

## ASSIGNMENT- 1st

### POLYTECHNIC DIPLOMA (ALL BRANCHES) – 1<sup>st</sup> Sem.



Monad University  
N.H. 24, Delhi Hapur Road,  
Village & Post Kastla, Kasmabad, P.O Pilakhwa - 245101,  
Dist. Hapur (U.P.), India

**Course Name - Professional Communication**

**Course Code: DIP-111**

Assignment No: 1

last date of submission: 11/09/2017

#### Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD/Faculty within the due date (11/09/2017).
3. Write your Name, Programme , and Enrolment No. clearly at the top of the page.

- Q. 1 (a) You are familiar with “Preposition”. It is studied as preposition of Place, Time, Reason, Manner, Measure and Rate. Describe them with 5 proper examples of each kind of preposition.
- (b) Pronoun is an important part of speech. Describe all kinds of Pronoun. Personal pronoun contains three persons as 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> person. Explain your ideas about it.
- Q. 2 (a) We are habitual of using article and it is studied in two parts. Describe them. Give your ideas for using indefinite and definite article. Write 10 sentences using article.
- (b) As we are familiar with tenses, describe all the three types of tenses in detail with their all parts.

**Course: DIP -112, Applied Physics**

**Assignment: 1**

**Due date of submission: 11/09/2017**

**Instructions:**

- 1. Write the response to the assignment in your own handwritings.**
- 2. Submit the response to your H.O.D. within the due date.**
- 3. Write your name, program and enrollment no. clearly at the top of the page.**

Q 1

(A) Differentiate between fundamental and derived unit.

(B) Explain Elasticity, Strain and Young's modulus of elasticity.

Q 2

(A) Explain angular motion & angular displacement.

(B) Define circular motion and explain needs of central force in daily life.

## ASSIGNMENT-1

Course- Diploma (All Branches)

Sub code- DIP-113

Sub-Applied Chemistry

Year- 1st year/1st sem

Last date of Submission-11/09/2017

### 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.

Q1.

- 1) Define atomic structure of atom and give the example.  
परमाणु की संरचना को परिभाषित और उदाहरण दे ।
- 2) Explain the discovery of nucleus of the atom.  
परमाणु के नाभिक की खोज को समझाओ ।

Q2.

- a) Explain the atomic model proposed by Somerfield.  
सॉमरफ़लड के द्वारा प्रस्तावित परमाणु मॉडल समझाओ ।
- b) Explain and derive Heisenberg uncertainty principle and equation.  
हाइजेनबर्ग की अनिश्चितता के सिद्धांत और समीकरण को समझाओ ।

Programme: **Diploma**

Semester: **I**

Course: **DIP-114 Applied Mathematics I**

Assignment No: **1**

Due date of submission: **11.09.2017**

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) Find the expansion of  $\left(x - \frac{1}{2x}\right)^5$  by Binomial Theorem.
- (b) Determine modulus and amplitude of the complex number  $(5 + 12i)$  and write the polar form.

Q.2

- (a) Determine the solution of the following linear equations by inverse matrix method:

$$4x + 2y - z = 0,$$

$$x - y + 3z = -4,$$

$$2x + z = 1.$$

- (b) Verify Cayley-Hamilton theorem for the matrix  $A = \begin{bmatrix} 1 & -2 & 3 \\ 2 & 4 & -2 \\ -1 & 1 & 2 \end{bmatrix}$ .

**Programme: DIPLOMA (ALL BRANCH-I<sup>st</sup> Sem.)**

**Course Name: Computer Fundamentals and Applications (CFA)**

**Course Code: DIP-115**

**Assignment No: 1**

**Due date of submission: 11.09.2017**

**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 Enrollment No. and other details clearly on the front page given.**

**Question No. 1.**

- a) As you are aware of basics of Computer System. So, explain the following in detail by using suitable diagrams.
- i) Computer
  - ii) ALU, CPU and CU
  - iii) Bit, Byte, Nibble and Word.
- b) As we have discussed in the class, explain Input and Output devices used for computer system with suitable diagrams.

**Question No. 2.**

- a) As we have discussed various conversion methods like Binary to Decimal, Decimal to Binary etc. in the class sessions, now, perform the following conversions.
- i.  $(243)_{10} \rightarrow (?)_2$
  - ii.  $(500)_{10} \rightarrow (?)_2$
  - iii.  $(53)_{10} \rightarrow (?)_2$
  - iv.  $(303)_{10} \rightarrow (?)_2$
  - v.  $(1111)_2 \rightarrow (?)_{10}$
  - vi.  $(1010)_2 \rightarrow (?)_{10}$
  - vii.  $(10101100)_2 \rightarrow (?)_{10}$
- b) Discuss the all the Generations of Computers in detail.

**Programme : DIPLOMA (ALL BRANCH-I<sup>st</sup> Sem.)**

**Course Name: CONVENTIONAL ENERGY RESOURCES**

**Course Code: EY-111**

**Assignment No: 1**

**Due date of submission: 11.09.2017**

**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 Enrollment No. and other details clearly on the front page given.**

**Question No. 1.**

- a) Define energy and also explain importance of energy in daily life.
- b) Classify energy resources.

**Question no.2**

- a) Write short note on power, units of energy and grade of energy.
- b) Write short note on internal energy, thermal energy, electric energy and nuclear energy.