

### **CLASS -XI/ HOLIDAY HOMEWORK/ SESSION 2024-25**

Month of June brought long, hot days and now we have our summer holidays School is closed and no set rules waking up late and going to pool. Little homework, easy to be done Playing with friends and lots of fun, Beautiful time comes once in a year, summer holidays are best days ever!!

#### MESSAGE FROM PRINCIPAL'S DESK

# Dear Parents,

Vacation is an excellent time to learn new skills. It is a welcome break for the children to enjoy and explore things in their own way and do some creative work. This is the time for them to be close to family & friends. Take them on walks, give them some responsible job in the family (like taking care of grandparents) to instill values, involve them in daily chores, arrange a short family trip, bring them emotionally around & give them chances to take small decisions, so that they work on their overall personalities too.

Seeking your cooperation as always as teamwork is dream work. Here are some interesting and fun-filled assignments for the children to learn and keep them occupied during the holidays. These assignments have been designed in a way children know their best about themselves. We would appreciate if the children do these assignments on their own. Help and guidance may be given wherever required.

Blessings.

Ms. Parul Saraswat Principal

#### Dear students,

Holidays are a great opportunity to relax and rewind by indulging in the activities that are pleasurable and at the same time educative. This is the time when skills can be nurtured and developed in your soft and evolving brains. So, during this period you will get to learn and do your work independently, without the support of your immediate teachers and classmates.

Your school has come up with a plethora of activities through the holiday homework where in you will get a chance to chisel your creativity and innate talent. Apart from spending quality time with your family members, engage yourself in recreational activities like:

Reading good books newspapers in order to stay updated and to enhance vocabulary.

- Connecting with nature like gardening, observing growth
  Of plants and making manure from kitchen waste, feeding the birds and animals, observing stars and moon.
- ✓ Writing your daily diary, record your experiences and accomplishments.
- ✓ Listen to the stories and experiences of your elders, success stories of people who never gave up.
- ✓ Pursue your hobbies....sing, dance, paint, cook, capture, write.....you never know what might prove to be the turning point in your life. Under the guidance of your parents choose the life skill activities (relevant to your age) and try to inculcate them in yourself.

Life Skills Activities:

1. **Table Lay Out**: From putting a napkin in the lap to clearing the plate off the table and everything in between, the child should learn the table manners.

2. Be a Folding Helper: Take help from mom to fold your clothes and become a folding helper at home.

3. Cupboard Helper: Sit with mom and organize your cupboard neatly.

4. Laying the Shoe Rack: Take help from the elders, clean your shoes properly and keep them well organized in your rack.

5. **Prepare Lemonade**: Squeeze the lemons, add some sugar syrup and mix the lemonade. Serve it to your parents and grandparents.

6. Learn to do Gardening: Take an active participation in the growing of plants and water them daily.

7. **Cleaning and other household chores**: Involve yourself in household chores such as doing the laundry, making your bed, cleaning your room etc.

8. Learn to manage time: Allot specific amount of time for play and work. Last but not the least; be sure not to fizzle when the summer starts to sizzle. May this summer vacation help rejuvenate you for the next session of school. We hope you all have a rewarding summer and hopefully, you will quickly develop a daily mantra of "What can I learn or discover today?"

# STAY SAFE ..... STAY HAPPY

#### ENGLISH

Write each of the following questions in 100-120 words

**1.** Explain the reasons of changing relationship between the grandmother and the author

2. Sketch the character of the grandmother

3. Discuss the value highlighted in the chapter The Portrait of a Lady

4. Identify the poetic devices used in the poem-A Photograph and discuss their meanings

5. Human life is short-lived in contrast to nature. Comment on the statement in the light of the poem-A Photograph

6. Can the act of stealing be ever justified? Give your views in the context of reading of the summer of the Beautiful White Horse

7. Newspaper Activity:

Cut out and paste (minimum 2each) clipping of classified advertisement from the newspaper under the heading

\* Situation wanted

\* Situation vacant

- \* Property for sale
- \* To-Let

### CHEMISTRY (043)

Q1. Calculate the molecular mass of the following:

(i)  $H_20$  (ii)  $C0_2$  (iii)  $CH_4$  (IV)  $C_2H5OH$  (V)  $C_{12}H_{22}O_{11}$ 

Q2. Calculate the mass percent of different elements present in sodium sulphate (Na<sub>2</sub>SO<sub>4</sub>).

