

HOLIDAY HOME WORK-2017-18
Class : VI

Note: Holidays' HW should be done in fair notebook.

ENGLISH

1. Read dictionary and write five word-meaning daily.
2. Write the following stories and represent them through pictorial (picture) presentation:
 - (a) Thirsty Crow
 - (b) Hare and Tortoise
 - (c) Unity is Strength
 - (d) Greedy Dog
 - (e) An Honest Woodcutter
 - (f) Fox and the Crane
3. Write a paragraph on 'How I enjoyed my summer vacation'.

हिन्दी

1. समाचार पत्र और पत्रिकाएँ पढ़ें इनमें से दो चित्र काटकर A4 Size पर चिपकाकर उसका प्रभावपूर्ण ढंग से वर्णन करें।
2. 15 पेज हिन्दी सुलेख लेखन करें।
3. राष्ट्रभक्ति अथवा स्वच्छ भारत पर निबन्ध लिखें।
4. पक्षियों पर आधारित दो कविता या कहानी लेखन करें।

संस्कृत

1. सुलेख लेखन 10 पृष्ठ संस्कृत में (हिन्दी सुलेख की कॉपी में)
2. ए4 साईज पृष्ठ पर चोच पशुओं, चोच पक्षियों व चोच फलों के चित्र चिपकाकर उनके संस्कृत नाम लिखें।
3. सरस्वती वन्दना, एवं गोजन मन्त्र ए4 साईज के पृष्ठ पर लिखें एवं स्मरण करें।
4. पुल्लिंग, स्त्रीलिंग व नपुंसकलिंग के दस-दस शब्द चित्र सहित ए4 साईज पृष्ठ पर लिखें।

MATHEMATICS

1. To classify the triangles and define them on the basis of sides and angles (By cutting and pasting) Use A-3 Sheets.
2. Make any object (Pencil stand, box, hut, photo frame etc.) / Geometrical shape by using waste material and decorate it.

SCIENCE

1. Make a scrap book on deficiency diseases. Paste the pictures in scrap book. Write five lines about each deficiency disease.
2. Prepare a file with one word questions (Minimum 50) on the following topics:
 - (a) Science Current Affairs
 - (b) The Great Indian Scientists.

SOCIAL SCIENCE

1. Make a chart on solar system.
सौरमण्डल पर चार्ट बनाना।
2. Make a Globe.
ग्लोब बनाना।
3. Write about any five state's language, capital, food and dresses.
भारत के किन्हीं पाँच राज्यों की भाषा, राजधानी, खानपान, वेशभूषा के बारे में लिखें।
4. What are the resource who give the information about the history. Draw picture or paste.
इतिहास की जानकारी किन-2 स्रोतों से मिलती है? उनके चित्र बनायें या चिपकायें।

Note: Last 3, 4 question should be done in file.

HOLIDAY HOME WORK-2017-18
Class : VII

Note: Holidays' HW should be done in fair notebook.

ENGLISH

1. Do translation Hindi to English.
2. Do translation English into Hindi.
3. Based on Present Tense and Past Tense.
4. Write and learn 50 verb form.
5. Write and learn 50 appropriate words.
6. Write any five stories with their moral.

हिन्दी

1. 15 पेज सुलेख लेखन करें।
2. अपने घर के किसी एक बुराई का दादा/दादी, नाना/नानी का साक्षात्कार लिखकर लार्ग फोटो सहित।
3. महत्तारत के दो पात्रों का चरित्र-चित्रण कीजिए।
4. वर्ण-उच्चारण तालिका बनाए व याद करें।

संस्कृत

1. 10 पृष्ठ का सुलेख लेखन संस्कृत में (हिन्दी सुलेख की कॉपी में)
2. सुभाषितानि पाठ के श्लोक अपनी संस्कृत की कॉपी में लिखें व याद करें।
3. विभिन्न सरकारी विभागों में प्रयुक्त होने वाली संस्कृत सूक्तियों का संकलन करें तथा सम्बन्धित विभाग का चिह्न बनायें या चित्र चिपकाएँ (ए4 साईज के पृष्ठ पर)।
4. विद्या से सम्बन्धित कोई पाँच सूक्तियों का लेखन व स्मरण (ए4 साईज के पृष्ठ पर)
5. स्वयं का परिचय देते हुए संस्कृत में पाँच वाक्य लिखें (ए4 साईज के पृष्ठ पर)

