



ODM PUBLIC SCHOOL

HOLIDAY HOME WORK

CLASS- STD-X

ENGLISH

Worksheets of Me and Mine Book.

Solve the worksheets of Me and Mine book of literature text and supplementary reader and write the answers in the respective note books.

Lessons :

1. Letter to God.
2. Dust of Snow.
3. Fine and Ice
4. First Flight
5. Black aero plane
6. How to tell wild animals.
7. Nelson Mandela
8. A Tiger in the Zoo.

Supplementary Reader :

1. The Thief's Story
2. A Triumph of Surgery
3. The Midnight Visitor

ODIA

୧. ରଚନା : ପ୍ରକୃତିର ବିଭୀଷିକା : ଫୋନି
୨. ରଚନା : ସାଂପ୍ରତିକ ନିର୍ବାଚନୀ ବ୍ୟବସ୍ଥା
୩. ରାଘବଙ୍କ ଲଙ୍କା ଯାତ୍ରାକୁଳ ଏବଂ ସଭ୍ୟତା ଓ ବିଜ୍ଞାନ (ପ୍ରଶ୍ନୋତ୍ତର)
ପରୀକ୍ଷା ନିମନ୍ତେ ପ୍ରସ୍ତୁତ ହୁଅ ।
୪. ରାଘବଙ୍କ.....ଏବଂ ସଭ୍ୟତା ଓ ବିଜ୍ଞାନ..... ପ୍ରତ୍ୟେକ ବିଷୟ ୧ ଛଟି ଲେଖାଏଁ ପ୍ରସ୍ତୁତ କର ।
୫. ବ୍ୟାକରଣ : ରଚି ଅଭ୍ୟାସ କର ।

HINDI

१. अनुच्छेद लिखो –
 - (क) स्मार्ट क्लास की उपयोगिता –
 - (ख) भाग्य और कर्म
२. (क) आप इस वर्ष दशहरे के अवसर पर विद्यालय के प्रांगण में मेले का आयोजन करना चाहते हैं। इसी से संबंधित सूचना लिखिए।
 - (ख) आपके शहर में हस्तकला की वस्तुओं की सेल लगी है। २५-५० शब्दों में एक विज्ञापन तैयार कीजिए।

SANSKRIT

१. दश चित्रलिखन
२. दश पत्रलिखन
३. दश अपठित अनुच्छेद
४. सन्धि
५. समास

MATHEMATICS

1. Show that only one out of a , $a+2$ and $a+4$ is divisible by 3.
2. If LCM of (480, 672) is 3360, find HCF of (480, 672).
3. Prove that $\sqrt{7}$ is an irrational number.
4. Prove that product of three consecutive natural numbers is divisible by 6.
5. Find HCF of 9892 and 14742 using Euclid's Division Algorithm.
6. Show that 12^n never ends with 0.
7. Find the zeroes of the polynomial $mx^2+(m+n)x+n$.
8. If m and n are the zeroes of the polynomial $3x^2+11x-4$ find the value of $\frac{m}{n} + \frac{n}{m}$.
9. If a and b are the zeroes of the polynomial x^2-x-6 , find a quadratic polynomial whose zeroes are $3a+2b$ and $2a+3b$.
10. If "a" and "b" are the zeroes of the polynomial x^2-4x+3 , show that $\frac{1}{a} + \frac{1}{b} - 2ab + \frac{14}{3} = 0$.
11. If $(x-6)$ is a factor of x^3+ax^2+bx-6 and $a-b=7$, find the value of "a" and "b".
12. Show that 6^n never ends with 0.
13. State Euclid's Division algorithm.
14. Find HCF of 480 and 672 if their LCM is 3360.
15. Divide $x^4 - 5x + 6$ by $2 - x^2$ and verify the division algorithm.
16. Check, whether $x^5 - 4x^3 + x^2 + 3x + 1$ is a multiple of $x^3 - 3x + 1$ or not.

