



DIRECTORATE OF DISTANCE EDUCATION

L.N. Mithila University, Kameshwaranagar, Darbhanga-846008 (BIHAR)

Phone & Fax: 06272-246506 Website: dde@lnmu.ac.in, E-mail: dde@lnmu.ac.in

Assignment for M.Sc. Chemistry (Final)

अंकभार: 30%

सभी प्रश्नों के उत्तर दें।

प्रत्येक प्रश्नों के उत्तर 800 शब्दों में दें।

Paper IX

1. What is spectroscopy ? Explain absorption and emission spectra.
2. Discuss multiplet structure in ESR spectroscopy.
3. With the help of IR and Raman spectroscopy, how will you show that the following molecule have the structures as indicated :
 - (a) SO₂ symmetrical and bent
 - (b) CO₂ linear with a centre of symmetry
 - (c) N₂O is linear without a centre of symmetry

Paper X

1. What are the essential and trace metals ? Discuss in detail.
2. Describe the synthesis of ATP from ADP.
3. What is the mechanism of enzyme action ? Discuss it.

Paper XI

1. What is the composition of atmosphere ? Discuss it.
2. Describe the content of chloride sulphate, nitrate and microorganism.
3. What is water pollution ? Enumerate some common water pollutants. How it is controlled ?

Paper XIII

1. What is organolithium compound and what are the various application of organolithium compound?
2. What is oxidation ? How is it different from reduction.
3. What are pericyclic reaction ? Write different type of pericyclic reaction,

Paper XIV

1. Explain the monocyclic monoterpenes and sesquiterpenes.
2. Explain the detailed structure of the Testosterone
3. Write notes on the following:
 - (a) Nomenclature of steroids
 - (b) Stereo chemistry of steroids

Paper XV

1. What is Hypertension ? Describe its types.
2. What are Antibiotic ? Discuss, in detail, with the synthesis of any one antibiotic drug.
3. Describe different method for preparation of Azepines.

***Assignment (दत्तकार्य) जमा करने की अंतिम तिथि 30.06.2022 ***