH
1. Find out some facts on tigers and write a paragraph on the need to protect them. Collect information on kinds or subspecies of tiger alive in the world today.
2. Write a speech on Road safety week in your city. Prepare a poster to promote awareness about road safety.
3. Read newspaper articles for a week and identify the following:
   (a) Phrases and clauses
   (b) Five sentences in active voice
   (c) Five sentences in passive voice
   (d) Five words denoting adjectives
4. Collect articles from newspaper about sports events and write anecdotes on cricketers of IPL 2017.

SANSKRIT
1. शब्दरूप– किंम, तत्त, एतल – जीनो लिंगो में।
2. धातुरूप– तत्द, तत्द, तत्द, विधिलिङ।
3. अनुच्छेद– मम प्रयय क्रिः / सम प्रयय पृष्टकम।

COMPUTER
1. What do you mean by website? Give details of any 3 websites which you frequently use with illustrations.
2. What is cash-less transaction? Describe any 3 modes of cash-less transaction. (Eg. PayTm, etc.)
HINDI
1. भारतीय स्वतंत्रता संग्राम के बाद अब तक की किन्ही तीन महिलाओं पर परियोजनातैयार कीजिए। जिनका योगदान भारत देश के उन्नति के लिए हो।
2. किन्ही एक रचनाकार (महादेवी वर्मा, जयशंकर प्रसाद, सुमित्रानन्द पंत, सुरेंद्रकुंद जीवांती निराला) को आधार बनाकर एक साहित्यिक समाचार पत्र बनाएँ।

SCIENCE

Physics:
1. Write the major difference between distance and displacement?
2. If a man moves 3 m towards east direction after that he move 4m in south direction. Find his total distance and displacement.
3. Prove that the equation of motion:
   (i) $v = u + at$
   (ii) $v^2 = u^2 + 2as$
4. What is acceleration? Write it’s SI Unit.
5. What is a robot?
6. What is satellite and what to you know about ISRO?
7. If a car is moving with initial velocity 50% after 10 sec it’s velocity becomes 150%. then find the acceleration of the car?
8. Define non uniform motion with example and distance-time graph.

Bio
1. Learn: Ch-5
2. To study osmosis in cucumber slices
   * Take the cucumber slices.
   * sprinkle some salt on it
   * observe after few minutes the water will come out from the slices and they lose their shape
   * put these slices in water and they regain their shape.
   * Analyse the reasons

SCIENCE

Physics:
1. Why are all scientific names for plants and animals in Latin?
2. Name the only mammal that can fly? Why are bats able to hunt efficiently at night?
3. What are biofuels? What are the main types of biofuel? Why it is called safer fuel?
4. Why does Nepal Promote the SAFA TEMPO?
5. What is genetic engineering? What are the differences of genetically modified crops from the regular crops?
6. What are the different techniques in waste water management?

Chem.
1. Convert the following temperatures to Kelvin scale:
   (a) 65°C
   (c) 300°C
2. In what ways, air can be considered as matter.
3. (a) Name the state of matter that have the tendency to maintain their shape when subjected to outside force.
   (b) Name the state of matter in which the forces between the constituent particles are:
      (i) strongest (ii) weakest
4. (a) What is dry ice?
   (b) Name two substances that show sublimation.
5. Sugar & salt when kept in different jars, take the shape of the jar. Are they solid?
6. Cotton is solid but it floats on water. Why?
7. Why water evaporates faster in China dish as compared to in a test-tube?
8. A boy buys common salt from the market which is contaminated with Ammonium chloride & sand. What procedure should be adopted to obtain pure NaCl?
9. What principle is applied in centrifugation? Give examples where this method is applied to separate mixtures.
10. Why do fish go in deep waters during day light?
11. In which case evaporation of water will be faster i.e. near the sea or far away from sea.
12. Our own bodies contain examples of all three states of matter. Can you identify these.
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ENGLISH
1. Write an article on the lesson of love, faith and trust that you have learnt from the two young boys of verona.
2. Make a brochure on Chhattisgarh tourism (with suitable illustrations and information)
3. Complete all the exercises of unit 1,2,3 of work book.
4. Read novel “The story of my life by Helen Keller, Miss Anne Sullivan.
5. Write Summary of chapters 1 to 4 of Main course book
6. Read unit-1 Health and Medicine(Solve the book exercises)
7. Workbook (Solve in book) Determiners pg 1 to 10.
8. Read Newspaper articles for a week and identify the following from any two the articles of your choice
   (i) Transitive verbs and intransitive verb sentences.
   (ii) Adverbs and their kinds
   (iii) Co-ordinating conjunctions

9. Read the following magazines (any two)
   (i) Readers digest
   (ii) India today
   (iii) Whole living

   Choose any two articles and give your opinion on it.

