



PVSS DAV PUBLIC SCHOOL JHUMRI TELAIYA, JHARKHAND-825409

(SESSION – 2022 -22)
(CLASS – XII COM)

**HOW TO HELP YOUR CHILD MAKE THE BEST OF
SUMMER HOLIDAYS**

- 1 Make weekly plans.
- 2 Introduce them to books.
- 3 Teach your kids things their schools might not.
- 4 Get them closer to nature.
- 5 Have time set aside for crazy fun!

Enjoy your Summer Holidays in a productive way :

Travel and Explore – Take out time to travel to new places with your friends and family. A city tour or a visit to historical monuments, and museums will give lifetime memories as well as knowledge about your country’s rich heritage.

Read at least one book– You may read at least one story book during the summer break. A digital library visit will also give you the chance to find the book of your interest and spend leisure time going through its pages.

Play Outdoor Games – Indulge yourself in Outdoor Games and activities during the summer holidays. Sports are a must for the physical growth of the child. So, devote your time to your favorite sports such as cricket, table tennis, soccer, badminton, etc.

Enrich STEM Subjects – To enrich your understanding and knowledge of STEM subjects,

Experiments with things – All of you are creative geniuses and love to experiment with different things. Summer Holidays are the best time to explore and experiment with various things.

Enhance your Knowledge – Utilize your holidays to enhance your general knowledge of history, culture, tradition, nature, and environment, politics, scientific discoveries, etc. To keep abreast of the various things happening in the country and the world, it is important to have basic knowledge about them.

Engage in Fun Activities – Engage yourself in playful and fun activities such as the collection of coins, leaf, flowers, stamps, etc. Paint your favorite picture, or watch your favorite cartoon series, or make a scrapbook using newspaper & magazine cuttings.

Learn new things – Enroll yourself in interesting online workshops to learn new things such as yoga, karate, swimming, sketching, dance, and a new language such as French, Italian, German, or Spanish. If you are a music lover, you may also learn to play musical instruments during your summer holidays.

Improve your Skills – And, why not use the Summer Holidays to improve your skills in reading, writing, drawing, and listening. Also, you must learn the art of communication and work on improving his time-management skills during the summer break.

PVSS DAY PUBLIC SCHOOL JHUMERITELAIYA, KODERMA

SUMMER ASSIGNMENT

SUB : ENGLISH

Topics : The Last Lesson, My Mother At Sixty – Six, The Third Level, Notice , Formal Letter ,Article writing

What to be done : Following activity/ project based assignments to be done :

1. Choose any two comprehension passages and write the answers to the questions based on the passage.
2. Prepare a speech on “ Linguistic Chauvinism” to be delivered in the morning assembly.
3. Prepare an art – integrated project based on “ My Mother At Sixty – Six.”
4. Write a letter to the editor expressing your concern over the increasing stress among the younger generation and some measures which can be adopted by the youth to overcome stress.
5. Write five questions and their answers based on notice writing.
6. Prepare summaries of taught lessons to tell in the classroom.
7. Learn and revise the questions and answers of taught lessons.

Learning outcome : students’ conceptual understanding about the topics and the language skills will be improved.

SUB- MATHEMATICS

1. Prepare a project on the relationship between Matrices and Determinants.

2. For what value of k, points P(3,-2), Q(8,8) and (k,2) are collinear

3. Express $B = \begin{bmatrix} 2 & -2 & -4 \\ -1 & 3 & 4 \\ 1 & -2 & -3 \end{bmatrix}$ as the sum of symmetric and skew symmetric matrix.

4. Find the Inverse of the following matrices

a. $A = \begin{bmatrix} 0 & 1 & 2 \\ 1 & 2 & 3 \\ 3 & 1 & 1 \end{bmatrix}$

b. $A = \begin{bmatrix} 2 & -3 & 3 \\ 2 & 2 & 3 \\ 3 & -2 & 2 \end{bmatrix}$

5. a.) Solve the following system of equations using Cramers rule

$$X+y+z=10, 2x+y=13, x+y-4z=0$$

b) A school plans to award Rs.6000 in total to its students to reward for certain values – honesty , regularity and hard work . When three times the award money for hard work is added to the award money given for honesty amounts to Rs. 11000. The award money for honesty and hard work together is double the award money for regularity. Use matrix method to find the prize money for each category of award.