MATHEMATICS

1. Using number line verify:
(i) Commutative property of addition
(ii) Associative property over addition (Use A3 Sheet)
2. Make a magic square (4x4) by taking rational numbers. Also show that sum of rows = sum of columns = sum of diagonals, (Use A3 sheet)
3. Make a thermometer and show five decimal numbers on it. (Use A4 sheet)

SCIENCE

1. Find out what vitamins are and get the following information:
(a) Why are vitamins necessary in the diet?
(b) Which fruits or vegetables should be eaten regularly to get vitamins.
* Write one page note on the information collected by you.
2. Draw the diagram of the following:
(a) Human Excretory System
(b) Section of Human Heart
(c) Fertilisation
(d) Human respiratory system
(e) Soil Profile

- No Coloring
- Label in equal distance
- Draw with Pencil

3. Prepare a file with one word questions (minimum 50) on the following topics:
 - (a) Science Current Affairs
 - (b) The Great Indian Scientists
4. Learn all syllabus done in class.

SOCIAL SCIENCE

1. Make an album or collage of the component of environment separate page:
 - (a) Natural
 - (b) Human made
 - (c) Human
2. Write a paragraph on the struggle of Dr. B.R. Ambedkar for dalits on A-4 sheet.
3. Make a chart on the empires of Delhi Sultanate.

HOLIDAY HOME WORK-2017-18
Class : VIII

ENGLISH

1. Translate sentences from Hindi to English given in Study Material (5 sentences each of Past and Future tense).
2. Write the word meanings of Ch-3 and 4 from Honeydew and Supplementary.
3. Write 20 antonyms and 20 synonyms.
4. Write 20 Homophones.
5. Write 10 proverbs.
6. Write three stories from Panchtantra, paste relevant pictures also.
7. Prepare a collage on any one of the following topics.
 - (a) Importance of Games
 - (b) Natural Disasters
 - (c) Importance of Advertisements

Note: Do all your holiday homework in your English Notebook.

हिन्दी

1. किन्से-कहानियो पढ़े और उसमें आठे नये शब्दों (कम से कम 20) के अर्थ लिखकर वाक्य में प्रयोग करे।
2. स्वच्छ भारत स्वस्थ भारत पर एक कविता लिखे।
3. 15 पेज सुलेख लेखन करे।
4. कार्मिल दिवस अथवा राष्ट्रभक्ति से सम्बन्धित दो स्लोगन लिखकर चित्र बनाये।

संस्कृत

1. 10 पृष्ठ का सुलेख लेखन संस्कृत में (हिन्दी सुलेख की कॉपी में)
2. स्वच्छ भारत अभियान का चित्र बनाकर अथवा विपकाकर उससे सम्बन्धित पाँच वाक्य संस्कृत में लिखे 14 साईज के पृष्ठ पर।
3. वर्णोच्चारण तालिका बनाकर वर्णों के उच्चारण स्थानों को स्मरण करे (14 साईज के पृष्ठ पर)
4. अपनी पाठ्यपुस्तक से प्रथक कौई दो संस्कृत गीत लिखे व स्मरण करे (14 साईज पृष्ठ पर)

MATHEMATICS

1. Design and build a model of house / garden with geometrical figures.
2. Verify identity $(a+b)^2 = a^2 + b^2 + 2ab$ by cutting and pasting using coloured paper (Page 133)

SCIENCE

1. Write atleast 50 one word questions on Science Current Affairs in a project file and learn them.
2. Write atleast about 10 Scientists from 18-21 century and their achievements.
3. Prepare a collage on micro-organisms.

