SANT ISHAR SINGH JI MEMORIAL PUBLIC SCHOOL, KARAMSAR RARA SAHIB

HOLIDAYS HOMEWORK
CLASS-11TH

Dear Parents,

"We should live everyday like it is a holiday, being thankful and spending time with family and looking hopefully to the future".

There is no doubt that vacations are the most appropriate time for the students to refresh and rejuvenate themselves to showcase their performance more enthusiastically. Children have ample energy which needs to be channelized in the right direction to get the best out of them.

Keeping this in mind the holidays homework has been designed to make them more observant and confident. Students must remember to complete all their Homework and submit it to the respective teachers upon their arrival at the school after vacations. **School will re-open on 1st July 2024.**

General Instructions:-

1. Get up early in the morning and go out for a walk daily.
2. Listen to news daily and read the news headlines.
3. Watch "National Geographic, History and Discovery channels to enrich yourgeneral knowledge.
4. Subject based questions must be done in Holidays Homework Notebooks.
5. Show your best creativity and make colorful projects. Use good quality sketch pens or glitter pens for writing headings only, text should be handwrittenwith blue or black pen.
6. Time Table must be made. Holidays Homework must be done over the period of one month. Don't consider Holidays Homework as burden.

Subject-Physical Education

1. Practical file :- a) Athletics (History)
    b) Types of Events
    c) Track Marking
    d) Types of Strat
    e) Finish
    f) Field event
    g) Long Jump
    h) Shot Put
    i) Terminology
2. Art Integration Activity
    Body Mass Index (BMI)
3. Revision (Theory)

Chapter 1 Changing Trends and Career In Physical Education
Chapter 2 Olympic Value Education
Chapter 3 Yoga

Subject- Economics

Make a project on "Theory of Supply."
Art Activity- Make a collage on Showing The Impact of Technology on Business and Society
Business Studies: Study how businesses leverage technology for growth.
Economics: Evaluate the economic implications of technological advancements.
Political Science: Explore the role of government in regulating technology.
Accountancy: Discuss the challenges of accounting for technology-driven assets.
English: Research and present the societal impacts of technological changes through essays or presentations.

Subject -English Core

PROJECT 1- Interview-Based Research Project
TOPIC: Online Education and Learning Gaps
Cover the following aspects:
1.Cover page – Title of the project
2.School details and details of the students
3.Statement of purpose/Objectives/Goals
4.Acknowledgement
5.Certificate of completion under the guidance of the teacher
6. Action plan for the project
7. Questionnaire for interview (at least 10 interviews to be conducted – different age groups)
8. A Report on the topic
9. Personal views on the topic
10. List of resources / Bibliography
11.Photographs that capture your learning experience.
2. Read the book issued by the school library. Write its review with 10 literary devices which are used in it.
3. Prepare a collage on Culture and Tradition of Punjab and Odisha.
4. Roof top solar power plants are getting popular as they not only provide regular power supply but also save a lot of money towards electricity bills. Besides, government too is promoting this scheme by providing huge subsidy on the installation of these solar power plants. On behalf of the Deptt. Of Renewable Energy, Uttar Pradesh, draft an attractive poster creating awareness to this effect.

Subject: Accountancy

Question 1: Revise all chapters covered in the class-
   Chapter   2 – Basic Accounting Terms
         3 - Theory Base of Accounting
           4 – Bases of Accounting
           5 – Accounting Equation
         6 – Accounting Procedure - Rules of Debit & Credit
            7 – Origin of Transactions – Source Documents and preparation of Vouchers.

Question 2: Solve the questions from T.S Grewal edition (2024) from the following chapters:
         a) Accounting Procedures - Page 6.19 to 6.21
         b) Accounting Equation– Page 5.20 to 5.24

Subject: Business Studies

Question 1: Revise all chapters covered in the class-
   Chapter - 1. Evolution and Fundamentals of business.
              2. Forms of Business organisations.
              3. Public,Private and Global Enterprises.
              4. Business Services.

Question 2: Revise the MCQ's and Case studies of the chapter 1 to 4.

