Multiple Choice Questions' Bank:

1. Composite materials are classified based on:

(a) Type of matrix   (b) Size-and-shape of reinforcement (c) Both   (d) None

2. Major load carrier in dispersion-strengthened composites

(a) Matrix   (b) Fiber   (c) Both   (d) Can't define

3. Usually softer constituent of a composite is

(a) Matrix   (b) Reinforcement   (c) Both are of equal strength   (d) Can't define

4. Usually stronger constituent of a composite is

(a) Matrix   (b) Reinforcement   (c) Both are of equal strength   (d) Can't define

5. Last constituent to fail in fiber reinforced composites

(a) Matrix   (b) Fiber   (c) Both fails at same time   (d) Can't define

6. Size range of dispersoids used in dispersion strengthened composites

(a) 0.01-0.1 μm   (b) 0.01-0.1 nm   (c) 0.01-0.1 mm   (d) None

7. Rule-of-mixture provides _____ bounds for mechanical properties of particulate composites.

(a) Lower   (b) Upper   (c) Both   (d) None

8. Al-alloys for engine/automobile parts are reinforced to increase their

(a) Strength   (b) Wear resistance   (c) Elastic modulus   (d) Density

9. Mechanical properties of fiber-reinforced composites depend on

(a) Properties of constituents
(b) Interface strength
(c) Fiber length, orientation, and volume fraction
(d) All the above

10. Longitudinal strength of fiber reinforced composite is mainly influenced by

(a) Fiber strength   (b) Fiber orientation   (c) Fiber volume fraction   (d) Fiber length

11. The following material can be used for filling in sandwich structures

(a) Polymers   (b) Cement   (c) Wood   (d) All

12. Not an example for laminar composite

(a) Wood   (b) Bimetallic   (c) Coatings/Paints   (d) Claddings

Answers:

1. c
2. a
3. a
4. b
5. a
6. a
7. c
8. b
9. d
10. a
11. d
12. a