



- Q-4**                    **Attempt all questions**                    **(14)**
- a) How to prepare 250ml standard solution of Borax?                    05
- b) Write the Difference between part per thousand and part per million.                    05
- c) A sample of 0.60 gm of NaCl dissolved in water and made up to 100 mL                    04  
calculate the Normality of this solution. (Na = 23, Cl = 35.5)
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- Q-5**                    **Attempt all questions**                    **(14)**
- a) What is buffer solution? Explain it with mechanism of acidic and basic                    07  
buffer.
- b) Write a note on Lowry-Bronsted acid base theory..                    07
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- Q-6**                    **Attempt all questions**                    **(14)**
- a) Explain Sp<sup>3</sup> hybridization with an example.                    07
- b) Explain Covalent radius.                    07
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- Q-7**                    **Attempt all questions**                    **(14)**
- a) Explain Sp<sup>3</sup>d<sup>2</sup> hybridization with an example.                    07
- b) Explain Ionization potential.                    07
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- Q-8**                    **Attempt all questions**                    **(14)**
- a) Explain the work obtained during isothermal change.                    07
- b) Write the difference between physisorption and chemisorptions.                    07