Subject- Physics

- Revise theory of Unit I (units and dimensions) and Unit II (Kinematics)
- Solve numericals in physics copy. (solved examples, frequently asked questions and Hots)
- Complete Physics practical copies.
- Art integrated Activity:
  Infographics of Vectors (Acceleration, velocity, displacement, etc.)
  Create on A4 size sheet
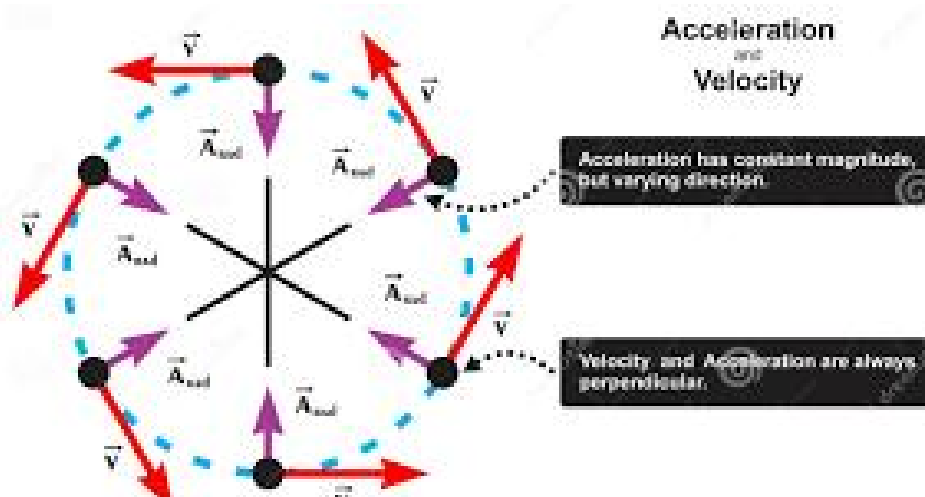
Subject:- Punjabi

_*_ *(ਕਲਾ ਏਕੀਕ੍ਰਿਤ ਪ੍ਰੋਜੈਕਟ)*

ਵਿਦਿਆਰਥੀ ਤਸਵੀਰਾਂ ਲਗਾ ਕੇ ਇੱਕ ਸੁੰਦਰ ਪ੍ਰੋਜੈਕਟ ਤਿਆਰ ਕਰਨਗੇ, ਜਿਸ ਵਿੱਚ ਹੇਠ ਲਿਖੇ ਵਿਸ਼ਿਆਂ ਨੂੰ ਧਿਆਨ ਵਿੱਚ ਰੱਖਦਿਆਂ ਹੋਇਆਂ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਅਤੇ ਉੜੀਸਾ ਦੇ ਸੱਭਿਆਚਾਰ ਦੀ ਤੁਲਨਾ ਕੀਤੀ ਜਾਏਗੀ।

ਪੰਜਾਬ ਅਤੇ ਉੜੀਸਾ ਦੇ ਲੋਕਾਂ ਦੀ ਭਾਸ਼ਾ
ਪੰਜਾਬ ਅਤੇ ਉੜੀਸਾ ਦੇ ਲੋਕਾਂ ਦਾ ਪਹਿਰਾਵਾ
ਪੰਜਾਬ ਅਤੇ ਉੜੀਸਾ ਦੇ ਲੋਕਾਂ ਦਾ ਖਾਣ- ਪੀਣ
ਪੰਜਾਬ ਅਤੇ ਉੜੀਸਾ ਦੇ ਪ੍ਰਸਿੱਧ ਧਾਰਮਿਕ ਸਥਾਨ

ਪ੍ਰੋਜੈਕਟ ਦੇ ਆਰੰਭ ਵਿੱਚ ਵਿਦਿਆਰਥੀ ਹੇਠ ਲਿਖੀ ਜਾਣਕਾਰੀ ਦੇਣਗੇ:-
ਨਾਂ.....................
ਜਮਾਤ................
ਸਕੂਲ ਦਾ ਨਾਂ..........
ਸੂਚੀ ਪੱਤਰ(Index)......

Unit test-1 ਦਾ ਸਾਰਾ ਸਿਲੇਬਸ ਯਾਦ ਕਰੋ
ਸੁਹਾਗ- 1-8, ਘੋੜੀਆਂ-1-5, ਸਿੱਠਣੀਆਂ, ਟੱਪੇ
ਦਫ਼ਤਰੀ ਸ਼ਬਦਾਵਲੀ (A to H), ਪੱਤਰ:- 1-4, ਨਿੱਜੀ ਇਸ਼ਤਿਹਾਰ ਰਚਨਾ(1-20), ਮੁਹਾਵਰੇ:-1-20

Subject:- (Biology)

1. Complete practical mannual.
2. Prepare an investigatory project on any relevant topic from syllabus .
3. Complete the worksheet assignment sent on what's app.
4. Prepare an art integrated project as per cbse guidelines

Subject-History & Political Science

Details of Holiday Homework:
Dear Students, **Final Project Report** must be written on A4 sheets along withPictures,Newspaper,Magazine etc.
Write **One Mark questions** of all completed chapters of Political Science and History in the Fair Notebook.
Do **Map Work** on your Fair Notebook.
Art Activity: Make a collage on Campaigning during Lok Sabha elections with a variety of Photos from newspapers and Magazines.

