



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:-01/03/2018

Course: MTME-121, Optimization for Engineering Design

Assignment No: 1

Due date of submission: 12/03/2018

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) You know about optimization. Describe the engineering application of optimization.
- (b) You are aware about classical optimization techniques. Describe different Classical optimization techniques.

Q.2

- (a) You are familiar with constrained optimization techniques. Describe the cutting plane method and Method of Feasible directions.
- (b) You are aware about Univariate and Pattern search methods. Explain it with example.



DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:-01/03/2018

Course: MTME-122, Advanced Mechanics of Solids

Assignment No: I

Due date of submission: **12/03/2018**

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) As you already know the concept of elasticity; establish the relationship between any three elastic constants.

(b) As you are familiar with torsion; explain torsion in a non circular section.

Q.2

(a) As you are familiar with theories of failure; explain maximum principle stress theory with example.

(b) You already have studied theories of failure; explain maximum principle strain theory with example.



DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:-01/03/2018

Course: MTME—123, PRODUCTION TECHNOLOGY

Assignment No: 1

Due date of submission: **12/03/2018**

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) You are aware about the Metallurgy of welding and weld design. If yes, then explain it.
- (b) You know that Thermal cutting of metals is very important in the field of welding. Please explain the classification of welding.

Q.2

- (a) You know about the Cladding, Surfacing and Fabrication. If yes, then explain with example.
- b) You are aware about Stress distribution and temperature fields in the welds. If yes, then explain it.



DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:–01/03/2018

Course: MTME-124, Total Quality Systems

Assignment No: I

Due date of submission: 12/03/2018

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 quality systems. Write the importance of Quality assurance in the industry.
- (b) We know that you are aware about Quality costs. Discuss the effects of Quality costs and measurement in TQS.

Q.2

- (a) You are familiar with Total Quality Control. Discuss the concepts of Total Quality Control.
- (b) You are aware about Tools of analysis. Elaborate the Principles of Tools of analysis.