

NEO CONVENT SR. SEC. SCHOOL

HOLIDAYS HOMEWORK CLASS XI

- **ENGLISH-XI**
- **Do the assignments put on the school website.**
- **MATHS (NCERT)**
- **Do all NCERT examples and questions of below mentioned chapters:**
- **Chap 1 (Sets) and Chap 3 (Trigonometry).**
- **[Do in a separate register]**

CHEMISTRY-XI

Name: _____

Class/Sec: _____

Subject : _____

Date : _____

Teacher's Sign : _____

Parent's Sign : _____

1. Solve the assignment which will be uploaded on portal on 20.05.18
2. Prepare an investigatory project file
3. Practice questions of NCERT of Ch-1 and Ch-2

PHYSICS-XI

Instructions :

1. Holiday Home Work should be neat and clean.
2. Use separate register for assignment.
3. Do not forget to write units at proper places and in answer. You can hope to get full marks in numericals only if units are given both data and with answer.
4. Use pencil for figures and diagram.

Q1. Project/model/PRESENTATION based on topic allotted to student.

Q2. Assignment based on chapter UNITS AND MEASUREMENT (attach below).

Q3. Do NCERT Questions of ch- 2,3 and 4 both solved and unsolved in home work register.

Q4. Prepare notes of chapter 2, 3 and 4 in class register.

ASSIGNMENT

1. Force(F) and density(d) are related as $F = \alpha/(B + \sqrt{d})$
 - (i) Then the dimensions of α are....
 - (ii) Then the dimensions of B are....
 2. If muscle times speed equals power, what does muscle stand for?
 3. A calorie is a unit of heat or energy, it is equal to 4.2J, where $1J=1kgm^2s^{-2}$. Suppose we employ a system of units in which the unit of mass equals α kg, the unit of length β m, the unit of time γ s. Show that a calorie has a magnitude $4.2\alpha^{-1}\beta^{-2}\gamma^2$, in terms of the new units.
 4. The radius of curvature of a concave mirror measured by a spherometer is given by $R = \ell^2/6h + h/2$ The values of ℓ and h are 4cm and 0.065cm respectively. Compute the error in measurement in measurement of radius of curvature.
 5. Write the dimensional formula corresponding to: (i)
Photon (ii) Calorie
 6. A book with many printing errors contains four different formulas for the displacement y of a particle undergoing a certain periodic motion: (a) $y = a \sin 2\pi t/T$
(b) $y = a \sin vt$ (c) $y = (a/T) \sin t/a$
(d) $y = (a/\sqrt{2})(\sin 2\pi t/T)$ Here a = amplitude, v = speed of the particle, T = time period of motion and P = pi. Rule out the wrong formulas on dimensional on dimensional grounds.
 7. In Vander Waal's equation $(P + a/V^2)(V - b) = RT$: (i) Write the dimensions of 'a'.
(ii) Write the dimensions of 'b'.
(iii) What does (a/b) represent energy or power? (iv) What is the ratio of the SI to CGS unit of (a/b)?
 8. Write parallex method for distance measurement.
 9. Write and explain the method for measuring the size of molecules.
 10. Write the dimensions of the density, gravitational constant, charge, and pressure.
 11. What do you mean by least count of an instrument?
 12. Evaluate $(21.6002 + 234 + 2732.10) \times 13$.
 13. The length and the radius of a cylinder measured with a slide calipers are found to be 4.54cm and 1.75cm respectively. Calculate the volume of the cylinder.
 14. Write the number of significant digits in (a) 1001 (b)100.1 (c) 100.10 (d) 0.001001
 15. Round the following numbers to two significant digits: (a) 3472 (b) 84.16 (c) 2.55 (d) 28.5.
 16. Test dimensionally if the formula $t=2\pi\sqrt{(m/(f/x))}$ may be correct, where t is time period, m= mass, F = force and x = distance.
 17. Find the dimensions of surface tension, thermal conductivity and coefficient of viscosity.
 18. Find the dimensions of charge, potential, capacitance and the resistance.
 19. If velocity, time and force were chosen as basic quantities, find the dimensions of mass.
 20. If the centripetal force is of the form $m^a v^b r^c$, find the values of a,b and c.
- 3. Make a project on given topic.**

BIOLOGY

Name: _____
Subject : _____
Teacher's Sign : _____

Class/Sec: _____
Date : _____
Parent's Sign : _____

1. DO SCIENTIFIC NAME OF COMMON PLANTS AND ANIMALS (20 EACH).
2. MAKE A PROJECT ON THE TOPIC DISCUSSED IN THE CLASS.
3. MAKE SHORT NOTES OF THE CHAPTERS COMING IN HALF YEARLY.
4. MAKE A LEAF FILE OF ALL INDIA V PRE MEDICAL EXAM INFORMATION OF DIFFERENT EXAMS LIKE A.I.P.M.T, AIIMS ,I.P UNIVERSITY WITH SYLLABUS AND IMPORTANT DATES.

- **ECONOMICS**

1. Revise the chapters done in the class.
2. Make a project on the given topic.
3. Prepare one chart on related topic (any) discussed in the class.

BUSINESS STUDIES

1. Revise the chapters done in the class.
2. Prepare one chart on related topic (any) discussed in the class.

ACCOUNTANCY

- Practice Additional Problems of Accounting Equation based on Text Book – D.K.Goyal and T.S.Grewal
- Prepare a Chart based on any relevant topic of your choice, discussed in the class.

Computer Science

1. Do Question from ch- 1,2
2. Draw flow charts
 - a. Accept a number and reverse it. Example:- 245 output 542
 - b. Display first N natural number in reverse.
 - c. Accept N numbers and find how many numbers are even and how many numbers are odd
 - d. Display factorial of a given number

- e Enter a number and display it is even or odd
- f Display a message n number of time.
- g. Accept 2 numbers and display all natural number between them.
- h. Accept 3 numbers and find greatest and smallest number.
- i. Accept 3 numbers and display in increasing order
- j. Accept a number and display it is negative or positive.

Write c++ program

- a. Write a program in c++ to accept an even number and display 4 previous 4 even numbers
- b. Write a program in c++ to accept a temperature in Fahrenheit and display in to Celsius
- c. Write a program in c++ to accept a temperature in Celsius and display in to Fahrenheit
- d. Write all program done in class.
- e. Write a program in c++ to accept principal, time and interest rate and find amount using simple interest.

Informatics Practices

- Prepare the Question Bank of 10 Questions each (at least) from Chapter 1, 2 and 3
- WAP to calculate Simple interest.
- WAP to accept name, and salary of an employee and then find the amount of HRA, DA, PF & Net Salary as HRA should be 45% of Salary, DA should be 110% of Salary, PF should be 12% of Salary, & Net Salary will be Salary + HRA + DA – PF
- WAP to find the roots of quadratic equations where value of a, b & c is to be enter by the user.
- WAP to accept customer name, Previous Reading and Current Reading of the Electricity consumed by the customer & then find the Unit Consumed, and Bill Amount which is fixed at Rs. 5.40/- per unit is to be charged.

Remember:

Road has Speed Limit, Bank has Money Limit, Exam has Time Limit, Tower has Height Limit, But Thinking has No Limit...So Think Big and Achieve Big.

Wish You all Happy Holidays! God Bless all.

