



MONAD University
N.H. 24, Delhi Hapur Road,
Village & Post Kastla, Kasmabad, P.O Pilkhuwa - 245304,
Dist. Hapur (U.P.), India

Assignment No: 1

Programme (Branch)/Sem:.....

Course Name:-.....

Submitted by :-

Candidate's Name:.....

Enrollment No.:-

Roll No. :-

Date of Submission:-

Submitted to:-

.....



**MONAD
UNIVERSITY**
Established by UP State Govt. Act 23 of 2010
& UIS 2 (f) of U.G.C. Act 1956

Programme: B.Tech (ALL-Ist Sem.)

Course Name: Engineering Physics-I

Course Code: BS-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. clearly at the top of page.

Question No. 1.

- a) Explain the wave-particle duality of matter and obtain an expression for de-Broglie wavelength.
- b) As you are aware of waves distinguish between transverse and longitudinal wave with example.

Question No. 2.

- a) Explain Rayleigh criterion of resolution.
- b) Describe Michelson-Morley experiment and explain the outcome of the experiment.



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Programme: B.Tech (ALL-Ist Sem.)
Course Name: Engineering Mathematics-I
Course Code: BS-112
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. clearly at the top of page.

Question No. 1.

- (a) As you are aware of the differentiation, find the Maclaurin series of the function $f(x) = e^x$ and its radius of convergence.
- (b) Find the asymptotes of the function $f(x) = \frac{3x+2}{x-1}$.

Question No. 2.

- (a) As you are aware of the matrix operations, find the rank of the following matrix by Echelon method:

$$A = \begin{bmatrix} 1 & 2 & 1 \\ 2 & 3 & 1 \\ 1 & 1 & 2 \end{bmatrix}.$$

- (b) Find the eigenvalues and eigenvectors of the matrix $A = \begin{bmatrix} 1 & 2 & 1 \\ 2 & 3 & 1 \\ 1 & 1 & 2 \end{bmatrix}$.



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Programme: B.Tech (ALL-Ist Sem.)

Course Name: Engineering Chemistry

Course Code: BS-113

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. clearly at the top of page.

Question No. 1.

- a) Define the term Chemical bonding. Explain different types of bonding with proper examples.
- b) Explain postulates of VBT.

Question No. 2.

- a) VSEPR theory determine the geometry of molecule, explain it in detail.
- b) Explain MOT. Give MOT for O₂ and NO.



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Programme: B.Tech (ALL-Ist Sem.)

Course Name: Fundamentals of Computers and Programming

Course Code: ES-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. clearly at the top of page.

Question No. 1.

- a) As you are aware of Computer. You can explain all the characteristics of Computer in detail. Do it.
- b) As we have discussed about the Hardware & Software in the class session, now, define and differentiate Hardware and Software with example.

Question No. 2.

- a) As you are aware of data types in C. So, you can explain different data types of C with example. Do it.
- b) As you are aware of basic concepts of C programming. So, you can WAP in C to add two numbers input through keyboard and also explain this program in detail. Go ahead.



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Programme: B.Tech (ALL-Ist Sem.)

Course Name: Basics of Electrical Engineering

Course Code: ES-116

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. clearly at the top of page.

Question No. 1.

a) What is a DC circuit? Explain the solution of DC Circuits using laws and theorems with suitable examples?

b) Write the various terminology of electrical network? What is the use of delta to star and star to delta transformation in the circuit? Explain it in brief?

Question No. 2.

a) Derive the expression of quality factor and bandwidth of the series RLC circuit at resonance with example?

b) What is a three phase system? Explain two wattmeter methods to determine power in three phase system?



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Programme: B.Tech (ALL-Ist Sem.)
Course Name: Professional Communication
Course Code: DIP-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. clearly at the top of page.

Question No. 1.

- a) As we are familiar with tenses, describe all the three types of tenses in detail with their all parts.
- b) Pronoun is an important part of speech. Describe all kinds of Pronoun. Personal pronoun contains three persons as 1st, 2nd, and 3rd person. Explain your ideas about it.

Question No. 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) 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.