HINDI
1. हिन्दी साहित्य से संबंधित कौन-कौन से पुरस्कार दिए जाते हैं। किन्हीं दस भारतीय साहित्यकारों के बारे में नाम,चित्त्र,कृतियों व प्रसिद्धि सहित 10 पृष्ठ की रिपोर्ट तैयार कीजिए।
2. पृष्ठ से दस मई तक की एक-एक बड़ी खबर छापकर उस पर अपनी आलोचनात्मक अथवा समीक्षात्मक प्रतिक्रिया लिखिए।

MATHS
1. What is real number? Write all the types.
2. What is euclid lemma? What is the use of euclid lemma?
3. Do some problem’s from euclid lemma for finding the HCF.
4. Prove that $\sqrt{7}$ is an irrational number.
5. If the HCF of 657 and 963 is expressible in the form of $657x+963x-15$ find x.
6. Express the GCD of 48 and 18 as a linear combination.
7. Proved that one of every three consecutive integers is divisible by 3.
8. Find the largest possible positive integer that will divide 398,436 and 542 leaving remainder 7,11,15 respectively.
9. Find the least number that is divisible by all numbers

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What chemical process is responsible for these? Name the chemical formula of the black & green coatings.

9. Why does copper vessel acquire green coating in rainy season?
10. Why is it important to balance a chemical equation?

S.S.T
1. Collect photographs of typical rural houses and clothing of people from different regions of India and examine whether they reflect any relationship with climatic conditions and relief of the area.
2. Write a brief report on various irrigation practices in the village and the change in cropping pattern in the last decade.
3. Discuss the importance of language popular traditions in the creation of National identity.

Project
Find out more about nationalist symbols in countries outside Europe. For one or two countries collect examples of pictures, posters or music that are symbols of nationalism. How are these different from European examples?

SANSKRIT
1. प्रथम: पाठ; द्वितीय पाठ से 10 कर्त्तां क्रियापद तथा 10 विशेष-विशेष्य खोदकर लिखिए।
2. अनुवाचित – मम अध्यापक/ वर्षा ऋतु।

COMPUTER
1. What are Super Bugs? Why are they in news?
2. Create your own E-World (online-world) and describe it with illustrations.(you can design a web page).
657x + 963(-15), then find x.

28. If \( (m^n) = 64 \) where \( m \) and \( n \) are positive integers, then find the value of \( (n)^m \).

29. Find the least number that is divisible by all the numbers from 1 to 5 (both inclusive).

30. Show that the square of any positive integer cannot be of the form 5q+2 or 5q+3 for any integer \( q \).

31. Prove that one of every three consecutive positive integers is divisible by 3.

32. Prove that \( (x^2 - x) \) is divisible by 2 for all positive integers \( x \).

33. Can two numbers have 18 as their HCF and 380 as their LCM? Give reason.

34. Prove that \( \frac{4\sqrt{5}}{7} \) is an irrational number.

35. Prove that \( (\sqrt{p} + \sqrt{q}) \) is an irrational number where \( p \) & \( q \) are primes.

36. If \( d = \text{HCF}(48,72) \), then find the value of \( d \).

37. Show that for odd positive integer to be a perfect square, it should be of the form 8k+1.

38. Show that, out of the numbers \( n \), \( n+2 \) and \( n+4 \), only one of them is divisible by 3.

39. Find the LCM of \( x \) and \( y \), if \( xy = 180 \) and HCF of \( (x,y) = 5 \).

40. Write down the following real numbers in the form of \( \frac{p}{q} \).
   (i) \( 0.\overline{36} \) (ii) \( 33.\overline{3} \)

SCIENCE

Physics:

