WORK SHEET
UNIT-V

MCQS

1. Density is defined as
   A) Mass/Volume
   B) Volume/Mass
   C) Force/Area
   D) None
   Answer: A
2. Stress is
   A) Force/Area
   B) Area/Force
   C) Mass/Volume
   D) None
   Answer: A
3. Strain is
   A) Force/Area
   B) Change in length/original length
   C) Mass/Volume
   D) None
   Answer: B
4. Load transfer occurs from
   A) Fiber to matrix
   B) Matrix to fiber
   C) Air to fiber
   D) None
   Answer: B
5. Longitudinal direction is
   A) Parallel to fiber
   B) Perpendicular to fiber
   C) Circular
   D) None
   Answer: A
6. Transverse direction is
   A) Parallel
   B) Perpendicular
   C) Angular
   D) None
   Answer: B
7. Young's modulus measures
   A) Strength
   B) Stiffness
   C) Density
   D) Weight
   Answer: B

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8. Rule of mixtures is used for
   A) Density
   B) Elastic properties
   C) Strength
   D) All of the above
   Answer: D
9. Composite materials are
   A) Isotropic
   B) Anisotropic
   C) Homogeneous
   D) None
   Answer: B
10. Fiber carries
    A) Less load
    B) Major load
    C) No load
    D) None
    Answer: B
11. Matrix function is
    A) Load transfer
    B) Protection
    C) Support
    D) All
    Answer: D
12. Failure may occur due to
    A) Cracks
    B) Weak bonding
    C) Overloading
    D) All
    Answer: D
13. Elastic modulus of fiber is
    A) Low
    B) High
    C) Zero
    D) None
    Answer: B
14. Density of composite depends on
    A) Fiber only
    B) Matrix only
    C) Both
    D) None
    Answer: C
15. Halpin-Tsai equations are used for
    A) Thermal properties
    B) Elastic properties
    C) Chemical properties

D) None
Answer: B

Fill in the Blanks

1. Density = _____ / Volume
2. Stress = Force / _____
3. Strain = _____ / original length
4. Load transfer occurs from _____ to fiber
5. Longitudinal direction is _____ to fiber
6. Transverse direction is _____ to fiber
7. Young's modulus indicates _____
8. Rule of mixtures calculates _____
9. Composite materials are _____
10. Failure occurs due to _____ or cracks

Answers

1. Mass
2. Area
3. Change in length
4. Matrix
5. Parallel
6. Perpendicular
7. Stiffness
8. Composite properties
9. Anisotropic
10. Weak bonding