



**DEPARTMENT OF MECHANICAL ENGINEERING**  
**MONAD UNIVERSITY, HAPUR**

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**Session - (2018-2019)**

**Programme Name:**

**Student's Name:**

**Father's Name:**

**Enrollment Number:**

**Course Name:**

**Course Code:**

**Assignment Number:**

**Date of Submission:**

**Course Faculty Signature**



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**MONAD UNIVERSITY, HAPUR**

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**Dated:-01/03/2019**

Course: BS- 121 – Chemistry

Assignment No: 1

Due date of submission: **12/03/2019**

Instructions

1. Write the responses to the assignment in your own handwriting & don't copy from other's assignment.
2. Submit the responses to your “**course faculty**” within due date.
3. Write your name, programme, and Enrollment no. clearly at the top of the page.
4. Each question's part carries 5 marks.

**Q.1**

- (a) Explain Schrodinger equation in detail.
- (b) Explain MOT for O<sub>2</sub> and NO molecule.

**Q.2**

- (a) Explain Crystal Field Theory in detail.
- (b) What do you mean by bond structure of solid?



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**Dated:-01/03/2019**

Course: BS- 122-2 – Mathematics-II

Assignment No: 1

Due date of submission: **12/03/2019**

Instructions

1. Write the responses to the assignment in your own handwriting & don't copy from other's assignment.
2. Submit the responses to your “**course faculty**” within due date.
3. Write your name, programme, and Enrollment no. clearly at the top of the page.
4. Each question's part carries 5 marks.

**Q.1**

(a) Solve the following differential equation:

$$\frac{d^3y}{dx^3} + 3\frac{d^2y}{dx^2} + 3\frac{dy}{dx} + y = e^{-x}.$$

(b) Solve the following differential equation:

$$x(x-1)\frac{dy}{dx} - y = x^2(x-1)^2.$$

**Q.2**

(a) Solve  $\frac{d^2y}{dx^2} + (1 - \cot x)\frac{dy}{dx} - y \cot x = \sin^2 x.$

(b) Solve  $p = \tan(px - y).$



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**Dated:-01/03/2019**

Course: ES- 121– Programming for Problem Solving

Assignment No: 1

Due date of submission: **12/03/2019**

**Instructions**

1. Write the responses to the assignment in your own handwriting & don't copy from other's assignment.
2. Submit the responses to your “**course faculty**” within due date.
3. Write your name, programme, and Enrollment no. clearly at the top of the page.
4. Each question's part carries 5 marks.

**Q.1**

- (a) What is Loop? Explain different types of loop with program.
- (b) What is pre-processor? Explain different types of directives.

**Q.2**

- (a) What is an Array? Explain type of Array.
- (b) What is sorting? Explain difference between sorting and searching.



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**Dated:-01/03/2019**

Course: MC- 121– Environmental Science

Assignment No: 1

Due date of submission: **12/03/2019**

**Instructions**

1. Write the responses to the assignment in your own handwriting & don't copy from other's assignment.
2. Submit the responses to your “**course faculty**” within due date.
3. Write your name, programme, and Enrollment no. clearly at the top of the page.
4. Each question's part carries 5 marks.

**Q.1**

- (a) What is environmental science?
- (b) What is the role of Air in environment?

**Q.2**

- (a) What are main differences between living and non living organisms?
- (b) How we get Vitamin-D from environment explain it?