1. What is electric current? Write it’s SI unit?

2. Write Ohm’s law & derive the formula of resistance and make it’s graph?

3. If 2A current is flowing through a conductor for 4 minutes. Then find the amount of electric charge?

4. Prove that the total resistance for parallel combination of resistance i.e. \( \frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \cdots \)

5. Find total Resistance of the circuit:
   (i) \( \_ \_ \_ \)
   (ii) \( \_ \_ \_ \)

6. How have robot’s developed and how sophisticated might they be in the future?

7. What is satellite communication? Explain in brief?

8. What is electric power? Explain & prove its formula \( P = V \cdot I \).

9. What is heating effect of electric current? What is it’s application? Which factor affects the temperature of conductor?

10. Find (i) total current (ii) potential diff. across \( 6 \ \Omega \) Resistor of a given circuit?

11. What is Raman effect? How can it change the wavelength of electromagnetic radiation?
1. Find out diseases which are passed on from parents to the offsprings.
2. How do detectives find out criminals from single hair or from drop of blood?
3. Visit a national park or sanctuary near your city and note the natural habitat of animals.
4. What are the applications of green technology in our daily life?
5. Why is Ginkgo biloba called a living fossil?
6. Learn ch-6

**Chemistry**

I. Balance the following chemical reactions-
1. \( \text{Mg(OH)}_2 + \text{HCl} \rightarrow \text{MgCl}_2 + \text{H}_2\text{O} \)
2. \( \text{N}_2 + \text{H}_2 \rightarrow \text{NH}_3 \)
3. \( \text{P}_4 + \text{O}_2 \rightarrow \text{P}_2\text{O}_5 \)
4. \( \text{Al} + \text{HCl} \rightarrow \text{AlCl}_3 + \text{H}_2 \)
5. \( \text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_12\text{O}_6 + \text{O}_2 \)
3. Differentiate between Endo thermic & exothermic reactions with an example.
4. Name two salts used in black & white photography.
5. Name the type of reaction between lead nitrate & potassium iodide.
6. Why do gold & silver donot corrode?
7. A silver ware is kept in a solution of CuSO\(_4\). What change do you expect?
8. A coin collector has been collecting gold coins, silver coins &copper coins for a long time. One day he observed a black coating on silver coins & green coating on copper coins.
9. If \( d \) is the HCF of 30,72, find the value of \( x \) and \( y \) satisfying \( d = 30x + 72y \).
10. If \( a \) and \( b \) are positive integers. show that \( \sqrt{2} \) always lies between \( \frac{a}{b} \) and \( \frac{a-2b}{a+b} \)
11. Proved that \( (\sqrt{n-1} + \sqrt{n+1}) \) is irrational.
12. Show that \( 3 + 7\sqrt{2} \) is an irrational number. Is sum of two irrational number is always irrational number.
13. Prove that \( \sqrt{5} + \sqrt{3} \) is an irrational number.
14. Prove that \( 4 - 5\sqrt{2} \) is an irrational number.
15. Prove that \( 2\sqrt{3} - 1 \) is an irrational number.
16. Prove that \( (\sqrt{3} + \sqrt{5})^2 \) is an irrational number.
17. Explain why the number 7x5x3x2+3 is not a prime number.
18. Check wheather \( 12^n \) can be end with the digit zero for any natural number \( n \).
19. Explain why 7x6x5x4+5 is a composite number.
20. Show that \( \sqrt[3]{7} \) is an irrational number.
21. Show that the square of an odd positive integer is of the form of \( 8m+1 \) where \( m \) is some whole number.
22. Show that in \( n \), \( (n+1) \) and \( (n+2) \) one and only one is divisible by 3 where \( n \) is any positive integer.
23. State Euclid’s division lemma. If Euclid lemma is used for \( a < b \) as \( a = bq + r \) then which or \( a, b, q \) or \( r \) is necessarily zero.
24. Show that any positive odd integer is of the form 6q+1, 6q+3 or 6q+5 where \( q \) is some whole number.
25. Find the HCF of 55 and 210. Express it as a linear combination of 55 and 210, that is HCF of 55 and 210=210a+55b, for some \( a \) & \( b \).
26. If the HCF of 657 and 963 is expressible in the form of