SOCIAL SCIENCE

1. Paste the five pictures each of natural resources and human resources on A-4 sheet.
2. List down the fundamental duties mentioned in the Indian Constitution.
3. Mark the following countries on a World Map:
India, U.S.A., China, Japan, Sri Lanka, Bangladesh, Germany, Brazil, Australia, Canada

HOLIDAY HOME WORK-2017-18
Class : IX

ENGLISH

1. Here is a story to be published in the school magazine. It has been left unfinished. Complete the story by adding a few points of your own:
Ashok was going to the school. On his way to school, he saw an accident. He saw _____
2. Here is a story to be published in the school magazine. It has been left unfinished. Complete the story by adding a few points of your own:
Priya was watching TV suddenly she read to breaking news. She saw _____
3. Write article on the following:
(i) Make in India
(ii) Health is Wealth
(iii) Adventure : Fun or Risk
4. Read and summarize the chapters:
(i) The Man who Knew too much
(ii) The Road not taken (Poetry)

Note: Do the holiday homework in your class notebook only in neat handwriting.

हिन्दी

1. किसानों की वर्तमान परिस्थिति पर एक लेख लिखें। (चित्र सहित)
2. भक्तिकाल के दो कवियों का परिचय दीजिए।
3. प्राकृतिक आपदा का वर्णन करते हुए इन्हें रोकने के उपाय बताएं।
4. समास की परिभाषा लिखते हुए प्रत्येक समास के पाँच-पाँच उदाहरण विग्रह सहित लिखिए।
5. 15 पंज सुलेख लेखन करें।

MATHEMATICS

1. Locate $5\sqrt{2}$ on the number line.
2. Find two irrational numbers between 0.5 and 0.55
3. Express $2.36 + 0.23$ as a fraction in simplest form. [2573/990]
4. If $x = 3 + 2\sqrt{2}$, then find the value of $\left(x - \frac{1}{x}\right)^2$. [128√2]
5. Find the simplified value of $\frac{1}{5-2\sqrt{3}} + \frac{1}{5+2\sqrt{3}}$ [0]
6. If $x = 2 + \sqrt{3}$, find $\left(x - \frac{1}{x}\right)^2$. $(2\sqrt{3})^2$

7. Simplify: $\frac{\sqrt{72}}{5\sqrt{72} + 3\sqrt{288} - 2\sqrt{648}}$ $\left[\frac{1}{5}\right]$
8. If $\frac{3+\sqrt{7}}{3-4\sqrt{7}} = a+b\sqrt{7}$, where a and b are rational numbers, find a and b. $\left[a = \frac{-37}{103}, b = \frac{-15}{103}\right]$
9. If $x = \frac{\sqrt{5}-\sqrt{2}}{\sqrt{5}+\sqrt{2}}$ and $y = \frac{\sqrt{5}+\sqrt{2}}{\sqrt{5}-\sqrt{2}}$, find the value of $x^2 + xy + y^2$. $\left[\frac{187}{9}\right]$
10. Locate $\sqrt{4.7}$ on the number line.
11. If $\sqrt{18-6\sqrt{5}} = \sqrt{a}-\sqrt{b}$, then prove that: $a+b=18$.
12. If $\frac{\sqrt{p+2q} + \sqrt{p-2q}}{\sqrt{p+2q} - \sqrt{p-2q}}$, then show that $q(x^2+1) = px$.
13. Show that $\frac{x^{a(b+c)}}{x^{b(a+c)}} + \left(\frac{x^a}{x^c}\right) = 1$.
14. If x is a positive real number and exponents are rational numbers, simplify:
 $\left[\frac{x^a}{x^c}\right]^{b(c+a)} \times \left[\frac{x^c}{x^a}\right]^{c(a+b)} \times \left[\frac{x^a}{x^c}\right]^{a(b+c)}$ $[x^0 = 1]$
15. Prove that: $\frac{a^{-1}}{a^{-1}+b^{-1}} + \frac{a^{-1}}{a^{-1}-b^{-1}} = \frac{2b^2}{b^2-a^2}$
16. Find what must be subtracted from the polynomial $2x^3 - 4x^2 + 4x^2 - 4x + 3$ so that the obtained polynomial is exactly divisible by $x^2 + x + 1$. $[-6x + 5]$
17. The polynomials $ax^3 - 3x^2 + 4$ and $2x^3 - 5x + a$, when divided by $(x-2)$, leaves the remainder p and q respectively. If $p-2q=4$, find the value of a. $[a=4]$
18. If $f(x) = x^4 - 2x^3 + 3x^2 - ax + b$ is divided by $(x-1)$ and $(x+1)$, it leaves the remainder 5 and 19 respectively. Find the remainder when $f(x)$ is divided by $(x-2)$. $[10]$
19. The polynomials $x^3 + 2x^2 - 5ax - 8$ and $x^3 + ax^2 - 12x - 11$ when divided by $(x-2)$ and $(x-3)$ respectively leaves remainders p and q. If $q-p=10$, find the value of a. $[2]$
20. Using factor theorem show that $a+b$, $b+c$ and $c+a$ are factors of $(a+b+c)^3 - (a^3 + b^3 + c^3)$.
21. If $(3x-2)$ is a factor of $3x^3 + x^2 - 20x + 12$, find its other factors. $[(x+3)(x-2)]$
22. Simplify by factorization method: $\frac{9-2\sqrt{3}-x^2}{3-x^2}$. $\left[\frac{3\sqrt{3}+x}{\sqrt{3}+x}\right]$

