1. Which of the following is NOT an important timber?

a) Teak
b) Pine
c) Oak
d) Aluminum

Answer: d) Aluminum

Explanation: Aluminum is not a type of timber; it is a metal. Teak, pine, and oak are all important types of timber commonly used in construction and furniture making.

2. What are the main defects in timber caused by fungal growth?

a) Termite infestation
b) Rot and decay
c) Warping
d) Knots

Answer: b) Rot and decay

Explanation: Fungal growth in timber can lead to rot and decay, weakening the wood and compromising its structural integrity.

3. Plywood is composed of layers of wood veneer glued together. What is its primary advantage over solid wood?

a) Lower cost

b) Greater strength and stability
c) More resistant to moisture
d) Easier to carve

Answer: b) Greater strength and stability

Explanation: Plywood's layered structure makes it stronger and more stable than solid wood of the same thickness, making it a preferred choice for construction and furniture making.

4. Which type of board is NOT made from wood fibers?

a) Plywood
b) Particle board
c) Fiberboard
d) Gypsum board

Answer: d) Gypsum board

Explanation: Gypsum board, also known as drywall or plasterboard, is made from gypsum plaster pressed between two thick sheets of paper and does not contain wood fibers.

5. What is the primary purpose of seasoning timber?

a) To enhance its color
b) To improve its strength
c) To reduce moisture content
d) To prevent termite infestation

Answer: c) To reduce moisture content

Explanation: Seasoning timber involves drying it to reduce its moisture content, which helps prevent warping, cracking, and decay over time.

6. Which property of glass makes it transparent?

a) Crystalline structure
b) Amorphous structure
c) Porosity
d) Opacity

Answer: b) Amorphous structure

Explanation: Glass has an amorphous (non-crystalline) structure, which allows light to pass through it, making it transparent.

7. What is the primary oxide present in most types of glass?

a) Silicon oxide
b) Aluminum oxide
c) Calcium oxide
d) Sodium oxide

Answer: a) Silicon oxide

Explanation: Silicon oxide (SiO_2) is the primary oxide present in most types of glass, providing structural stability and transparency.

8. Which property of steel makes it suitable for structural applications?

a) Low melting point
b) High tensile strength
c) Brittle nature
d) Low density

Answer: b) High tensile strength

Explanation: Steel has high tensile strength, allowing it to withstand heavy loads and stresses, making it ideal for structural applications like buildings and bridges.

9. What is the main advantage of aluminum over steel for certain applications?

a) Lower cost
b) Higher melting point
c) Lighter weight
d) Greater strength

Answer: c) Lighter weight

Explanation: Aluminum is lighter than steel, making it advantageous for applications where weight reduction is important, such as in aerospace and automotive industries.

10. What is the primary purpose of using adhesives in wood products?

a) To enhance color
b) To improve strength

c) To reduce moisture content
d) To increase fire resistance

Answer: b) To improve strength

Explanation: Adhesives are used in wood products to bond layers of wood together, improving their strength and durability.

11. Which type of board is NOT commonly used as a substitute for wood?

a) Particle board
b) Fiberboard
c) Gypsum board
d) Steel board

Answer: d) Steel board

Explanation: Steel board is not a common substitute for wood; particle board, fiberboard, and gypsum board are all materials used as wood substitutes in various applications.

12. What property of glass affects its ability to transmit heat?

a) Transparency
b) Opacity
c) Thermal conductivity
d) Amorphous structure

Answer: c) Thermal conductivity

Explanation: The thermal conductivity of glass determines its ability to transmit heat. Glass with low thermal conductivity is often used in windows to reduce heat transfer.

13. Which grade of steel typically has the highest strength?

a) Grade 250
b) Grade 350
c) Grade 450
d) Grade 550

Answer: d) Grade 550

Explanation: Higher-grade steels generally have higher strength, with Grade 550 steel having greater strength compared to Grade 250, 350, or 450 steels.

14. Which type of board is known for its smooth surface and uniform density?

a) Plywood
b) Particle board
c) Fiberboard
d) Gypsum board

Answer: d) Gypsum board

Explanation: Gypsum board, also known as drywall or plasterboard, is known for its smooth surface and uniform density, making it suitable for interior walls and ceilings.

15. What is the primary form of aluminum used in construction?

a) Aluminum foil
b) Aluminum wire
c) Aluminum sheet
d) Aluminum extrusions

Answer: d) Aluminum extrusions

Explanation: Aluminum extrusions, which are formed by forcing aluminum alloy through a shaped opening in a die, are commonly used in construction for window frames, door frames, and structural components.

16. What type of board is made from compressed wood fibers and adhesive?

a) Plywood
b) Particle board
c) Fiberboard
d) Gypsum board

Answer: c) Fiberboard

Explanation: Fiberboard, also known as hardboard or MDF (medium-density fiberboard), is made from compressed wood fibers and adhesive, resulting in a dense and uniform product.

17. What is the primary purpose of coating glass surfaces?

a) To increase transparency
b) To reduce thermal conductivity
c) To enhance strength

d) To improve scratch resistance

Answer: d) To improve scratch resistance

Explanation: Coating glass surfaces helps improve scratch resistance, durability, and in some cases, can also provide additional benefits such as UV protection or reducing glare.

18. Which property of aluminum makes it resistant to corrosion?

a) High density
b) Low melting point
c) Formation of oxide layer
d) Brittle nature

Answer: c) Formation of oxide layer

Explanation: Aluminum forms a thin oxide layer on its surface when exposed to air, which protects it from corrosion, making it suitable for outdoor applications.

19. Which type of board is commonly used as a base for decorative laminates?

a) Plywood
b) Particle board
c) Fiberboard
d) Gypsum board

Answer: b) Particle board

Explanation: Particle board is commonly used as a base for decorative laminates due to its smooth surface and ability to hold adhesives well.

20. What is the primary property of glass that affects its transparency?

a) Amorphous structure
b) Crystalline structure
c) Porosity
d) Density

Answer: a) Amorphous structure

Explanation: Glass’s amorphous (non-crystalline) structure allows light to pass through it, giving it transparency.