### Assignment 3

Due on 2020-02-18, 23:49 IST.

- **Q1:** How many point groups are there in 3D?  
  **Points:** 2

- **Q2:** The point group is ______.  
  **Points:** 2

- **Q3:** The point group of a monosodium nitrate (NaNO₃) can be written as ______.  
  **Points:** 2

- **Q4:** The point group is ______.  
  **Points:** 2

- **Q5:** Fill in the blanks:  
  The symmetry operation ______ involves the interchange of points or objects which are equivalent under and opposite sides of a central point.  
  **Points:** 2

- **Q6:** Objects are said to be equivalent to one another if they can be brought into coincidence under the admittance of a symmetry operation.  
  **Points:** 2

- **Q7:** Objects are said to be equivalent to one another if they can be brought into coincidence under the admittance of a symmetry operation.  
  **Points:** 2

- **Q8:** The point group is ______.  
  **Points:** 2

- **Q9:** Which group symbol is used for the following space group?  
  **Points:** 2

- **Q10:** Only non-coincident axes of order three parallel the presence of an inversion center.  
  **Points:** 2

- **Q11:** Which group symbol is used for the following space group?  
  **Points:** 2

- **Q12:** The only symmetry element for the Ih 5** symmetry is ______.  
  **Points:** 2

- **Q13:** Which group symbol is used for the following space group?  
  **Points:** 2

- **Q14:** The point group is ______.  
  **Points:** 2

- **Q15:** The space group is ______.  
  **Points:** 2

- **Q16:** Which group symbol is used for the following space group?  
  **Points:** 2

- **Q17:** Which group symbol is used for the following space group?  
  **Points:** 2

- **Q18:** Which group symbol is used for the following space group?  
  **Points:** 2

- **Q19:** A glide plane is present at (x, y, z) = (0.50, 0.25), a coordinate (x, y, z) generates another coordinate (x + 0.50, y + 0.25, z) as a result of a glide operation.  
  **Points:** 2

- **Q20:** Value of A ______.  
  **Points:** 1

- **Q21:** Value of B ______.  
  **Points:** 1

- **Q22:** Value of C ______.  
  **Points:** 1

- **Q23:** Value of D ______.  
  **Points:** 1

- **Q24:** Value of E ______.  
  **Points:** 1