23. Using factor theorem, show that $x^2 + 5x + 6$ is a factor of $x^4 + 5x^3 + 9x^2 + 15x + 18$. [281250]
24. Without calculating the cubes, find the value of $75^3 - 25^3 - 50^3$. [7]
25. If $x + \frac{1}{x} = 3$, find $x^2 + \frac{1}{x^2}$. [7]
26. If x and y are two positive real numbers such that $x^2 + 4y^2 = 17$ and $xy = 2$, then find the value of $(x+2y)$. [± 5]
27. If $a - b = 7$ and $a^2 + b^2 = 85$, find $a^3 - b^3$. [721]
28. If $x + \frac{1}{x} = 7$, then find the value of $x^3 + \frac{1}{x^3}$. [322]
29. If $a + b + c = 5$ and $ab + bc + ca = 15$, find the value of: $(a+b)^3 + (b+c)^3 + (a+c)^3 - 3(a+b)(b+c)(c+a)$. [-2000]
30. Prove that: $\frac{0.75 \times 0.75 \times 0.75 + 0.25 \times 0.25 \times 0.25}{0.75 \times 0.75 - 0.75 \times 0.25 + 0.25 \times 0.25} = 1$.
31. Simplify: $\frac{(a^2 - b^2)^2 + (b^2 - c^2)^2 + (c^2 - a^2)^2}{(a-b)^2 + (b-c)^2 + (c-a)^2}$ [(a+b)(b+c)(c+a)]
32. If $x + \frac{1}{x} = 6$, find the value of $x^4 + \frac{1}{x^4}$. [1154]

SCIENCE

- Write the name of 50 compounds along with their chemical formulae and colour.
- State and prove 3 equations of motion graphically.
- Prepare minimum 50 questions on the following topic:
 - ISRO and its achievements.
 - Science Current Affairs
 - The great Indian Scientists of 18th to 21st centuries.

Note: Do all the above in a file.

- Prepare a 3D Model of Plant and Animal cell along with cell organelles.

SOCIAL SCIENCE

- Prepare PPT on the people as a resource or French revolution.
- Prepare one mark questions about 25 each Ch-1 Economics, Ch-1 Geography, Ch-2 Civics.
- Map work of India fill:

The island groups of India, the states through which tropic of cancer passes, union territories of India, The main rivers of India, different relief features of India, Monsoon winds in India.

HOLIDAY HOME WORK-2017-18
Class : X

Note: Write the homework in your note book.

ENGLISH

- Complete the Stories:
 - 'It was raining heavily, the street light had gone off and I was returning _____
Complete the story in about 150-200 words with an appropriate ending.
 - Write a story in about 150-200 words beginning with the following line. Also give it a suitable title.
'Night before the Zonal Debate Competition _____ everyone was fast asleep, while I was practicing. Suddenly _____.
 - Write a story in about 150-200 words which begins as follows:
'Sitting alone on a beach I felt myself like a speck of sand against the vastness of the sea. Suddenly I saw a boat coming towards the shore _____. Also give it a suitable title.
- Write the articles on the following topic:
 - Importance of vocational education.
 - Make in India Exam.
 - Merits and Demerits of social media
- Read the following chapter and poem and write their summary:
 - The Letter
 - Nor the marble nor the gilded monument.

