



**RAYAT-BAHRA INTERNATIONAL**  
**SCHOOL** Chandigarh Road, Hoshiarpur Affiliated to **CBSE (1631251)**



# **SUMMER VACATION ASSIGNMENT**

**NON - MEDICAL  
GRADE-XI**



***“The more that you read, the more things you will know. The more that you learn, the more places you’ll go.”***

# CHEMISTRY



1. How many protons and neutrons are present in the following nuclei  
a)  ${}_6\text{C}^{13}$    b)  ${}_8\text{O}^{16}$    c)  ${}_{12}\text{Mg}^{24}$    d)  ${}_{26}\text{Fe}^{56}$    e)  ${}_{38}\text{Sr}^{88}$
2. Write the complete symbol for the atoms with given atomic number (Z) and atomic mass (A)  
a)  $Z=17, A=35$    b)  $Z=92, A=233$    c)  $Z=4, A=9$
3. Yellow light emitted from a sodium lamp has a wavelength of 580nm. Calculate the frequency and wave number of yellow light.
4. Calculate the energy of photons which has *2bis*  
a) Light of frequency  $3 \times 10^{15}$  hz and  
b) Wavelength of 0.50 nm
5. What is the number of photons of light with wavelength 4000pm which provide 1 joule of energy
6. Read topics Bohr model of an atom

# PHYSICS



1. Explain motion in one, two and three dimensions?
2. A body covers a circular path of radius  $R$  in 10 seconds. Calculate the distance and displacement of the body at the end of 30 seconds and 35 seconds.
3. Difference between velocity and acceleration.
4. A body starts from rest and acquires a velocity of 12 m/s in 5 seconds. Calculate the acceleration and distance covered by body.
5. What do you mean by position vector and displacement vector?
6. Explain definitions in in vector algebra.
7. Derive equations of uniformly accelerated by calculus method.

# **MATHEMATICS/APPLIED MATHEMATICS**



- **Make an assignment on following chapters:-**

- 1. Complex numbers and quadratic equations  
(solve miscellaneous exercise of this chapter fully)**
- 2. Sequence and series  
(solve miscellaneous exercise of this chapter upto question no. 6 only)**

# Tips



**Revise all the syllabus covered in Virtual Classes.  
Show your creativity in your vacation assignments.**



# Prevention Measures

**Encourage Social Distance**  
**Thoroughly wearing Masks.**  
**Avoid Gatherings.**  
**Boost up your immune system.**  
**Sanitize your hands.**

*Rbis*

*Stay safe and  
blessed*