17. Prove that n^2-1 is divisible by 8 for any odd positive integer n.
18. Obtain all other zeroes of $2x^4 - 3x^3 - 3x^2 + 6x - 2$, if 2 of its zeroes are $\sqrt{2}$ and $-\sqrt{2}$.
19. Find a quadratic polynomial where the sum and product of zeroes are $-\sqrt{2}$ and $1/3$ respectively.
20. Draw graph of a quadratic, a cubic, and a bi-quadratic polynomial on xy-plane such that they have 2-zeroes each.
21. Divide $3x^3 + x^2 + 2x + 5$ by $1 + 2x + x^2$.
22. Show that $3\sqrt{2}$ is an irrational number.
23. Find HCF of 175 and 375 using Euclid's Division algorithm.
24. Obtain all other zeroes of $3x^4 + 6x^3 - 2x^2 - 10x - 5$, if 2 of its zeroes are $\sqrt{5}/\sqrt{3}$ and $-\sqrt{5}/\sqrt{3}$.
25. Using Euclid's Division lemma show that the cube of any positive integer is of the form $9m$, $9m+1$ or $9m+8$.
26. According to the relation $a = bq + r$ in Euclid's division Lemma, which one is true?
 (a) $0 < r < b$ (b) $0 \leq r \leq b$ (c) $0 \leq r < b$ (d) $0 < r \leq b$
27. Euclid's division algorithm is to find _____ of two numbers.
 (a) HCF (b) LCM (c) Both (d) None of these
28. According to Fundamental Theorem of Arithmetic every composite number can be expressed as product of _____.
 (a) two numbers (b) primes (c) composites (d) even and odd
29. Denominator of rational form a terminating decimal is of the form _____.
 (a) $2^m / 5^n$ (b) $2m.5n$ (c) $m.n$ (d) $2^m.5^n$
30. Any one of the numbers a, a + 2 and a + 4 is a multiple of
 (a) 2 (b) 3 (c) 5 (d) 7
31. If the real number α is a zero of polynomial $f(x)$ then $f(\alpha)$ is equal to :
 (a) 1 (b) -1 (c) 0 (d) -2
32. If the product of two zeroes of polynomial $2x^3 - 9x^2 + 13x - 6$ is 2, the 3rd zero of the polynomial is:
 (a) -1 (b) -2 (c) $3/2$ (d) $-3/2$
33. Degree of dividend is the _____ of degree of quotient and divisor.
 (a) Sum (b) Difference (c) Product (d) None of these
34. A quadratic polynomial of "x" intersects x-axis maximum at _____ points.
 (a) 1 (b) 2 (c) 3 (d) 4
35. Geometrical meaning of zeroes of a polynomial of x means the _____ coordinate of the point at which graph of the polynomial intersects x-axis.
 (a) x (b) y (c) both x & y (d) None of these
36. If the sum of zeroes of the quadratic polynomial $3x^2 - kx + 6$ is 3, then the value of k is
 (a) 3 (b) -3 (c) 6 (d) 9
37. If the sum and product of zeroes of a quadratic polynomial is -3 and 2 then the polynomial is :
 (a) $x^2 + 3x - 2$ (b) $x^2 + 3x + 2$ (c) $x^2 - 3x - 2$ (d) $x^2 - 3x + 2$

38. The 3rd zero of the polynomial $x^3 + 7x^2 - 2x - 14$, if two of its zeroes are $\sqrt{2}$ and $-\sqrt{2}$, is :
- (a) 7 (b) -7 (c) 14 (d) -14
39. If $a-b$, a and $a+b$ are zeroes of the polynomial $x^3 - 3x^2 + x + 1$ then the value of $a + b$ is
- (a) $1 \pm \sqrt{2}$ (b) $-1 + \sqrt{2}$ (c) $-1 - \sqrt{2}$ (d) 3
40. The product and sum of zeroes of the quadratic polynomial $ax^2 + bx + c$ respectively are:
- (a) $b/a, c/a$ (b) $c/a, b/a$ (c) $c/b, 1$ (d) $c/a, -b/a$
41. If "p" is a prime number divides K^2 , then "p" divides
- (a) $2K^2$ (b) K (c) $3K$ (d) all of these
42. The number $2 + \sqrt{2} + \sqrt{3}$ is a _____ number.
- (a) Rational (b) Irrational (c) Natural (d) Whole
43. If $m^n = 32$ with "m" and "n" are whole numbers then $(n)^{mn}$ is
- (a) 32 (b) 25 (c) 510 (d) 5^{10}
44. LCM and HCF of two numbers are 125 and 25. So the product of the two numbers is :
- (a) 25 (b) 125 (c) 625 (d) 3125
45. The decimal expression of $1/40$ is terminating after _____ places.
- (a) 1 (b) 2 (c) 3 (d) 4
46. 90% and 97% pure acid solutions are mixed to obtain 21 liters of 95% pure acid solution. Find the quantity of each type of acid to be mixed to form the mixture.
47. A plane left 30 minute later than the scheduled time and in order to reach the destination 1500 Km away in time, it has to increase the speed by 250 Km/h from the usual speed. Find its usual speed.
48. 8 men and 12 women can finish a piece of work in 10 days while 6 men and 8 women can finish in 14 days. Find the time taken by each man and woman to finish the work alone.
49. Two pipes running together can fill a tank in $\frac{40}{13}$ minutes. If one pipe takes 3 minutes more than the other, find the time taken by each pipe to fill the tank separately.
50. Find the solution from the graph.
- $$2x + 3y + 9 = 0$$
- $$3x - 7y = 44$$

