

# Computational Chemistry and Classical Molecular Dynamics

## Assignment Zero

- 1) The symbol  $\Sigma$  stands for
  - a) Addition
  - b) Multiplication
  - c) Summation
  - d) Division
  
- 2) To calculate  $n!$  ( $n$  factorial), we need to do  $n-1$ 
  - a) additions
  - b) multiplications
  - c) summations
  - d) Divisions
  
- 3) As  $n$  tends to infinity, the value of  $1/n$  goes to
  - a) Zero
  - b) 1
  - c) infinity
  - d) fixed, small finite value
  
- 4) Chemical thermodynamics deals with
  - a) Free fall
  - b) free rotation
  - c) free energy
  - d) free exchange
  
- 5) Newton's laws deal with
  - a) Force
  - b) heat
  - c) density
  - d) energy levels
  
- 6) Chemical kinetics uses
  - a) Quadratic equations
  - b) Differential equations
  - c) Difference equations
  - d) infinite series

- 7) When you bowl a ball in cricket, it falls to the ground because
- a) The ground is nearer to the ball than the sun or the moon
  - b) The ball spins or swings
  - c) The acceleration due to gravity of the sun is smaller than that of the earth
  - d) The earth's gravitational force near the earth is stronger than all other forces on the ball
- 8) The unit of force is
- a) Joule    b) Newton    c) Kelvin    d) Faraday
- 9) Kilogram, Kilometer and kilolitre refer respectively to
- a) volume, mass, length
  - b) mass, length, volume
  - c) Length, mass, volume
  - d) Mass, volume, length
- 10)        Angstrom is a unit of
- a) Mass    b) momentum    c) Energy    d) length
- 11)        Rate of change of momentum corresponds to
- a) Mass    b) length    c) Energy    d) force
- 12)        Pressure is related to force as
- a) Force x area    b) force /area    c) Force + area    d) Area/force