B.V.M. PUBLIC SCHOOL

GRADE: X

SUMMER BREAK HOLIDAYS HOMEWORK (2025-26)

Dear Parents
Vacations are the most appropriate time for kids to refresh and rejuvenate themselves, to be creative and to learn new skills.
Children have ample energy, which should be channelized in the right direction to get the best out of them. We have designed holiday homework, keeping this in mind. It will build their confidence and new skills.

- **GENERAL INSTRUCTIONS: -**

✓ *Eat healthy food daily and drink lots of water and juices.*
✓ *Read every day. Watch less TV/mobiles.*
✓ *Good manners are essential for success. Always respect your parents, grandparents, and all elders.*
✓ *Appreciate nature by taking long walks in a park or garden with your family and friends.*
✓ *Do your homework neatly and on your own.*
✓ *Revise the previous work.*

ENGLISH

Part A: Literature Project Work

Topic: ***Faith and Irony in "A Letter to God"***

Chapter: A Letter to God by G L Fuentes

Instructions:

1. Prepare a project file (A4 sheets or scrapbook) on the chapter "A Letter to God."

2. Include the following:

- Cover Page
- Acknowledgement
- Certificate
- Index
- Author's Introduction
- Summary of the Chapter
- Theme
- Character Sketch of Lencho
- Message and Irony
- Moral Values
- Personal Opinion
- Pictures or drawings (optional)
- Bibliography

Part B: Revision Work for UT-1

Revise the entire syllabus covered so far for Unit Test 1

Note to Students:

All written work should be neat and well-organized.

Label all sections clearly.

Use coloured pens and drawings to make your project attractive (optional).

The revision will help you prepare well for UT-1.

हिंदी-

1 लगभग 10-12 पृष्ठों का एक सचित्र (चित्र सहित) प्रोजेक्ट बनाएं जिसमें अंडमान निकोबार तथा लक्ष्य दीप समूह के इतिहास, राजनीतिक व्यवस्था, खानपान, वेशभूषा कला संस्कृति एवं भौगोलिक संरचना व रणनीतिक महत्व (स्ट्रैटेजिक लोकेशन) पर प्रकाश डाला गया हो। (केवल हिंदी भाषा का प्रयोग करें ।)

2 प्रथम इकाई परीक्षा का संपूर्ण पाठ्यक्रम याद करें।

DRAWING

Make A4/A3 size pencil shading sketch/water/ poster/ acrylic colour painting or portrait.

Or

Make a pop – up greeting card for your best friend.

MATHEMATICS

1. Complete Lab Activities 1 to 5
2. Solve the given worksheets of chapters 1, 2 and 3 in your notebook.
3. Project file

   Make a project file that includes the following: -

   Cover page

   Certificate

   Acknowledgement

   Objective

   Description

   Conclusion

   Bibliography

   Roll no.1 to 21 Project- World's most mysterious number (π)

   Roll no.22 to 42 Project- Interpretation of Trigonometry in real life

ASSIGNMENT

Revision Worksheet (MCQs)

Chapter 01 - Real Numbers

1. The number $\sqrt{3}$ is a/an
   (a) integer (b) rational no. (c) irrational no. (d) None of these
2. The HCF and LCM of 6, 72 and 120 is, respectively
   (a) 8, 360 (b) 6, 340 (c) 6, 360 (d) None of these
3. $\frac{22}{7}$ is a
   (a) prime no. (b) an integer (c) a rational no. (d) an irrational no.
4. The sum of two numbers is 37 and their product is 342. The numbers are
   (a) 18, 19 (b) 23, 14 (c) 24, 13 (d) 28, 9
5. $5+\sqrt{2}+\sqrt{3}$ is
   (a) a natural no. (b) an integer (c) a rational no. (d) an irrational no.
6. If $\left(\frac{9}{7}\right)^3 \times \left(\frac{49}{81}\right)^{2x-6} = \left(\frac{7}{9}\right)^9$, then the value of x is
   (a) 12 (b) 9 (c) 8 (d) 6
7. The number .211 2111 21111 211111… is a
   (a) terminating decimal
   (b) non-terminating repeating decimal
   (c) non-terminating decimal which is non-repeating
   (d) None of these
8. Prime factorization of 64 is
   (a) 2^5 (b) 2^6 (c) 8×8 (d) 64×1
9. If p is a prime number and p divides k^2, then p divides
   (a) $2k^2$ (b) k (c) $3k$ (d) None of these
10. If the HCF of 85 and 153 is expressible in the form of 85 n - 153, then the value of n is
    (a) 3 (b) 2 (c) 4 (d) 1
11. Given that LCM (91, 26) = 182, then HCF (91, 26) is
    (a) 13 (b) 26 (c) 7 (d) 9
12. $7\times11\times13+6$ is
    (a) a prime number (b) a composite number
    (c) an even number (d) None of these
13. If $p^n = (a\times5)^n$, for p^n to end with the digit zero $a =$ ______ for any natural number n.
    (a) any natural no. (b) an odd no. (c) any even no. (d) None of these
14. HCF is always
    (a) multiple of LCM (b) factor of LCM
    (c) divisible by LCM (d) Option a and c both
15. HCF(47,61) is
    (a) 2867 (b) 1 (c) 47 (d) 61

