



DEPARTMENT OF MECHANICAL ENGINEERING MONAD UNIVERSITY, HAPUR

Programme: Diploma, (common to all branch)

Dated: 10/04/2018

Course: DIP-124-Applied Mechanics.

Assignment No: 2

Due date of submission: 20/04/2018

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 **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 beam. Describe different types of beam with neat sketch.

आप बीम के बारे में जानते हैं साफ स्केच के साथ विभिन्न प्रकार के बीम का वर्णन करें ।

(b) You know about truss. Describe perfect and imperfect truss.

आप ट्रस के बारे में जानते हैं , परिपूर्ण और अपूर्ण ट्रस का वर्णन करें ।

Q.2

(a) You are familiar with simple lever. Describe different classes of simple lever.

आप साधारण लीवर से परिचित हैं। सरल लीवर के विभिन्न वर्गों का वर्णन करें।

(b) You are aware about steel yard. Describe it with neat sketch.

आप स्टील यार्ड के बारे में जानते हैं। यह साफ स्केच के साथ वर्णन करें।



MONAD UNIVERSITY HAPUR (UP)

Programme: Diploma,(**common to all branch**)

Semester: II

Course: APPLIED PHYSICS –II, DIP-121

Assignment No: 2

Due date of submission: 20 April 2018

Instructions:

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, Programme and Enrolment No. clearly at the top of the page.

Q1.

- a) As you aware of magnet. Write the magnetic properties.
- b) Write the atomic explanation of magnetism.

Q 2

- a) As you are of post office box. Explain the principle and working method of post office box.
- b) Write the short note on :
 - (i) Intensity of magnetization.
 - (ii) Magnetic Permeability.



MONAD UNIVERSITY HAPUR (UP)

Programme: **Diploma (common to all branch)**

Semester: **II**

Course: **DIP-123, Applied Mathematics-II**

Assignment No: **2**

Due date of submission: **20.04.2018**

Instructions

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, Programme and Enrolment Number clearly at the top of the page.

Q.1

(a) Evaluate the following integrals:

$$(i) \int \frac{x \tan^{-1} x^2}{1+x^4} dx \quad (ii) \int \tan^{-1} \left(\frac{1+\cos x}{\sin x} \right) dx.$$

(b) Solve the differential equation $\frac{dy}{dx} = \frac{y^3+3yx^2}{x^3+3xy^2}$.

Q.2

(a) Solve $\frac{dy}{dx} + \sqrt{\frac{1-y^2}{1-x^2}} = 0$.

(b) Prove that three points A, B and C will be collinear, iff
$$\vec{a} \times \vec{b} + \vec{b} \times \vec{c} + \vec{c} \times \vec{a} = 0.$$



MONAD UNIVERSITY HAPUR (UP)

Programme: **Diploma (common to all branch)**

Semester: **II**

Course : **EY-121, basic of renewable energy**

Assignment No: **2**

Due date of submission: **20.04.2018**

Instructions

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, Programme and Enrolment Number clearly at the top of the page.

Q.1

(a): Define fuel cell and also explain types and features of fuel cell.

ईंधन सेल को परिभाषित करें और ईंधन सेल के प्रकार और विशेषताओं को भी समझाएं।

(b): Write advantage and disadvantage of wind power mill and also explain rotors of wind power mill. पवन ऊर्जा मिल के लाभ और नुकसान को लिखें और पवन ऊर्जा मिल के रोटारों को भी समझाएं।

Q.2

(a): Write short note on ocean wave energy, ocean tidal energy and ocean wave energy.

महासागर लहर ऊर्जा, समुद्र ज्वारीय ऊर्जा और समुद्र की लहर ऊर्जा पर लघु नोट लिखें।

(b): Define geothermal energy and also write advantage and disadvantage of geothermal energy. भू-तापीय ऊर्जा को परिभाषित करें और भू-तापीय ऊर्जा का लाभ और नुकसान भी लिखें।



ASSIGNMENT-2

Course- Diploma.

Sub code-DIP-122

Sub-Applied Chemistry

Year-1st year/IIInd Sem

Last date of Submission-20/04/2018

Instructions

- 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 Enrolment number clearly at the top of the page.

Q1. (a)Define and explain Cetane number.

सिटेन संख्या को परिभाषित और समझाओ .

(b)Explain Bio gas.

बायो गैस को समझाओ

Q2.

a) What is Lubricant? How many types of lubricant explain it
स्नेहक क्या है? कितने प्रकार के स्नेहक को समझाओ.

b) What is Glass? Give the physical and chemical properties.
ग्लास क्या है? भौतिक और रासायनिक गुणों को समझाओ.



DEPARTMENT OF CHEMICAL ENGINEERING MONAD
UNIVERSITY, HAPUR

Date of submission: 20/04/2018

Course: DIP-127, Environmental science

Assignment No: II

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 teacher 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 समझाएं।

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

जैसा कि आप पारिस्थितिकी उत्तराधिकार शब्द के बारे में जानते हैं। यदि हाँ, पारिस्थितिक उत्तराधिकार के अर्थ और प्रकार की व्याख्या करें।

Q.2

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

जनसंख्या के बारे में आप पहले से ही जागरूक हैं। जनसंख्या की विशेषताओं को समझाओ।

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

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