Q3. Calculate the mass percentage composition of copper pyrites.(CuFeS2)

Q4. The molecular mass of an organic compound is 78 and its percentage composition is 92.4% C and 7.6% H. Determine the molecular formula of the compound.

Q6. An organic compound an analysis gave the following percentage composition C =57%,

H=3.6% and rest is oxygen. The vapor density of the compound was found to be 83. Find out the molecular formula of the compound.

Q7. Calculate the amount of water in grams produced by combustion of 16g methane (CH<sub>4</sub>)

Q8. How many moles of methane are required to produce 22g ofCO<sub>2</sub> after combustion?

Q9. 50.0 kg of N2 and 10.0 kg of  $H_2$  are mixed to produce NH3.

(A) Calculate the NH<sub>3</sub> formed.

(B) Identify the limiting reagents in this reaction if any.

Q10. 3.0 g of H2 react with 29.0 h of O2 to yield H2O.

(1) Which are the limiting reagents?

(2) Calculate the maximum reactant?

PHYSICS (042)

# 1. MAKE An INVESTIGATORY PROJECT AND WORKING MODEL ON GIVEN TOPIC.

- 1. To Study and Determine the Density of the Solids
- 2. To Study of the Parallelogram Law of the Vectors
- 3. To Study of Pascal's Law and its Applications
- 4. To Study of the Zeroth Law of the Thermodynamic
- 5. To Study and Investigate the Motion of the Pendulum

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- 6. Study of the Equilibrium of the Concurrent Forces
- 7. To Study and Construct a Circuit of the Clap Switch

8. To Study the Hooke's Law, Stress-Strain Relationship

9. To Study of the Transformation Energy from the Deep

**10.To Study the Principle of Superposition of the Waves** 

**11.**To Study and Measure the Temperature by using the Sound

2. WRITE 20 QUESTIONS WITH ANSWERS BASED ON YOUR INVESTIGATORY PROJECT. ASSIGNMENT

1. If the units of energy, force and velocity are 50 J, 5 N and 2m/ s, what will be unit of mass, length and time

2. What will be the value of G in CGS units if in SI units it is 6.67  $\times$  10-11 m3 kg<sup>-1</sup> s<sup>-2</sup>

3. What will be the dimensions of a/b in the relation  $E = b - x^2 / at$ , where E is energy, x is distance and t is time.

4.In the relation h= 2Tcos  $\alpha$ / r2pg, where h is the height, T is surface tension  $\rho$  is density and r is the radius of a capillary tube,  $\alpha$  is angle of contact and g is acceleration due to gravity. Verify the correctness of the equation.

5. Give one example each of physical quantities which have SI unit but no dimensions, which neither have unit nor dimension.

6. Acceleration due to gravity is 10m/s<sup>2</sup>. Determine its value in cm/minutes<sup>2.</sup>

7. If the units of force and length, each are doubled then how many times the unit of energy, Surface tension and stress be affected?

8. If velocity, density and frequency are taken as fundamental quantities, what will be the dimensions of linear momentum and surface tension?

9. If velocity, acceleration and force are chosen as fundamental units, what will be the dimensions of linear momentum, angular momentum and Young's modulus of elasticity?

10. A piece of lead has a mass of 23.94g and a volume of 2.10 cm3. Calculate the density in SI units.

11. If force, length and time are fundamental quantities, determine the dimensions of mass.

12. Check the dimensional correctness of the following equation –  $\rho$ = 3g  $4\pi RG$ 

13. If the mass (m) of a stone depends on velocity (v),  $\rho$  (density of water) and g, find the expression for mass.

14. Determine the expression for centripetal force if it depends on mass m, radius r and speed v of the object.

15. As H (heat) depends on I, R and t, determine its formula with the help of dimensional analysis.

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#### ACCOUNTANCY (055)

Solve all Numerical NCERT Book

**Chapter- Accounting Equation** 

Chapter -Journal

**Revise all Theory chapter Notes and fair Notes** 

**BUSINESS STUDIES (054)** 

Do below mentioned questions in your notebook

- 1. What do you understand by maritime trade?
- 2. Describe the activities relating to commerce.
- 3. Why does business need multiple objectives? Explain any five such objectives.
- 4. What is business risk? What is its nature?
- 5. Distinguish between 'preliminary contracts' and 'provisional contracts'.
- 6. Explain the following terms -
- A. Minimum subscription
- B. Return of allotment
- 7. What is a 'Memorandum of Association'? Briefly explain it's clauses.
- 8. What is a 'Articles of Association'? What are the main content of AoA?
- 9. At which stage in the formation of a company does it interact with SEBI?
- 10. What is a prospectus? Is it necessary for every company to file a prospectus?