SCIENCE

Physics

1. With a well labeled diagram. Explain the function of an electric motor.
2. Draw the pattern of magnetic field lines due to a current carrying straight conductor & circular loop.
3. How much work is done in moving a charge of 2C across two points having a potential difference of 12V?

Chemistry

1. Write all the question answer of NCERT Inbox Answers of Chapter-1 and Chapter-2.
2. Complete the activities on lab-mineral as follows :-
 - (a) Testing the pH value of different samples collected.
 - (b) Reaction of HCl and NaOH with (i) zinc gromeles (ii) washing soda and baking soda

Biology

1. What would happen if the roots of a plant become negatively geotropic?
2. How do unicellular organisms respond to external stimuli?
3. How are involuntary actions and reflex actions different from each other?
4. Complete your lab manual – Leaf peel experiment.
– Respiration of germinating seeds.
5. Draw a neat and labelled diagram of human brain and explain the functions of its different parts.

SOCIAL SCIENCE

History

1. Why did Gandhiji decide to call off the civil disobedience movement? Explain.
2. What do you mean by Rowlatt Act and Why did Gandhiji decide to launch a nationwide satyagraha against the proposed Rowlatt Act of 1919?
3. How the First World War helped in the growth of National Movement in India?

Civics

1. What are the difference forms of power sharing in modern democracies? Give an example of each.
2. Distinguish between "coming together federation" with examples. India comes under which type of federation?
3. Explain how the federal experiment has been successful in the matter of formation of states in India?

Geography

RESOURCES & DEVELOPMENT

1. "Khadar" is a geographical area related to which soil type?
2. What is "Net Sown Area"?
3. What is a cold desert?
4. Why was the Rio de Janeiro Earth Summit, 1992 held?
5. What is "Exclusive Economic Zone"?

6. What do you mean by “Know How”?
7. Classify resources on the basis of its origin.
8. Define “stock” resources.
9. What is “Fallow land”?
10. What percentage of land in India are called “Plains”.
11. Name two states where land degradation is caused by ‘overgrazing’.
12. Name two states worst affected by soil erosion.
13. Name the most wide spread soil group of India.
14. Name two acidic soils.
15. Name a transported soil.
16. Why Red soils are less fertile?
17. Name two areas prone to soil erosion by wind action.
18. What methods can be applied to reduce soil erosion by wind action.
19. What is the last stage of soil erosion in any region?
20. Name a good crop and a cash crop grown on “Alluvial Soils”.

Project Work

- (i) Draft a poster (using a drawing sheet) covering all the consumer rights (Refer Pg-84 & 85 of text book).

Or

Prepare posters with Catchy slogans like

- An alert consumer is a safe consumer.
- Buyers, be aware.
- Consumers be cautions.
- Be aware of your rights.
- As consumers assert your right.

Economics

1. Define literacy rate.
2. What is meant by sustainable development?
3. What does HDI stand for?
4. Define average income.
5. What is net attendance ratio?
6. What is the main criterion used by the World Bank in classifying different countries? What are the limitations of this criterion, if any?
7. Describe any five conditions of aspects that you would you consider before accepting a job.