Subject : Mathematics

1. Art integrated learning (A.I.L)
    Infographic Making
    Topic: Relation and function
    For example:
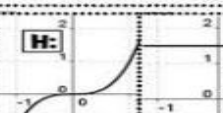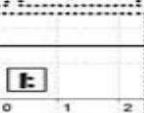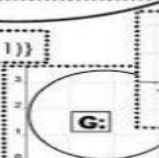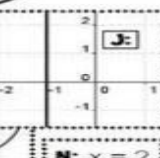
2. As SEA project :Complete five practical activities on practical notebook's as discussed.
                        Revise chapter 1,2,4,5 from modern

Subject : Chemistry

Chapter 1 some basic concept of chemistry

Q.1 The highest temperature among the following is

(a) $203^{o}F$ (b) 278 K   (c) $105^{o}c$ (d) All are equal.

Q.2   One mole of CO_2 contains

(a) 6.02×10^{23} atoms of C (b) 6.02×10^{23} atoms of O (c) 18.1×10^{23} molecules of CO_2 (d) 3 g atoms of CO_2

Q.3 Two elements X (atomic weight =75) and Y (atomic weight =16) combine to give a compound having 75.8% of X. The formula of the compound is

(a) XY   (b) X_2Y (c) XY_2 (d) X_2Y_3

Q.4 For a reaction A + 2B 'C, the amount of C formed by starting the reaction with 5 moles of A and 8 moles of B is   (a) 5 moles (b) 8 moles (c) 16 moles (d) 4 moles .

Q.5 Law of multiple proportions is illustrated by one of the following pairs.

(a) H_2S and SO_2 (b) NH_3 And NO_2 (c) Na_2S and Na_2O (d) N_2O and NO

Assertions and   Reasons

Q.6 Assertion : Atomic mass of sodium is 23 u.

Reason : An atom of sodium is 23 times heavier than an atom of carbon -12 isotope.

Q.7 Asserttion : The number 14.5678 has 5 significant figures.

  Reason : The last digit 8 is uncertain.

Q.8 Assertion : The amount of the product formed in any reaction depends upon the amount of the limiting reactant.

Reason : Limiting reactant is consumed completely in the reaction.

Short answer questions

Q.9 What is the difference between Molarity and Molality ?

Q.10 The density of 3 molal solution of NaOH is 1.10 gml^{-1}. Calculate the molarity of the solution.

Chapter 2 structure of atom

1. Neutron was discovered by ————–

(a) J.J Thomson

(b) Chadwick

(c) Rutherford

(d) Priestle

2. The nucleus of the atom consists of ————–

(a) Protons and neutrons

(b) Protons and electrons

(c) Neutrons and electrons

(d) Protons, neutrons and electrons

3. The radius of an atomic nucleus is of the order of—————

(a) 10^{-10} cm

(b) 10^{-13} cm

(c) 10^{-15} cm

(d) 10^{-8} cm

4. Isotopes of an element have —————

(a) Different chemical and physical properties

(b) Similar chemical and physical properties

(c) Similar chemical but different physical properties

(d) Similar physical but different chemical properties

5. Which of the following pairs represents isobars?

(a) $^3He_2$ and $^4He_2$

(b) $^{24}Mg_{12}$ and $^{25}Mg_{12}$

(c) $^{40}K_{19}$ and $^{40}Ca_{20}$

(d) $^{40}K_{19}$ and $^{39}K_{19}$

6. The atomic orbital is —————

(a) The circular path of the electron

(b) Elliptical shaped Orbit

(c) Three-dimensional field around nucleus

(d) The region in which there is a maximum probability of finding an electron

7. Principal, Azimuthal and magnetic quantum numbers are respectively related to:

(a) Size, shape and orientation

(b) Shape, size and orientation

(c) Size, orientation and shape

(d) None of the abov

9. According to Aufbau principle a new electron enters the orbitals when:

(a) (n + l) is minimum

(b) (n + l) is maximum

(c) (n + m) is minimum

(d) (n + m) is maximum

10. Which of the following is not permissible?

(a) n= 4, l = 3, m= 0

(b) n= 4, l = 2, m= 1

(c) n= 4, l = 4, m= 1

(d) n= 4, l = 0, m= 0

Short Answer Type Questions

Q1. Arrange s, p and d sub-shells of a shell in the increasing order of effective nuclear charge (Z_{eff}) experienced by the electron present in them.

