

HOLIDAY HOMEWORK CLASS- XII

CLASS XII-CHEMISTRY

HOLIDAY HOMEWORK (Based on class XI syllabus the students can prepare the following topics and its chapter wise application in class XII is as follows)

Work to be done during summer holidays and evaluation will be done after the reopening of the school on 31st May 2017.

CHAPTER-3, ELECTRO CHEMISTRY

- * Daniel cell and cell representation.
- * Standard reduction potential and standard hydrogen electrode.
- * Electro chemical series and its relevance.

CHAPTER-7, THE P-BLOCK ELEMENTS CHAPTER-8, d and f BLOCK ELEMENTS CHAPTER-9, COORDINATION COMPOUNDS

*Periodic table, general electronic configuration of s,p,d and f-block elements.

- *General trends in periodic properties and anomalies.
- *Hybridisation sp , sp^2 , sp^3 , sp^3d , sp^3d^2 , sp^3d^3 and dsp^2 .
- *Examples such as H_2O , NH_3 , PCl_3 , PCl_5 , SF_6 , IF_7 .
- *Anomalous behavior of second period of elements, inert pair effect.
- *Hydrogen bonding, intermolecular and intramolecular.

TEXT BOOK-2 (ORGANIC CHEMISTRY)

IUPAC System of naming of organic compounds with different functional groups.

Resonance effect, inductive effect, hyperconjugative effect.

The ortho para directing and meta directing substituents on the benzene ring.

Important reactions like Wurtz, Friedal crafts alkylate and acylation, Markownikovs rule and peroxide effect.

CLASS XII-ENGLISH

1) Read the "Invisible Man by H.G.Wells and prepare 10 long answers

कक्षा बारही

.1निम्नलिखित विषयों पर फीचर लिखिए।

१. चुनाव में जातिवाद का प्रभाव
२. राजनीति और देशभक्ति
३. युवा पीढ़ी और नव माध्यम

. 2निम्नलिखित विषयों पर फीचर लिखिए।

१. खेलकूद और स्वास्थ्य
२. संचार विप्लव

HOLIDAY HOMEWORK

CLASS XII PHYSICS

1. Two point charges 0.2 C and 0.4C are placed 0.1m apart . Calculate the electric field at midpoint between the charges and at a point on the line joining the charges 0.05m away from 0.2C ?
2. Two point charges $+16\mu\text{C}$ and $-9\mu\text{C}$ are placed 8cm apart in air. Determine the position of the point at which the resultant field is zero?
3. The sum of two point charges is $7\mu\text{C}$.They repel each other with a force of 1N when kept apart 30cm apart in free space .Calculate the value of each charge.
4. Two point charges placed at a distance r in air exert a force F on each other .At what distance will these charges experience the same force in a medium of dielectric constant k ?
5. Define electric field intensity at a point. Write its SI unit . If it is a vector quantity what is its direction?
6. Define electric flux .Write its SI unit . Is it a scalar or a vector quantity.
7. Define electric dipole moment .Write its SI unit .If it is a vector specify its direction.
8. What is an electric field line ? Write down the important properties of electric field lines.
9. Draw the electric field lines due to (a) point positive charge (b) an electric dipole
10. State and express Coulombs law in vector form
11. State and explain Gauss theorem
12. Prove the inverse square law dependence of electric field intensity due to a point charge using concept of electric field line.
13. Derive an expression for the electric field at a point due to a point charge

14. Derive expression for the electric field at a point along the (a) axial line and (b) equatorial line of an electric dipole
15. Explain what happens when an electric dipole is placed in an external (a) uniform electric field (b) non uniform electric field.

HEALTH & PHYSICAL EDUCATION

HOLIDAY HOMEWORK

CLASS XII

- 1) Application of physics in the field of physical education?

MATHEMATICS

1. Revise the chapters trigonometric function of limits and derivatives of class XI.

2. Prepare formulae chart.

BIOLOGY

CLASS XII

Recording of twelve experiments in the lab record book

CLASS XII

COMPUTER SCIENCE

1. Write 10 program illustrating the if statement?
2. Use switch case write any 5 programs?
3. Using for write any 5 programs?

4. Using while write any 5 programs?
5. Using do.. while any 5 programs?
6. Write any 3 programs using function?
7. Write any 2 programs using structure?
8. Using 1-dimensional array, write 2 programs?
9. Using 2-dimensional array, write 2 programs?