

B.R.A.Bihar University Muzaffarpur

M.Phil Chemistry

Session -2015-16

Assignment Questions

Paper -I

Full Marks-30

किन्ही तीन प्रश्नों का जबाव दें | सभी प्रश्नों का मान बराबर है |

1. Discuss the importance of quality literature survey in research?
2. In statistical analysis discuss the significance of Chi-square Test.
3. Discuss the type of computer with special term of digital and analogue computer.
4. Discuss the programming of language of C and C++.

Paper -II

1. How would you apply the 'Huckel Molecular orbital' theory in 'cyclobutadiene'.
2. Define 'Chemical Shift'. What is the "Reference compound" in NMR spectroscopy and why it is used as reference?
3. What do you mean by 'Raman Scattering' and Raman Shift'? Explain them.
4. Discuss the IR stretching frequencies in metal carbonyls with examples.

Paper -III

1. What is Auger spectroscopy? What are the three basic steps involved in the auger spectroscopy. Discuss the initiation of auger process.
2. Illustrate radioactive and non-radioactive transitions with suitable examples.
3. Discuss the structure and mechanism of Wilkinson catalyst. Explain its superiority over catalyst.
4. What are the characteristic features of per cyclic reaction?
5. Discuss synthesis of the following compounds
(a) Chloroquine (b) Ranitidine
6. Discuss stereochemistry of Phosphorous.