हिन्दी

- पाठ्यक्रम के अतिरिक्त कविताओं को पढ़कर विभिन्न रसों के उदाहरणों का संकलन करें।
- किन्हीं 2 उत्पादों हेतु 20 से 25 शब्दों का विज्ञापन तैयार कीजिए।
- आपके क्षेत्र से निकटवर्ती शहर के मध्य सड़क की स्थिति अव्यक्त खराब है। इस सम्बन्ध में मुख्य अभियंता लोकनिर्माण विभाग को पत्र लिखिए।
- अपने क्षेत्र में सामाजिक तत्त्वों की गतिविधियों को रोकने के लिए प्रभावी कदम उठाने हेतु पुलिस आदर्य को पत्र लिखिए।
- 'पदवीन सम्पन्न सुख नहीं' अथवा 'करत कस्त अभ्यास ते जदमति होत सुजान' सूक्ति के आधार पर एक निबंध लिखें।

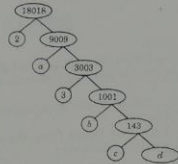
MATHEMATICS

- Show that any positive even integer is of the form $8q, 8q + 2, 8q + 4$ or $8q + 6$, where q is some integer.
- Use Euclid's division algorithm to find HCF of 210 and 55. If HCF is expressible in the form of $210x + 55y$, find x and y .

$$\begin{bmatrix} x = 0, y = \frac{1}{11} \end{bmatrix}$$

3. Use Euclid's Division Algorithm to find the largest number which divides 957 and 1280 leaving remainder 5 in each case. [17]

4. Find the missing numbers a, b, c and d in the given factor tree. [a=3, b=7, c=11, d=13]



5. Find the greatest number of 6 digits exactly divisible by 24, 15 and 36. [999720]
6. Show that 12^n cannot end with the digit 0, for any natural numbers n.
7. Prove that $\sqrt{7}$ is an irrational number.
8. After how many places of decimal will the decimal expansion of $\frac{141}{120}$ [3 places]
9. Write the denominator of the rational number $\frac{607}{4000}$ in the form $2^m \times 5^n$, where m and n are non-negative integers. What are the values of m and n. Hence, write its decimal expansion, without actual division. [m=5, n=3]
0.15175
10. Three friends plan to go for a morning walk. They step off together and their steps measure 42cm, 40cm and 45cm respectively. What is the minimum distance each should walk so that each can cover the same distance in complete steps twelve times? What value is indicated from this action? [302.40m]
11. Naresh was asked to show that square of any positive integer can be of the form $4q$ or $4q + 1$ for some integer q. He solved the question as follows:
Any positive integer can be either of the form $2m$ or $2m + 1$ for some integer m.
Now, $(2m)^2 = 4m^2 = 4 \times q$, where $q = m^2$
and $(2m + 1)^2 = 4m^2 + 4m + 1 = 4(m^2 + m) + 1$
 $= 4q + 1$, where $q = m^2 + m$.
Hence, the result.
His classmate, Anwar advised Naresh that the procedure applied by him is not proper. Sometimes you may not be able to solve a question with these type of short-cuts. Is Answer correct? What value is indicated from this action? [Yes]

