Unit 9 - Week 7: Lectures and Assignment

Assignment 7

Due on 2020-04-15, 12:00 GMT

Course Code: MPPS

Course Title: Properties of Materials (Structural and Properties of Materials)

Week 9: Lectures and Assignment

Chapter 7: Overview of Strength and Failure

7.1 Overview of Strength and Failure

7.2 Failure of Materials

7.3 Failure Modes

7.4 Stress and Strain

Assignment 7:

1. Stress analysis in a material increases from 10000 MPa to 20000 MPa. The change in the yield stress will be (B) 10000 MPa. (A) 10000 MPa (B) 20000 MPa (C) 10000 MPa (D) 20000 MPa

2. In creep testing, what is the strain rate? (A) 10% (B) 20% (C) 30% (D) 40%

3. What is the difference between Hookean and non-Hookean behavior? (A) 10% (B) 20% (C) 30% (D) 40%

4. Which of the following best describes the behavior of a material under stress? (A) 10% (B) 20% (C) 30% (D) 40%

5. What is the difference between elastic and plastic deformation? (A) 10% (B) 20% (C) 30% (D) 40%

6. In an elastic material, the stress-strain curve is (A) linear (B) exponential (C) parabolic (D) hyperbolic

7. What is the difference between elastic and plastic deformation? (A) 10% (B) 20% (C) 30% (D) 40%

8. What is the difference between elastic and plastic deformation? (A) 10% (B) 20% (C) 30% (D) 40%

9. Which of the following best describes the behavior of a material under stress? (A) 10% (B) 20% (C) 30% (D) 40%

10. In an elastic material, the stress-strain curve is (A) linear (B) exponential (C) parabolic (D) hyperbolic

Assignment 8:

1. Explain the difference between elastic deformation and plastic deformation. (A) 10% (B) 20% (C) 30% (D) 40%

2. What is the difference between elastic and plastic deformation? (A) 10% (B) 20% (C) 30% (D) 40%

3. In an elastic material, the stress-strain curve is (A) linear (B) exponential (C) parabolic (D) hyperbolic

4. Which of the following best describes the behavior of a material under stress? (A) 10% (B) 20% (C) 30% (D) 40%

5. Explain the difference between elastic deformation and plastic deformation. (A) 10% (B) 20% (C) 30% (D) 40%

6. In an elastic material, the stress-strain curve is (A) linear (B) exponential (C) parabolic (D) hyperbolic

7. Which of the following best describes the behavior of a material under stress? (A) 10% (B) 20% (C) 30% (D) 40%

8. In an elastic material, the stress-strain curve is (A) linear (B) exponential (C) parabolic (D) hyperbolic

9. Explain the difference between elastic deformation and plastic deformation. (A) 10% (B) 20% (C) 30% (D) 40%

10. In an elastic material, the stress-strain curve is (A) linear (B) exponential (C) parabolic (D) hyperbolic