DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

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

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:-10/04/2019

Course: MTME—121, Computer Integrated Manufacturing

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 the DNC Technology and principles. If yes, then explain it.

(b)You know that CIM is very important in the manufacturing. Please explain the classification of CIM.

Q.2

(a) You know about the adaptive control system. If yes, then explain with example.

b) You are aware about feature and application of CIM. If yes, then explain basic key of CIM.

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:-10/04/2019

Course: MTME—122, Advanced Mechanics of Solids

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.
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Q.1

(a) As you already know about stress; explain the stresses in uniform rotating rings and discs.

(b) As you are familiar with torsion; show that $\frac{T}{J} = \frac{\tau}{R} = \frac{C\theta}{L}$

Q.2

(a) As you are familiar with theories of failure; explain failure theories for fiber composites.

(b)You already have studied elastic constants; establish the relationship between Young's modulus of elasticity, Shear modulus and Poisson's ratio.

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:-10/04/2019

Course: MTME-123(2), Advanced Welding Technology

Assignment No: 1

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

Instructions

1. Write the responses to the assignment in your own hand writing & 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) I know you are aware about modern trends in welding. Define explosive welding process..

(b) I know you are familiar with plasma arc welding. Discuss the working principle of Plasma arc welding.

Q.2

(a) You are very well familiar with robotics in welding. Discuss about robot design and applications in welding.

(b) You know about efficiency of robotics in welding very well. Discuss the efficiency of robotics in welding.

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY,HAPUR

Dated:-10/04/2019

Course: MTME-124(2) Computational Fluid Dynamics.

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 **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 momentum and energy equation for a viscous flow. Derive the momentum and energy equation for viscous flow in integral form.

(b) You know about first-order wave equation. Show that the first-order wave equation $\frac{\partial u}{\partial t}+c\frac{\partial u}{\partial x}=0$

is a hyperbola.

Q.2

(a) Using Taylor's series, derive the second-order central difference for $\frac{\partial u}{\partial y}$.

(b) You are aware about alternating direction implicit (ADI) technique. Explain it.