Q2. Show the distribution of electrons in an oxygen atom (atomic number 8) using an orbital diagram.

Q3. Nickel atom can lose two electrons to form Ni^{2+} ion. The atomic number of nickel is 28. From which orbital will nickel lose two electrons?

.

Q4. Which of the following orbitals are degenerate?

3 ,4 ,3 2,3 ,4 ,4 2

Q5. Calculate the total number of angular nodes and radial nodes present in the 3p orbital.

Q6. The arrangement of orbitals on the basis of energy is based upon their (n+l) value. Lower the value of (n+1), the lower is the energy. For orbitals having the same values of (n+l), the orbital with a lower value of n will have lower energy.

I. Based upon the above information, arrange the following orbitals in the increasing order of energy.

(a) 1s, 2s, 3s, 3p

(b) 4s, 3s, 3p, 4d

(c) 5p, 4d, 5d, 4f, 6s

(d) 5f, 6d, 7s, 7p

II. Based upon the above information, solve the questions given below :

(a) Which of the following orbitals has the lowest energy?

4d, 4f, 5s, 5p

(b) Which of the following orbitals has the highest energy?

5p, 5d, 5f, 6s, 6p

Q7. Which of the following will not show deflection from the path on passing through an electric field?

Proton, cathode rays, electron, neutron.

Q8. An atom having atomic mass number 13 has 7 neutrons. What is the atomic number of the atom?

Q9. Wavelengths of different radiations are given below:

$\lambda(A)$ = 300 nm

$\lambda(B)$ = 300 μm

$\lambda (C)$ = 3 nm

λ = 0 (D) 30 Å

Arrange these radiations in the increasing order of their energies.

Q10. The electronic configuration of the valence shell of Cu is $3d^{10} 4s^1$ and not $3d^9 4s^2$. How is this configuration explained?

Q11. The Balmer series in the hydrogen spectrum corresponds to the transition from $n_1 = 2$ to $n_2 = 3, 4, ...$ This series lies in the visible region. Calculate the wave number of the line associated with the transition in the Balmer series when the electron moves to $n = 4$ orbit. ($R_H = 109677$ cm^{-1})

Q12. According to de Broglie, the matter should exhibit dual behaviour, that is, both particle and wave like properties. However, a cricket ball of mass 100 g does not move like a wave when it is thrown by a bowler at a speed of 100 km/h. Calculate the wavelength of the ball and explain why it does not show wave nature

Q13. What is the experimental evidence in support of the idea that electronic energies in an atom are quantized?

Q14. Out of electrons and protons which one will have a higher velocity to produce matter waves of the same wavelength? Explain it.

Q15. A hypothetical electromagnetic wave is shown in Fig. Find out the wavelength of the radiation.
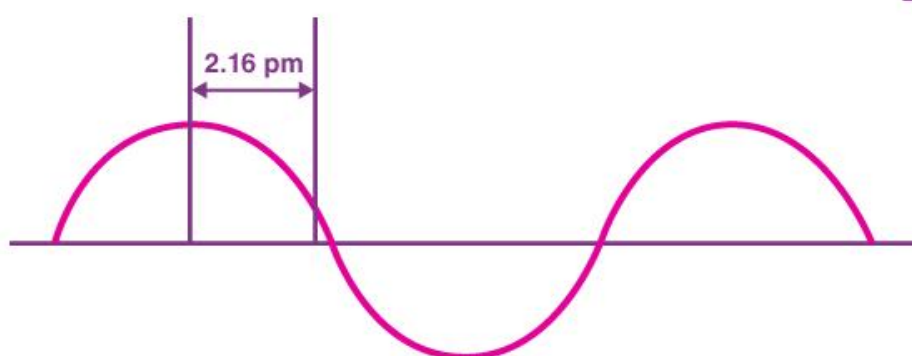
Q16. Chlorophyll present in green leaves of plants absorbs light at 4.620×10^{14} Hz. Calculate the wavelength of radiation in nanometer. Which part of the electromagnetic spectrum does it belong to?

Q17. What is the difference between the terms orbit and orbital?

Q18. Table-tennis ball has a mass of 10 g and a speed of 90 m/s. If speed can be measured with an accuracy of 4% what will be the uncertainty in speed and position?

Q19. The effect of the uncertainty principle is significant only for the motion of microscopic particles and is negligible for macroscopic particles. Justify the statement with the help of a suitable example.

Chapter 3   learn Ncert questions

AIL- Project . Topic – Infographic making of topic green chemistry