L.R.S INTERNATIONAL ACADEMY, RAIPUR SADAT
HOLIDAY HOME-WORK (2025-26)
CLASS- XI
___ (science/Commerce/Humanities) ___

Dear Parents,

Summer is the time of Scorching heat but these vacations provide you an opportunity to make a better understanding with your ward. We suggest you to form a basic sketch for your ward to spend the day to avoid last minute hassles for the completion of Home Work. Kindly act as a helping hand to your ward in terms of giving practical help in finishing projects and assignments.

Thanks…..

English:-

Prepare the project portfolios on the following topics:
(I)Lesson: - Discovering Tut - The Saga Continues   (Hornbill)
(II) Transformation.   (Grammar)
Note:-Use the format given below to create the above project~~
(I) Cover page: Student's information and year
(II) Index: List of content
(III) Acknowledgment and preface
(IV) Introduction
(V)Topic/Heading page
(VI) List of activities and planning done to gather information about the project
(VII) Script/written material about the topic
(VIII) Conclusion
(IX) Photograph wherever necessary
(X) Teacher's remark and signature

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Physics:-
1 Write dimensional formulas of all the physical quantities you studied so far.
2 Do all numerical problems of unit, dimensions, error analysis and measurement.
3 Do all numerical problems of motion in one dimension (straight line).
4 Make a project file on motion in one dimension.

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Maths: -
Q1. $A = \{4,5,6,7,8,9,10\}, B = \{4,5,9\}, C = \{1,4,6,9\}$ Find $(A \cup B) \cap (A \cup C)$
Q2. Find the range of the following function $f(x) = x^2 + 2, \ x \in R$
Q3. Find the value of $cot\left(-\frac{15\pi}{4}\right)$
Q4. Prove that $\sin 3x = 3 \sin x - 4 \sin^3 x$
Q5. Find multiplicative inverse of $\sqrt{5} + 3i$
Q6. Find modulus and argument of $\left(\frac{1+i}{1-i}\right)$
Q7. Find the domain and range of the following function

i) $f(x) = \sqrt{x^2 - 9}$ ii) $f(x) = \sqrt{9 - x^2}$ iii) $f(x) = \frac{1}{\sqrt{x^2-9}}$

Q8. Prove that cot x cot 2x - cot 2x cot 3x - cot 3x cot x = 1

Q9. Prove that $\cos 6x = 32 \cos^6 x - 48 \cos^4 x + 18 \cos^2 x - 1$

Q10. Draw the graph of following functions

    i) Modulus function   ii) Signum function   iii) Greatest integer function

Q11. The function f is defined by $f(x) = \begin{cases} 1 - x, & x < 0 \\ 1, & x = 0 \\ x + 1, & x > 0 \end{cases}$ Draw the graph of this function.

Q.12 Find the domain of $f(x) = \frac{x^2+2x+1}{x^2-8x+12}$

Q13. Draw the trigonometric value table of all six trigonometric ratios in all four quadrant.

Q14. Convert $40^o 20'$ into radian measure.

Q15. Draw the table of Domain and Range of trigonometric functions.

Q16. Find the value of   i) $\cot\left(-\frac{15\pi}{4}\right)$ ii) $cosec\,(-1410^o)$

Q17. Prove that $\sin 3x = 3\sin x - 4\sin^3 x$

Q18. Prove that $\tan 3x \tan 2x \tan x = \tan 3x - \tan 2x - \tan x$

Q19. Find the value of $\tan\frac{\pi}{8}$

Q20. Express in the form $a + ib$ to $\frac{(3+i\sqrt5)(3-i\sqrt5)}{(\sqrt3+\sqrt2i)-(\sqrt3-\sqrt2i)}$

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Biology:-

1- . Collect different type of leaves (minimum 20) make herbarium file in herbarium Sheet .Also write its scientific name, common name, collection date, place.
2- Write the 5 scientific name and common name each of the following-

1. Fruits name

2. Pulses name

3- Birds name
4- Mammals name
5- Ornamentals plants
6- Gymnosperm name
7- Eatable fresh water fishes
8- . Eatable marine water fishes
9- . Aquarium fishes

10-   Reptile name

3. Draw the life cycle of Fern on the chart paper.
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Physical education:-
Practical-1: Fitness tests administration. (SAI Khelo India Test)

Practical-2: Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.

Practical-3: Anyone one IOA recognised Sport/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.

PREPARE THESE TOPICS

1- KHELO INDIA PROGRAMME
2- ELEMENTS OF YOGA
3- ANCIENT OLYMPIC GAMES
4- PARALYMPIC GAMES
5- SPECIAL OLYMPICS

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Fine art:-
1. Kindly sketch a still life and shade with pencil.
2. Sketch a landscape of night view.
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Chemistry:-
1. Project on chapter 2 and do all the numerical from page no 31 to 52.
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Business studies:-
1. Write human activity and types of human activity and difference between Economic and Non- Economic activity.
2. Write the classification of Industry.
3. Difference between Business, 'Profession' and 'Employment'.
4. Form a Explained Flow Chart of Business Activities.
5. Prepare a Project on "Make-in-India" and also write its Approach, Objective and Sectors.
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Accountancy:-
1. Define Accountancy and write any five advantage.
2. Write branches of Accounting.
3. Explain – Capital, Drawing, Assets, Liabilities, Debtors, Creditors, Purchase, Sales, Opening stock, closing stock, Insolvent, Capital Receipts, Revenue Receipts, capital Expenditure and Revenue Expenditure.
4. Write meaning and rules of Real account, Personal account and Nominal account.
5. Prepare Accounting Equation –
(i) Stared Business with cash Rs.1, 50,000. (ii)Furniture purchase 25000 (iii) Paid rent in Rs. 12000

(iv) Purchased goods for cash Rs.10, 000 and credit Rs.20,000.(v). Sold goods for cash Rs.20,000 costing Rs.15,000. (vi) Paid wages in cash Rs.12, 500

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Economics:-

Prepare a project file on _____.

1. Effect on PPC due to various government policies.
2. Solar energy, a Cost Effective comparison with conventional energy sources.
3. Bumper production--- a boon or bane for the farmer.

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History

Make an Assignment file in these topics…

01. Mesopotamian Culture
02. Genghis Khan

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Political Science

Make an Assignment file in these topics…

01. Constitution
02. Judiciary

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Geography:-

1. Find out 30 one liner / MCQ from chapter no 3 and 4 from both books.
2. Prepare project on the topic suggested by CBSE (choose only one)