

MANONMANIAM SUNDARANAR UNIVERSITY

DIRECTORATE OF DISTANCE AND CONTINUING EDUCATION

INTERNAL ASSIGNMENT FOR MAY 2024 EXAMINATIONS

M. Sc Chemistry – First Semester

Organic Reaction Mechanism - I

Subject Code: SCHM11

- 1.) (A) i) Explain Cahn In gold Prelog rules.
ii) Write Curtin Hammett Principle.

(OR)

(B) Confirmation and stability of dimethyl cyclohexane.

- 2.) (A) i.) Explain Hammond postulate with potential diagram.
ii.) Duality of substituent constant.

(OR)

(B) Stereochemistry of allanes, spiranes, biphenyl arisa compounds.

MANONMANIAM SUNDARANAR UNIVERSITY

DIRECTORATE OF DISTANCE AND CONTINUING EDUCATION

INTERNAL ASSIGNMENT FOR MAY 2024 EXAMINATIONS

M. Sc Chemistry – First Semester

Structure and Bonding in Inorganic Compounds

Subject Code: SCHM12

- 1.) (A) Draw the M.O. diagrams of hetero diatomic and triatomic molecules. (any two examples for each)

(OR)

- (B) Write on boranes, carboranes and metalloboranes.

- 2.) (A) Principle and Instrumentation of Powder X-ray diffraction technique.

(OR)

- (B) i) Write on crystal growth methods.
ii) Point defects and line defects.

MANONMANIAM SUNDARANAR UNIVERSITY

DIRECTORATE OF DISTANCE AND CONTINUING EDUCATION

INTERNAL ASSIGNMENT FOR MAY 2024 EXAMINATIONS

M. Sc Chemistry – First Semester

Nano Materials and Nano Technology

Subject Code: SCHE11

1.) (A) Synthesis of nanomaterials by chemical methods.

(OR)

(B) Synthesis and properties of metal oxide nanoparticles.

2.) (A) Write on electrical and magnetic properties of nonmaterial's.

(OR)

(B) Synthesis and applications of ceramics and polymer matrix composites.

MANONMANIAM SUNDARANAR UNIVERSITY

DIRECTORATE OF DISTANCE AND CONTINUING EDUCATION

INTERNAL ASSIGNMENT FOR MAY 2024 EXAMINATIONS

M. Sc Chemistry – First Semester

Molecular Spectroscopy

Subject Code: SCHE12

- 1.) (A) i.) Effect of isotopic substitution in rotational spectroscopy.
ii.) Vibrational –Rotational spectra of diatomic molecules.

(OR)

- (B) Principle and Theory of X-ray photoelectron spectroscopy.

- 2.) (A) Ionization techniques in Mass spectrometry.

(OR)

- (B) Applications of ESR to transition metal complexes.