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**The H. N. S. B. Ltd. Science College, Himatnagar**  
**Internal Examination September - 2017**

B.Sc. Sem.-3

Subject: Chemistry

Date: 12/09/2017

Marks: 40

Paper CC-CH-302

Time: 1½ hr

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- Q-1 A) Answer any two of the Following 10
- 1) Explain Dobar Nariyel Charcoal method for the separation of noble gases.
  - 2) Explain the Structure of  $\text{XeF}_6$  and  $\text{XeOF}_4$  on basis of the hybridization.
  - 3) Write a note on Calthrate (Pinzar) compounds.
- B) Answer any two of the Following 03
- 1) Give names of radioactive minoris which contain noble gas.
  - 2) What is the shape of  $\text{XeF}_2$  and  $\text{XeF}_4$ ?
  - 3) Give Name and atomic No. of a Noble gas which declared by IUPAC in 2017.
- Q-2 A) Answer any two of the Following 07
- 1) Write a short note on iso electric point of amino acid.
  - 2) Write a Synthesis for amino acid by Fischer Malonic ester method.
  - 3) Explain Geometry of Peptide chain.
- B) Answer any two of the Following 07
- 1) Explain the Nitration of Phenol with Mechanism.
  - 2)  $-\text{Cl}$  group is deactivating group and O/P decision group, Explain with the help of  $\sigma$ -complexes.
  - 3) Explain the Halogenation of Toluene with Mechanism.
- Q-3 A) Answer any two of the Following 13
- 1) Explain Vapour pressure.
  - 2) Explain Stalagmometer Experimental method for surface tension.
  - 3) Explain Ostwald's Viscometer Experimental method for viscosity.