Question Bank 2

- 1.Discuss the postulates of MOT.(2016 -17)
- 2. Draw the MO diagram of N_2 , O_2 , CO , NO molecule & calculate its bond order ? Describe its nature . (2016 -17) (17 18) (13 14) (15- 16)
- 3. Draw the molecular orbital diagram of HF. Calculate bond order and nature. (13-14)
- 4. Explain MOT in case of metals and on bases differentiate between conductor , semiconductors , insulators. (2017 18)
- 5. What is liquid crystal & distinguish between nematic & sematic liquid crystal with application. (14-15)(15-16)(13-14)(16-17)(17-18)
- 6. Why do we express hardness of water in terms of $CaCo_3$ equivalent? (15 16)
- 7. Explain basic principle of lime soda process ? (17-18)
- 8. What is hardness of water? Describe zeolite process for making soft water from hard water. (13-14)(15-16)
- 9. What are ion exchange resins? How will you purify water by using resins? (2016-17)(15-16)(14-15)
- 10. Explain reverse osmosis process.(2016-17)(15-16)(14-15)
- 11. With the help of neat sketch, explain construction principle and working a Bomb calorimeter. (17-18)(15-16)
- 12. How are polymers classified & explain.(2014-15)
- 13. What are the necessary conditions for a monomer to undergo condensation polymerization?
- 14. Distinguish between thermoplastic and thermosetting polymers?
- 15. What are composites? Classified properties and advantages?