



**SCHOOL OF ENGINEERING & TECHNOLOGY**  
**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**



## SCHOOL OF ENGINEERING & TECHNOLOGY MONAD UNIVERSITY, HAPUR

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**Dated:-10/04/2019**

Course: DIP-121-Applied Physics II

Assignment No: 2

Due date of submission: **22/04/2019**

### 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) Write the Kirchhoff's voltage law and Kirchhoff's current law.  
किरचॉफ के वोल्टेज के नियम और किरचॉफ के विद्युत धारा के नियम को लिखें।

(b) Prove that  $C_p > C_v$ .

सिद्ध करें कि  $C_p > C_v$

### Q.2

(a) Explain the combination of resistance with the help of circuit diagram.  
सर्किट आरेख की सहायता से प्रतिरोध के संयोजन की व्याख्या करें।

(b) Derive the Mayor's formula.  
मेयर के फार्मूले को प्राप्त करें।



## SCHOOL OF ENGINEERING & TECHNOLOGY MONAD UNIVERSITY, HAPUR

**Dated:-10/04/2019**

Course: DIP-122-Applied Chemistry II

Assignment No: 2

Due date of submission: **22/04/2019**

### 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 an ideal fuel? Explain the property of fuel.

एक आदर्श ईंधन क्या है? ईंधन की विशेषताएं की व्याख्या करें।

(b) What is Corrosion? Describe the various methods to prevent corrosion.

क्षरण क्या है? क्षरण को रोकने के लिए विभिन्न तरीकों का वर्णन करें।

### Q.2

(a) Explain the purification of petroleum.

पेट्रोलियम के शुद्धिकरण की व्याख्या कीजिए।

(b) Define the following:

(i) Chemical fuel (ii) Fogging (iii) Galvanization  
निम्नलिखित को परिभाषित कीजिये:

(i) रासायनिक ईंधन (ii) फॉगिंग (iii) गैल्वनीकरण



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**Dated:-10/04/2019**

Course: DIP-123-Applied Mathematics II.

Assignment No: 2

Due date of submission: **22/04/2019**

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) Write a short note on functions, range and domain.
- (b) Explain limit and continuity with examples.

**Q.2**

- (a) Give two examples of each on multiplication and division of two functions in differentiation.
- (b) Explain the integration by substitution and integration by parts with two examples of each.



## SCHOOL OF ENGINEERING & TECHNOLOGY MONAD UNIVERSITY, HAPUR

**Dated:-10/04/2019**

Course: DIP-124-Applied Mechanics.

Assignment No: 2

Due date of submission: **22/04/2019**

### 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) You are aware about general condition of equilibrium. Give the general condition of equilibrium of a rigid body under the action of coplanar forces.

आप संतुलन की सामान्य स्थिति के बारे में जानते हैं। समतलीय बलों की कार्रवाई के तहत एक कठोर वस्तु के संतुलन की सामान्य स्थिति दें।

(b) You know about lever. Explain different types of lever with example.

आप लीवर के बारे में जानते हैं। उदाहरण के साथ विभिन्न प्रकार के लीवर की व्याख्या करें।

### Q.2

(a) You are familiar with steel yard. Describe the working principle of steel yard.

आप स्टील यार्ड से परिचित हैं। स्टील यार्ड के कार्य सिद्धांत का वर्णन करें।

(b) You are aware about Lami's theorem. State and prove Lami's theorem.

आप लामी के प्रमेय के बारे में जानते हैं। लामी के प्रमेय को लिखें और लामी के प्रमेय को साबित करें।



## SCHOOL OF ENGINEERING & TECHNOLOGY MONAD UNIVERSITY, HAPUR

**Dated:-10/04/2019**

Course: DIP-126-Environmental Science

Assignment No: 2

Due date of submission: **22/04/2019**

### 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) You already know about biodiversity. If yes, explain about the characteristics of biodiversity.  
आप पहले से ही जैव विविधता के बारे में जानते हैं। यदि हाँ, तो जैव विविधता की विशेषताओं के बारे में बताएं।

(b) As you are aware of the term ecological succession. If yes, explain the meaning and types of ecological succession.

जैसा कि आप पारिस्थितिक उत्तराधिकार शब्द से अवगत हैं। यदि हाँ, तो पारिस्थितिक उत्तराधिकार के अर्थ और प्रकार की व्याख्या करें।

### Q.2

(a) You already aware about population. Explain the characteristics of population.

आप पहले से ही जनसंख्या के बारे में जानते हैं। जनसंख्या की विशेषताओं के बारे में बताएं।

(b) You already know about nitrogen cycle. Explain the steps of nitrogen cycle.

आप नाइट्रोजन चक्र के बारे में पहले से ही जानते हैं। नाइट्रोजन चक्र के चरणों की व्याख्या कीजिए।



## SCHOOL OF ENGINEERING & TECHNOLOGY MONAD UNIVERSITY, HAPUR

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**Dated:-10/04/2019**

Course: EY-121-Basics of Renewable Energy

Assignment No: 2

Due date of submission: **22/04/2019**

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 the method of making of charcoal in detail.

चारकोल बनाने की विधि के बारे में विस्तार से बताएं।।

(b) How do you classify gasifier?

आप गैसीफायर को कैसे वर्गीकृत करते हैं?

### **Q.2**

(a) Explain with a neat diagram the working of a down draught gasifier.

एक साफ आरेख के साथ एक डाउन ड्राफ्ट (प्रारूप) गैसीफायर के कार्य विधि के बारे में बताएं।

(b) Write the short note on the following:- (I) Global energy (II) Green House effect (III) Fluidized bed gasifier.

निम्नलिखित पर परिभाषित करें :- (I) वैश्विक ऊर्जा (II) ग्रीनहाउस प्रभाव (III) द्रवित गैस गैसीफायर।