



MONAD UNIVERSITY HAPUR (UP)

Programme: **B.Tech**

Semester: **II**

Course: **BS-122 Differential Equations and Integral Transforms**

Assignment No: **2**

Due date of submission: **22.04.2019**

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) As you are aware of the Maclaurin's series, state the Maclaurin's series expansion of a function with Lagrange's form of remainder after n terms, Using this find the expansion of $\log(1+x)$ upto four terms.

$$\sin^{-1} x = x - \frac{x^3}{6} + \frac{x^5}{120} - \frac{x^7}{5040} + \dots$$

- (b) Expand E^{-x} by Maclaurin's series and find the general term.

Q2.

- (a) As you are aware of maxima and minima, discuss the maximum or minimum values of $U = X^3 Y^2 (1 - X - Y)$.

- (b) Find the existence of $\lim_{X \rightarrow 0} X^3 + Y^3$.



MONAD UNIVERSITY HAPUR (UP)

Programme: **B.Tech**

Semester: **II**

Course: **BS-121 Chemistry**

Assignment No: **2**

Due date of submission: **22.04.2019**

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.

- a) Explain modern form of periodic table in detail.
- b) Explain ionization energies, electron affinity and electronegativity of atom.

Q2.

- a) What is isomerism? Explain different types of isomerism?
- b) What do you mean plane polarized light and chirality of molecules?



MONAD UNIVERSITY HAPUR (UP)

Programme: **B.Tech**

Semester: **II**

Course: **BS-121 Programming for Problem Solving**

Assignment No: **2**

Due date of submission: **22.04.2019**

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 (a): Write a program to print the series

@

@@

@@@

@@@@

@@@@@

(b): What is the difference between compiler and interpreter?

(c): What is switch with any example?

Q2: (a): What is recursion with example and define advantages of function?

(b): What is the difference between while and do-while loop with examples.



MONAD UNIVERSITY HAPUR (UP)

Programme: **B.Tech**

Semester: **II**

Course: **BS-121 Physics**

Assignment No: **2**

Due date of submission: **22.04.2019**

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

(a) As you aware of semiconductor. Explain the n-p-n & p-n-p junction with suitable diagram.

b. Write short note on :

- i. Intrinsic and extrinsic semiconductors
- ii. Carrier generation
- iii. and recombination
- iv. optoelectronic devices

Q2

a. As you aware of transistor. Explain the working and characteristics of transistor.

b. Write short note on:

- i. BJT
- ii. Hybrid h -parameters.
- iii. MOSFET



MONAD UNIVERSITY HAPUR (UP)

Programme: **B.Tech**

Semester: **II**

Course: **MC-121 EVS**

Assignment No: **2**

Due date of submission: **22.04.2019**

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) What is the importance of water in our daily life?

(b) Write short notes on “CHIPKO MOVEMENT”

Q.2

(a) Write an essay on soil pollution .

(b) Describe details about Pond Ecosystem