17 Lecture - PHY101

Important Mcqs

Which of the following materials has the highest thermal conductivity?

a) Polymers

b) Ceramics

c) Metals

d) None of the above

Answer: c) Metals

Which of the following materials is most commonly used in electronic devices?

a) Polymers

b) Ceramics

c) Metals

d) None of the above

Answer: c) Metals

What is the key property of ceramics that makes them useful for high-temperature applications?

a) High electrical conductivity

b) High thermal conductivity

c) High melting point

d) High ductility

Answer: c) High melting point

Which of the following materials is known for its flexibility and good insulating properties?

a) Polymers

b) Ceramics

c) Metals

d) None of the above

Answer: a) Polymers

What is X-ray diffraction used for in materials science?

a) Studying the mechanical properties of materials

b) Studying the thermal properties of materials

c) Studying the atomic and molecular structure of materials

d) None of the above

Answer: c) Studying the atomic and molecular structure of materials

Which of the following is not a key mechanical property of materials?

a) Tensile strength

b) Thermal conductivity

c) Hardness

d) Elastic modulus

Answer: b) Thermal conductivity

Which of the following materials is used in the aerospace industry due to its high strength and light weight?

a) Polymers

b) Ceramics

c) Metals

d) None of the above

Answer: c) Metals

Which of the following materials has the highest dielectric constant?

a) Polymers

b) Ceramics

c) Metals

d) None of the above

Answer: b) Ceramics

What is the role of specific heat in materials science?

a) It determines how easily a material can be melted.

b) It determines how easily a material can conduct electricity.

c) It determines how easily a material can be heated or cooled.

d) None of the above

Answer: c) It determines how easily a material can be heated or cooled.

Which of the following materials is known for its hardness and resistance to wear?

a) Polymers

b) Ceramics

c) Metals

d) None of the above

Answer: b) Ceramics