12. If one zero of the quadratic polynomial $x^2 + (a+1)x - 6$ is 2, then what is the value of a ?
[a = 0]
13. If the sum of the zeroes of a quadratic polynomial $ky^2 + 2y - 3k$ is equal to their product, find the value of 'k'.
[k = $\frac{2}{3}$]
14. If the zeroes of $x^2 - kx + 6$ are in the ratio 3 : 2, find k.
[k \pm 5]
15. Form a quadratic polynomial whose zeroes are $\frac{3-\sqrt{3}}{5}$ and $\frac{3+\sqrt{3}}{5}$. [25x² - 30x + 6]
16. Find the value of m, if zero of the polynomial $(m^2 + 4)x^2 + 65x + 4m$ is reciprocal of the other.
[m = 2]
17. If p, q are zeroes of the polynomial $f(x) = 2x^2 - 7x + 3$, find the value of $p^2 + q^2$. [$\frac{37}{4}$]
18. α and β are the zeroes of the quadratic polynomial $p(x) = x^2 - (k+6)x + 2(2k-1)$. Find the value of k, if $\alpha + \beta = \frac{1}{2} \alpha \beta$.
[k = 7]
19. If m and n are the zeroes of the polynomial $3x^2 + 11x - 4$, find the value of $\frac{m}{n} + \frac{n}{m}$. [$-\frac{145}{12}$]
20. If α and β are zeroes of the polynomial $x^3 - 5x + 6$, then find polynomial whose zeroes are $\frac{1}{\alpha}$ and $\frac{1}{\beta}$.
[6x² - 5x + 1]
21. If one zero of the polynomial $2x^2 - (3k+1)x - 9$ is the negative of the other, find k and the zeroes.
[k = $-\frac{1}{3}$, zeroes: $\pm \frac{3}{\sqrt{2}}$]
22. Find the zeroes of the polynomial $x^2 + \frac{1}{6}x - 2$ and verify the relationship between the coefficients and the zeroes of the polynomial.
[$-\frac{3}{2}, 4$]
23. Find the zeroes of the polynomial $2x^3 + x^2 - 5x + 2$.
[-2, $\frac{1}{2}, 1$]
24. If one zero of the polynomial $p(x) = 3x^2 - 8x - 2k - 1$ is seven times the other, then find the zeroes and the value of k.
[zeroes: $\frac{1}{3}, \frac{7}{3}$] [k = $-\frac{5}{3}$]
25. What must be added to the polynomial $3x^4 + 5x^3 - 7x^2 + 5x + 3$ so that the resulting polynomial is exactly divisible by $x^2 + 3x + 1$?
[x²]

26. When a polynomial $6x^4 + 8x^3 + 27x^2 + 21x + 7$ is divisible by another polynomial $3x^2 + 4x + 1$, the remainder is in the form $ax + b$. Find a and b . $\left[a = \frac{-37}{3}, b = \frac{-4}{3} \right]$

27. Find all zeroes of the polynomial $x^4 - 3x^3 - 5x^2 + 21x - 14$, if two of the zeroes are $\sqrt{7}$ and $-\sqrt{7}$. $\left[1, 2, \pm\sqrt{7} \right]$

28. Find k so that the polynomial $x^2 + 2x + k$ is a factor of the polynomial $2x^4 + x^3 - 14x^2 + 5x + 6$. Also, find all the zeroes of the two polynomials.

$$\left[\text{zeroes: } -3, 1, 2, \frac{-1}{2} \right] \quad [k = -3]$$

29. What must be subtracted or added to $p(x) = 8x^4 + 14x^3 - 2x^2 + 8x - 12$ so that $4x^2 + 3x - 2$ is a factor of $p(x)$? $\left(\begin{array}{l} 15x - 14 \text{ subtracted} \\ -15x + 14 \text{ added} \end{array} \right)$

SCIENCE

- Collect Information, pictures and make three page report on:
 - Corrosion
 - Disadvantages of corrosion
 - Methods to prevent corrosion
- Practise all the numericals of lesson "Electricity" from NCERT book.
- Draw neat and labelled diagram on A4 Size paper of the following:
 - Structure of Stomata
 - Alimentary System
 - Respiratory System
 - Structure of Heart
 - Excretory System

Instructions

- Draw diagrams with pencil only.
- No shading & no colouring
- Labelling should be on one side and in the same line
- Label using capital letter
- Prepare one word questions (minimum 50) on the following topics:
 - Science Current Affairs
 - ISRO and its achievements
 - The great Indian Scientists of 18th and 21st centuries.

Note: Do all these work in one file only.

SOCIAL SCIENCE

- Prepare PPT on power sharing.
OR
Make a chart on ethnic composition of Belgium.
- On the outline of India locate types of soil with the help of suitable symbols.
- Mention briefly the important features of each soil found in India.
- Define sustainable development. Write some features of sustainable development.