# PAINTING (049)

- 1 -Draw objects and still life in water colour.
- 2 -Draw landscape in water colour.
- 3 -Madhubani and Warli painting in water colour on A3 sheet.

### **MATHS (041)**

**1. Revise** 

Chapter -1: Sets

**Chapter-2: Relations and Functions** 

2. Make separate Note Book and complete work ECONOMICS (030)

Do below mentioned questions in your notebook -

Q1. 'The government and policy makers use statistical data to formulate suitable policies of economic development'. Illustrate with two examples.

Q2. "You have unlimited wants and limited resources to satisfy them." Explain this statement by giving two examples.

Q3. "All numerical data cannot be called as statistics but all statistics can be called as numerical data." Explain.

Q4. "Statistics is a tool which can be used only by experts otherwise it is prone to misuse". Do you agree? Explain.

Q5. Statistics is considered as lifeline of economics and any economy". Do you agree? Explain

Q6. "Investigator and Enumerator cannot be a same person." State true or false. Give reasons.

Q7. Which of the following methods give better results and why?

(a) Census. (b) Sample

Q8. Explain the central problem of "For whom to produce".

**Q9.** Explain the central problem of "Choice of techniques".

Q10. State and discuss any two factors that will shift the Production Possibility Frontier

(PPF) to the right.

**Political Science (028)** 

Chapter 1- Constitution: Why and How?

Q-1. What is Constitution?

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Q-2. What are the features of the Constitution?

Q-3. "India is a secular state". Justify the statement.

Q-4." India is a sovereign, democratic, republic justify the statement.

Q-5. Write a note on constituent assembly.

**Chapter -2 Right** 

Q1. What is the importance of the right to constitutional remedies? Explain.

Q2. Mention the fundamental duties of a citizen in constitution of India.

Q3. What are the provisions of the right to equality?

**Chapter -3- Election and Representation** 

Q1. Explain the role of Election Commission of India.

Q2. How does the election commission of India insure its independence?

# HISTORY (027)

### **CHAPTER -1- WRITING AND CITY LIFE**

Q1. "The Euphrates River of ancient Mesopotamia was world - renowned trade route ". How will you justify it?

Q2. How pictographic script came into prominence?

Q3. What do you know about the ancient town Ur of Mesopotamia?

Q4. Discuss the features of town planning of early urban society.

Q5. What do you know about the emergence of Nineveh?

Q6. What do you know about Gilgamesh? Explain in detail.

# **PHYSICAL EDUCATION (048)**

1- Daily physical Fitness schedule to be followed:

Boys: Run & walk test, Skipping, Bent Knee sit-ups, Push-ups & Pull-ups & shuttle Run. (Do write in chart paper.)

Girls: Run & walk test, Skipping, Bent Knee sit-ups, Modified push-ups & shuttle Run. (Do write in chart paper.)

2- Draw a Suryanamskar steps in Chart papers.

3- Draw a field / court and equipment rules terminology. Do use of thermacoal Sheets & A4 size sheets. (Any one game of your choice from the IOA recognized sport/games)

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4- Draw Colorful of the any sports person. (Do use of chart paper)

5- The 'Khelo India Prgramme' is an initiative by the Government of India to encourage sports in the country. (A4 size sheets)

# **GUIDELINES:**

- \* Use A4 size sheets & Charts only.
- \* The project could be in 5 10 pages (Max)
- \* Must be hand written only
- \* Must include a creative cover page and Index.
- \* Hard copies in File/Folders.
- \* Innovation and Creativity also carries marks.

\* It is an individual project and marks will be awarded in Half Yearly and Annual Examination during practical Examination.

**COMPUTER SCIENCE (083)** 

Q1 Verify the following using truth table.

X+Y.Z = (X+Y). (X+Z)

- Q2 Write a python program to add two Numbers.
- Q3 Write a python program for simple interest.
- Q4 Write a python program check age for valid for vote or not.
- Q5 Write a python program to find area of a circle.
- Q6 Perform the following conversions-

(1010110) binary to decimal ()

(62) decimal to binary ( )