

VIVEKANANADA COLLEGE
ALIPURDUAR

DEPARTMENT OF CHEMISTRY
INTERNAL ASSESMENT
1st SEMESTER EXAMINATION (D.SC)(P)

DATE-23/02/2021

FULL MARKS-10

INSTRUCTIONS

- Each question carries 5 marks each; students are to answer only one question from each part.
- Answers to be written in A4 –size papers and submitted in stick files containing proper information of students particulars.

INORGANIC CHEMISTRY

1. Write down de-Broglie's hypothesis along with the derivation. What is the significance of spin quantum number?

Or

What is the significance of ψ and ψ^2 in Schrodinger wave equation. Define covalent bonding with proper example?

ORGANIC CHEMISTRY

2. Why CO_2 has less dipole moment than CCl_4 .

Or

Which of the following can exist as diastereomers- (a) Lactic acid (b) 1-Butene (c) 2- Butene (d) Ethane. Explain with proper reason.

QUESTIONS MADE BY SANDIP Kr. PAUL
STATE AIDED COLLEGE TEACHER
DEPARTMENT OF CHEMISTRY

VIVEKANANDA COLLEGE
DEPARTMENT OF CHEMISTRY
INTERNAL ASSESSMENT
3rd SEMESTER EXAMINATION (D.SC(P))

MAXIMUM MARKS-10

DATE-22/02/2021

INSTRUCTIONS

- Each question carries 5 marks each; students are to answer only one question from each part.
- Answers to be written in A4 -size papers and submitted in stick files containing proper information of students particulars.

PHYSICAL CHEMISTRY

1. Derive Clausius - Claypeyron equation and interpret its significance in phase equilibria.

Or

How Equivalent and Molar conductivity varies with dilution in case of strong and weak electrolytes.

ORGANIC CHEMISTRY

2. What is Edmann degradation? What is its importance in peptide chemistry?

Or

What is Mutarotation? Explain its significance in carbohydrate chemistry.

QUESTIONS MADE BY ANNWESHA DAS
STATE AIDED COLLEGE TEACHER
DEPARTMENT OF CHEMISTRY