

**Probability & Statistics**  
**Quiz #4**  
**Total Marks: 10 marks (CLO-3)**

**9.2** An electrical firm manufactures light bulbs that have a length of life that is approximately normally distributed with a standard deviation of 40 hours. If a sample of 30 bulbs has an average life of 780 hours, find a 96% confidence interval for the population mean of all bulbs produced by this firm.