

## Unit 2 - Week 1

### Course outline

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#### Week 1

- Introduction to Metal Forming Technology
- Classification of Metal Working Processes
- Behavior of Materials
- Failure of Materials
- Concept of stress and strain

#### Quiz : Assignment 1

#### Week 2

#### Week 3

#### Week 4

#### Week 5

#### Week 6

#### Week 7

#### Week 8

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## Assignment 1

The due date for submitting this assignment has passed.  
As per our records you have not submitted this assignment.

**Due on 2019-08-14, 23:59 IST.**

1) Which of the following type of force is applied for stretch forming process? 1 point

- Indirect compression type of force
- Direct compression type of force
- Tension type of force
- Shearing type of force

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Tension type of force*

2) Total stress acting on a body is the 1 point

- Multiplication of normal and shearing stress of the body
- Division of normal and shearing stress of the body
- Summation of normal and shearing stress of the body
- Subtraction of normal and shearing stress of the body

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Summation of normal and shearing stress of the body*

3) Which of the following type of force is applied for sheet metal forming applications? 0 points

- Indirect compression type of force
- Direct compression type of force
- Tension type of force
- Shearing type of force

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Shearing type of force*

4) Which of the following statement is true for Continuous body? 1 point

- Identical properties obtained at all points
- Property does not vary with direction or orientation
- Do not contain voids/spaces of any kind
- None of these

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Do not contain voids/spaces of any kind*

5) Which of the following statement is true for Isotropic material? 1 point

- Identical properties obtained at all points
- Property does not vary with direction or orientation
- Do not contain voids/spaces of any kind
- None of these

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Property does not vary with direction or orientation*

6) Which of the following statement is/are correct for metal forming process? 1 point

- (i) Metal forming processes are used for plastically deforming workpiece to desire shape and obtaining optimum mechanical properties.  
(ii) In plastic deformation, the deformation is permanent in nature

- Only i
- Only ii
- Both i and ii
- None of these

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Both i and ii*

7) Which of the following statement is/are correct for strain hardening process? 1 point

- (i) Strain hardening is a cold working process  
(ii) Due to strain hardening ductility of material will increase

- Only i
- Only ii
- Both i and ii
- None of these

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Only i*

8) Which of the following statement is/are correct for hot working process? 1 point

- (i) In case of hot working process metal is heated below the recrystallization temperature  
(ii) Surface finish and tolerances are inferior to cold working processes because of surface reactions (oxidation scale etc.)  
(iii) Deformation forces are low

- i and ii only
- i and iii only
- ii and iii only
- i, ii and iii

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*ii and iii only*

9) Which of the following statement is/are correct for cold working process? 1 point

- (i) Strain hardening effects predominate over thermal recovery effects.  
(ii) In cold working process the strength and hardness of the material will decrease.  
(iii) It results in an elongated grain structure and can be used to harden metals and alloys that do not respond to heat treatment.  
(iv) Surface finish and tolerances can not closely obtain

- i and ii only
- i and iii only
- ii and iii only
- i, ii and iii

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*i and iii only*

10) Which of the following statement is/are correct for elastic and plastic behavior of material? 1 point

- (i) In case of elastic deformation of material, recovery of original dimension of the body is possible when the load is removed.  
(ii) In case of plastic behavior of material, beyond the elastic limit permanent set of deformation is experienced even after removal of load.

- Only i
- Only ii
- Both i and ii
- None of these

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Both i and ii*