Chapter 02 - Polynomials

1. The quadratic polynomials with the sum and the products of its zeroes as ¼ and –1 respectively, is
   (a) $4x^2+x+1$ (b) $4x^2+x+4$ (c) $4x^2+x-1$ (d) $4x^2-x-4$
2. If $x^2 + \frac{1}{x^2} = 102$, then the value of $x - \frac{1}{x}$ is
   (a) 8 (b) 10 (c) 12 (d) 13
3. The polynomial $p(x) = x^2 + 2x + 5x^3 - 3$ is
   (a) linear polynomial (b) cubic polynomial
   (c) constant polynomial (d) quadratic polynomial
4. The quadratic polynomial, the sum and product of whose zeroes are –1 and 1 respectively, is
   (a) x^2-1 (b) x^2+1 (c) x^2+x (d) x^2-x
5. The zeroes of quadratic polynomial t^2-15 are
   (a) $-\sqrt{15},\sqrt{15}$ (b) $\sqrt{15},\sqrt{12}$ (c) $\sqrt{15},-\sqrt{12}$ (d) $\sqrt{15},-15$
6. If $p(x)=3x^2-5x$, then $p(2)=$ ______:
   (a) 2 (b) 3 (c) 0 (d) None of these
7. The quadratic polynomials whose zeroes are ⅗ and -½, is
   (a) $10x^2-x-3$ (b) $10x^2+x-3$ (c) $10x^2-x+3$ (d) None of these
8. If one zero of the quadratic polynomial $x^2 + 3x + k$ is 2 then the value of k is
   (a) 10 (b) -10 (c) 5 (d) -5
9. The zeros of the polynomial $x^2 - 3x - m(m + 3)$ are are
   (a) $m,\ m + 3$ (b) $-m,\ m + 3$ (c) $m,\ -(m + 3)$ (d) $-m,\ -(m + 3)$
10. If the square of difference of the zeros of the quadratic polynomial $x^2 + px + 45$ is equal to 144 then the value of p is
    (a) ±9 (b) ±12 (c) ±15 (d) ±18
11. Statement A (Assertion): If one zero of the polynomial $(k^2 + 4)x^2 + 13x + 4k$ is reciprocal of other than k = 2.
    Statement R (Reason): If (x – α) is a factor of p(x) then p(α) = 0.
    (a) Both assertion(A) and reason(R) are true and reason(R) is the correct explanation of assertion(A)
    (b) Both assertion(A) and reason(R) are true but reason(R) is not the correct explanation of assertion (A)
    (c) Assertion (A) is true but reason (R) is false
    (d) Assertion (A) is false but reason (R) is true

Chapter 03 - Pair of Linear Equations in two Variable

1. The solutions of the equation 2x - y - 5 = 0 are
   (a) $x=2, y=-1$ (b) $x=2, y=1$ (c) $x=1, y=-1$ (d) $x=-2, y=1$
2. The sum of digits of a two digit number is 9. Also, 9 times this number is twice the number obtained by reversing the order of the digits. The number is
   (a) 20 (b) 16 (c) 18 (d) None of these
3. The system of equations kx - y = 1 and 6x - 2y = 3 has a unique solution when
   (a) $k=0$ (b) $k \neq 0$ (c) $k=3$ (d) $k \neq 3$
4. Point (4, 3) lies on the line
   (a) $3x+7y=27$ (b) $7x+2y=47$ (c) $3x+4y=24$ (d) $5x-4y=1$
5. The graph of an equation y = -3 is a line which will be
   (a) parallel to x-axis (b) parallel to y-axis
   (c) passing through origin (d) on x-axis
6. The value of k for which kx + 2y = 5 and 3x + y = 1 have unique solution, is
   (a) $k=-1$ (b) $k \neq 6$ (c) $k=6$ (d) $k=2$
7. The pair of equations $3x + 2y = 5,\ 2x - 3y = 7$ has:
   (a) no solution (b) one solution (c) many solutions (d) two solutions
8. If the pair of equations $2x + 3y = 7,\ kx + \frac{9}{2}y = 12$ have no solution, then value of k is:
   (a) $\frac{2}{3}$ (b) $\frac{3}{2}$ (c) 3 (d) –3
9. If (6, k) is a solution of the equation $3x + y = 22$ then, the value of k is:
   (a) –4 (b) 4 (c) 3 (d) –3
10. For a pair of equation to be consistent and dependent, the pair must have:
    (a) no solution (b) unique solution (c) infinitely many solutions (d) none of these
11. If system of equations $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$ has infinitely many sc
    then:
    (a) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ (b) $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$ (c) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2} = \frac{c_1}{c_2}$ (d) None of these
12. How many real solutions of $2x + 3y = 5$ is/are possible?
    (a) no (b) one (c) two (d) infinitely mar
13. The value of k for which the system of equations $3x + 2y =- 5,\ x - ky = 2$ has a unique solution, is:
    (a) $k = \frac{2}{3}$ (b) $k \neq \frac{2}{3}$ (c) $k =- \frac{2}{3}$ (d) $k \neq\ - \frac{2}{3}$
14. On solving $x - y = 3$ and, $x + y = 5$, we have value of y as:
    (a) 1 (b) 2 (c) 3 (d) 4