6. If $x \neq y \neq z$ and $\Delta = \begin{vmatrix} x & x^2 & 1+x^3 \\ y & y^2 & 1+y^3 \\ z & z^2 & 1+z^3 \end{vmatrix} = 0$ prove that $1+xyz = 0$.

Prove that :-

7.

$$\begin{vmatrix} 1+a & 1 & 1 \\ 1 & 1+b & 1 \\ 1 & 1 & 1+c \end{vmatrix} = abc \left(1 + \frac{1}{a} + \frac{1}{b} + \frac{1}{c}\right) = abc + bc + ca + ab$$

$$8. \begin{vmatrix} a^2+1 & ab & ac \\ ab & b^2+1 & bc \\ ca & cb & c^2+1 \end{vmatrix} = 1 + a^2 + b^2 + c^2$$

$$9. \begin{vmatrix} \alpha & \alpha^2 & \beta + \gamma \\ \beta & \beta^2 & \gamma + \alpha \\ \gamma & \gamma^2 & \alpha + \beta \end{vmatrix} = (\alpha - \beta)(\beta - \gamma)(\gamma - \alpha)(\alpha + \beta + \gamma)$$

10. The sum of three numbers is 6. If we multiply 3rd number by 3 and add second number to it, we get 11. By adding 1st number and 3rd number we get double of the second number. Find number by matrix method.

(x=1, y=2, z=3)

11. If a, b, c are +ve and unequal. Prove that $\Delta = \begin{vmatrix} a & b & c \\ b & c & a \\ c & a & b \end{vmatrix}$ is -ve.

12. Use product $\begin{bmatrix} 1 & -1 & 2 \\ 0 & 2 & -3 \\ 3 & -2 & 4 \end{bmatrix} \begin{bmatrix} -2 & 0 & 1 \\ 9 & 2 & -3 \\ 6 & 1 & -2 \end{bmatrix}$ to solve the system of equation

$$x - y + 2z = 1, \quad 2y - 3z = 1, \quad 3x - 2y + 4z = 2$$

Prove that :-

13

$$\begin{vmatrix} x & x^2 & yz \\ y & y^2 & zx \\ z & z^2 & xy \end{vmatrix} = (x-y)(y-z)(z-x)(xy+yz+zx)$$

$$14. \begin{vmatrix} 1+a^2-b^2 & 2ab & -2b \\ 2ab & 1-a^2+b^2 & 2a \\ 2b & -2a & 1-a^2-b^2 \end{vmatrix} = (1+a^2+b^2)^3$$

$$15. \begin{vmatrix} x+y+2z & x & y \\ z & y+z+2x & y \\ z & x & z+x+2y \end{vmatrix} = 2(x+y+z)^3$$

16. If $A = \begin{bmatrix} 2 & -1 & 1 \\ -1 & 2 & -1 \\ 1 & -1 & 2 \end{bmatrix}$ prove that $A^3 - 6A^2 + 9A - 4I = 0$. Hence Find A^{-1}

17. Prove that.

$$\begin{bmatrix} (y+z)^2 & xy & zx \\ xy & (x+z)^2 & yz \\ xz & yz & (x+y)^2 \end{bmatrix} = 2xyz(x+y+z)^3$$

18. If a, b and c are real numbers &

$$\begin{vmatrix} b+c & c+a & a+b \\ c+a & a+b & b+c \\ a+b & b+c & c+a \end{vmatrix} = 0$$

Show either $a+b+c = 0$, or $a=b=c$

19. Prove that

$$\begin{vmatrix} x & x^2 & 1+px^3 \\ y & y^2 & 1+py^3 \\ z & z^2 & 1+pz^3 \end{vmatrix} = (1+pxyz)(x-y)(y-z)(z-x)$$

