



ASSIGNMENT-2

Course- M.Sc Subject

CODE-MC-111

Sub-InOrganic Chemistry

Year- 1st year/1stsem

Last date of Submission-10/11/2016

Instruction

- 1)Write the responses to the assignment in your own handwriting.
- 2)Submit the responses to your HOD within the due date.
- 3)Write your name, program and Enrollment nu clearly at the top of the page.

Q1.

- a)Explain the Inert liable Compound in coordination complex.
- b)Explain the Stepwise and overall formation compound.

Q2.

- a)Explain pH-metry and spectrophotometry determination of coordination compound.
-)Explain the mechanism of substitution reaction in transition metal complex.



ASSIGNMENT-2

Course- M.Sc Subject

code-MC-112

Sub-Organic Chemistry

Year- 1st year/1stsem

Last date of Submission-10/11/2016

Instruction

- 1) Write the responses to the assignment in your own handwriting.
- 2) Submit the responses to your HOD within the due date.
- 3) Write your name, program and Enrollment nu clearly at the top of the page.

Q1.

- a) Explain the Bimolecular Reaction SE_1 & SE_2
- b) Explain the carbenes with suitable Example..

Q2.

- a) Define the nitrenes.
- b) Explain the conformation of sugars,



ASSIGNMENT-2

Course-M.Sc

Sub code-M.SC-113

Sub-Physical Chemistry

Year-1st year/1st sem

Last date of Submission-10/11/2016

Instruction

- 1) Write the responses to the assignment in your own handwriting.
- 2) Submit the responses to your HOD within the due date.
- 3) Write your name, program and Enrollment nu clearly at the top of the page.

Q1.

- a) Show that for Hydrogen atom

$$\frac{\langle K \rangle}{\langle V \rangle} = \frac{-1}{2}$$

(Virial theorem)

- b) What is perturbation theory. A perturbation

$$V = \delta \left(x - \frac{a}{2} \right)$$

is introduced in a box. Calculate the first order energy correction to the first excited state?

Q2.

- a) What is quantum statistics. Describe in detail
- i) Bose Einstein statistics
 - ii) Fermi Dirac
 - iii) Maxwell statistics
- b) Give the ground state term symbol for P² and P⁵?



ASSIGNMENT-2

Course - M.Sc

Sub code- MC-114

Sub-Computers for Chemist

Year-1st year/1st sem

Last date of Submission-10/11/2016

Instruction

- 1) Write the responses to the assignment in your own handwriting.
- 2) Submit the responses to your HOD within the due date.
- 3) Write your name, program and Enrollment nu clearly at the top of the page.

Q1.

- (a) Explain the introduction of office Automation . What is features of MS word?
- b) What do you understand Algorithm and explain the characteristics of algorithm?

Q2

- a) What is Flowchart and define the symbols of Flowchart?
- b) Explain the MS-Power Point with Example?



ASSIGNMENT-2

Course - M.Sc

Sub code-MC-115-1

Sub-Mathematics for Chemist

Year-1st year/1st sem

Last date of Submission-10/11/2016

Instruction

- 1) Write the responses to the assignment in your own handwriting.
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- 3) Write your name, program and Enrollment nu clearly at the top of the page.

Q1.

(a) Differentiate of functions w. r .x.

$$f(x) = 15x^{100} - 3x^{12} + 5x - 46$$

(b). Find the value of

$$\int \frac{1}{(x+1)(x+2)(x+3)} dx$$

Q2.

(a) Solve differential equations

$$(x^2 - y^2)dx + 2xydy = 0$$

(b) Solve differential equations

$$\frac{dy}{dx} + \frac{2y}{x} = 6x^3$$



ASSIGNMENT-2

Course - M.Sc

Sub code-MC -115-2

Sub- Biology for Chemist

Year-1st year/1st sem

Last date of Submission-10/11/2016

Instruction

- 1) Write the responses to the assignment in your own handwriting.
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- 3) Write your name, program and Enrolment nu clearly at the top of the page.

Q1.

- a) Give the chemical composition of a generalized nucleotide?
- b) . Write an account of the different type of RNA and add a note on their function?

Q2

- a). Summarize the events of the hexose monophosphate shunt. What respiration role dose this process play and where does it occur?
- b). Describe the chief processes of amino acid synthesis in the living system?