



**DEPARTMENT OF MECHANICAL ENGINEERING**  
**MONAD UNIVERSITY, HAPUR**

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Course: HS-211, Essentials of Management

Dated:-01/09/2017

Assignment No: I

Due date of submission: 11/09/2017

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.

Question:-1

- a) What is meant by planning? What is importance of planning in production?
- b) Write briefly about the functions of management.

Question:-2

- a) Labour and management-friends or foes? They cannot be friends because you do not do business with friends. They cannot be foes because they need each other. 'Discuss this statement and its applicability in the Indian context.
- b) What is missing in the organization relations system that is critical to make it harmonious and productive?



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Dated: -01/09/2017

Course: BTEME-211, Material Science in Engineering Material Science and Metallurgy

Assignment No: I

Due date of submission: 11/09/2017

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**Q.1**

(a) I know you are aware about material science and metallurgy. How is the study of material science useful to an engineer?

(b) I know you are aware about engineering materials. Classify engineering materials from various views points.

**Q.2**

(a) I know you are familiar with crystallography. Explain crystalline and non-crystalline structure.

(b) I know you are aware about ideal crystal. Define imperfections & defects in solids.



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Dated:-01/09/2017

Course: BTME-212, Strength of Materials -I

Assignment No: 1

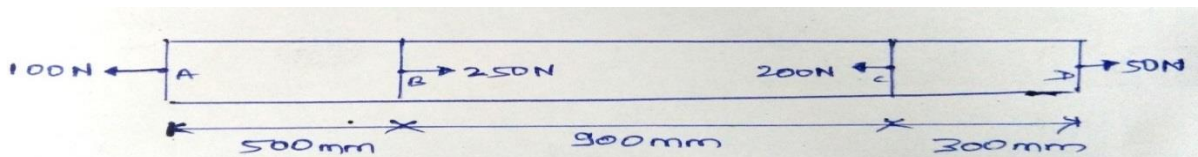
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Q.1

(a) The figure below shows a steel rod of  $50\text{mm}^2$  cross-sectional area. It is loaded at A, B, C and D as shown. If  $E=210\text{ GPa}$ , Find the total change in length of the rod.



(b) Define

- (i) Poisson's ratio    (ii) Bulk Modulus    (iii) Young's modulus of elasticity

Q.2

(a) As you already know about stresses and strains in rigid bodies; explain thermal stress and strain with example.

(b) As you already know about properties of material; explain stress strain diagram.



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Dated:-01/09/2017

Course: BTME -214—Manufacturing Technology-1.

Assignment No: 1

Due date of submission: 11/09/2017

Instructions

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4. Each question's part carries 5 marks.

**Q.1**

(a) You are aware about the manufacturing technology. If yes, then explain it.

(b) You know that Metal forming processes is very important in the field of Engineering. Please explain the scope of Mechanical engineering.

**Q.2**

(a) You know about the deformation of metal. If yes, then explain it.

b) You are aware about hot and cold working. If yes, then explain it.



# DEPARTMENT OF MECHANICAL ENGINEERING

## MONAD UNIVERSITY, HAPUR

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Course: BTME-215 – Mechanics of Fluid

Dated:-01/09/2017

Assignment No: 1

Due date of submission: 11/09/2017

### Instructions

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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 fluid. Explain different types of fluid.
- (b) You know about importance of viscosity in fluid motion. Explain effect of temperature on viscosity of water and air.

### Q.2

- (a) A plate 0.030 mm distant from fixed plate, moves at 60 cm/s and requires a force of 4 N/m<sup>2</sup> to maintain this speed. Determine the fluid viscosity between the plates.
- (b) You are familiar about viscosity. Explain Newton's law of viscosity.