SOCIAL SCIENCE

1. Project Work

Topics:

a) Consumer Awareness(Roll 1-15)

b) Social Issues. (Roll no 16 – 31)

c) Sustainable development (Roll no 32- 41&above)

Format:

Page 1

1. Title of the Project
2. Objective
3. Name
4. School
5. Year
6. Class
7. Submitted to

Page 2 Acknowledgement

Page 3 Certificate

Page 4 Content (Index)

Page 5 Introduction

Page 6 Detail description about topic

Page 7 Conclusion

Page 8 Bibliography

2. Revise the Syllabus of Unit Test 1

Geography:

Chapter 1-Resource & Development

Civics:

Chapter 1- Power Sharing

Economics

Chapter 1-Development

SCIENCE

1. Portfolio on Biology:

- Collect pictures and information from newspapers and magazines about recent advancements in the field of biology (e.g., new vaccines, research on diseases, etc.).
- Organise the information and create a portfolio for it.

2. PowerPoint Presentation:

- Choose a topic from the suggested list (e.g., different types of drugs, sexual reproduction in plants, types of blood cells, sexually transmitted infections).
- Prepare a 12-15 slide presentation with informative and innovative content, including pictures.
- Include interesting facts and the use of the chosen topic in daily life or medicine.

Note:

All children have to do the power point presentation and portfolio.

Lab file work – Complete biology chemistry and physics lab file.

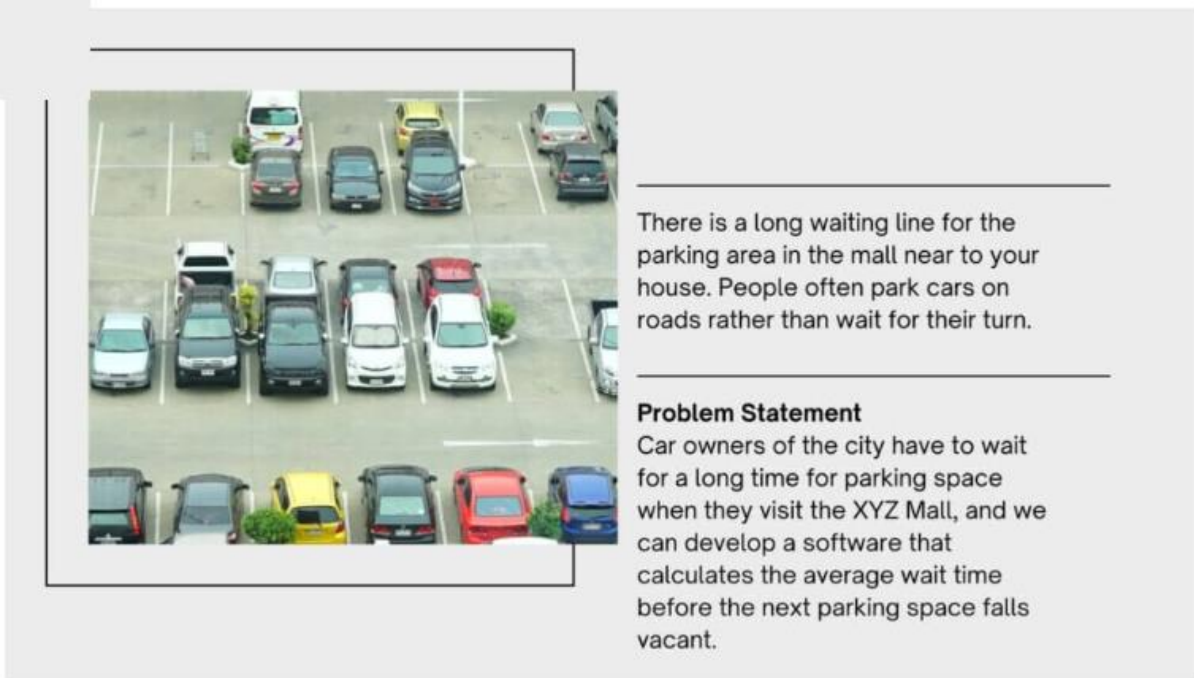
Revise UT-1 syllabus

ARTIFICIAL INTELLIGENCE

All the following activities are part of the internal assessment. For this student will be assessed out of 20 marks. Complete the following activities in A4-sized sheet or scrapbook:

Activity 1: Name and explain multiple intelligences and mention the professions associated with it. (e.g. an expert dancer – Kinaesthetic intelligence)

Activity 2: Draw the 4W Problem Canvas for the following scenario



Activity 3: List and explain some ethical issues related to AI. Explain how it is impacting/will impact our society. (e.g. Deep Fake)

Activity 4: Write 10 AI applications, each in the NLP, CV and Data domains of AI.