20. Show that $\begin{vmatrix} x+1 & x+2 & x+a \\ x+2 & x+3 & x+b \\ x+3 & x+4 & x+c \end{vmatrix} = 0$ where a, b, c are in Arithmetic Progression

SUBJECT- MATHS

TOPIC- MATRICES AND DETERMINANTS

AIM-

1. To understand matrix and its practical uses
2. To understand different types of matrices including their notation .
3. To perform different operations on to or more matrices.
4. To evaluate determinants.
5. To evolve and describes properties of determinans.
6. To find inverse of a matrices.
7. To solve system of linear equations using inverse of matrix.

WHAT TO BE DONE- 1 Make a concept map on Matrices

2 Make a concept map on Determinants

3 Give general idea of roles of matrices and determinants

LEARNING OUTCOME- Students will be able to: Define determinants and understand their relation to matrices. Explain the methodology for finding a determinant. Solve minor matrices and higher order matrices.

Subject - B.St

Class	Topic	Aim	What to be done	Learning Outcome
XII	1. Principles of Management 2. Project on mgt 3.	1.To develop the understanding of the Principles of management 2.To develop the understanding of implementation of principles of management in the firms of India. 3. To develop the understanding of the causes of failure or success of a company/firm.	1. Form a group of two students and get the group registered with subject teacher 2. Visit a nearby firm having 20 staffs or more 3. Observe the operation of the firm <ul style="list-style-type: none">● Act as a media reporter and an analyst● Notice the principles of management implemented.● Create the profile of the firm.● Create the profile of the owner of the firm● One picture with the staffs and manager● Compile in a project tag file● Give your suggestions to the manager of the firm.● Take the signature of manager on your project with his remarks. 4. Handover the findings and suggestions to the manager also.	Learner's will be able to.. Know about the application of principle of management.

SUBJECT - (INFORMATICS PRACTICES)

1. Explain about different elements of a computer network.
2. Describe about a URL with a neat and clean diagram.
3. What do you mean by MAC Address ? How it is different from the I.P. Address ?
4. Differentiate between a client and a server.
5. What do you mean by Network Topology ?
6. Explain about different types of Network Topologies, with neat and clean diagrams.

Aim- To create the skill of networking among the students.

Learning Outcomes – Students will learn about the benefits of Computer network etc,

Sub:- PHE

Topic:- making fixture of knock out tournament/lay out a field/ground/court. **What to be done:-**To make in a stick file.
Learning out comes:- students themselves can prepare a fixture in a competition if organised in the school/ students can assist sports teacher in laying out ground. **Draw a fixture of 11,13,19 and 21teams for knock out tournament.**

OR

Lay out a court/field/ground/ of any major games of your choice which are to be practice in your standard with all dimensions and mention latest rules if made. Should be done seperately in stick file.

Subject- Accountancy

Class	Topic	Aim	What to be done	Learning Outcome
XII	Comprehensive problem of a sole trade business.	To develop the understanding of accounting process.	Prepare a project work on Comprehensive problem of a sole trade business. The project should contain the following. <ul style="list-style-type: none">• Journal• Ledger• Trail Balance• Trading and Profit & Loss A/c• Balance sheet• Conclusion	Learner's will be able to. <ul style="list-style-type: none">• Know and have complete understanding of the entire accounting process.

SUBJECT. Economics

AIM- To create interest in macro economics and to utilize the time properly

WHAT TO Do.

Students has to do the assignment.

Learning outcomes.

1.understand the distribution of budget expenses in various parts of INDIA

2.understand various budget policies in India.

3.Explain the need for constitution,it's ideals , values and features etc.

****†**†*****

ASSIGNMENT

1. Prepare pre pandemic budget and post pandemic budget of India.

N.B. All the activities must be made on separate Holiday assignment copy.

XXXXXXXXXX