1. \*\*What is Serialization in C#?\*\*

- A) The process of converting an object into a binary format

- B) The process of converting an object into a string

- C) The process of converting an object into a JSON format

- D) The process of converting an object into a format that can be stored or transmitted

\*\*Answer:\*\* D

2. \*\*Which namespace is typically used for XML Serialization in C#?\*\*

- A) System.Xml

- B) System.IO

- C) System.Runtime.Serialization

- D) System.Text.Json

\*\*Answer:\*\* C

3. \*\*Which attribute is used to indicate that a class should be serialized using XML serialization?\*\*

- A) `[Serializable]`

- B) `[XmlSerializable]`

- C) `[XmlRoot]`

- D) `[DataContract]`

\*\*Answer:\*\* C

4. \*\*What class is used for binary serialization in C#?\*\*

- A) `BinaryFormatter`

- B) `JsonSerializer`

- C) `XmlSerializer`

- D) `DataContractSerializer`

\*\*Answer:\*\* A

5. \*\*Which class is used to handle JSON serialization and deserialization in C#?\*\*

- A) `BinaryFormatter`

- B) `JsonSerializer`

- C) `XmlSerializer`

- D) `DataContractSerializer`

\*\*Answer:\*\* B

6. \*\*What is the purpose of the `OnDeserialized` attribute in C#?\*\*

- A) To specify a method to be called before deserialization

- B) To specify a method to be called after deserialization

- C) To mark a property as not serializable

- D) To specify a method to be called during serialization

\*\*Answer:\*\* B

7. \*\*Which interface is used to implement custom serialization in C#?\*\*

- A) `ISerializable`

- B) `IDeserializationCallback`

- C) `IFormatter`

- D) `IDataContractSurrogate`

\*\*Answer:\*\* A

8. \*\*Which attribute is used for custom serialization of a property?\*\*

- A) `[IgnoreDataMember]`

- B) `[NonSerialized]`

- C) `[XmlIgnore]`

- D) `[DataMember]`

\*\*Answer:\*\* D

9. \*\*Which method should be overridden to provide custom serialization for a class?\*\*

- A) `GetObjectData`

- B) `ReadObject`

- C) `WriteObject`

- D) `OnSerializing`

\*\*Answer:\*\* A

10. \*\*What is the primary use of the `DataContractSerializer` class?\*\*

- A) XML Serialization

- B) JSON Serialization

- C) Binary Serialization

- D) Custom Serialization

\*\*Answer:\*\* A

11. \*\*In which scenario would you use JSON serialization over XML serialization?\*\*

- A) When working with legacy systems

- B) When data size and human readability are a concern

- C) When you need to serialize objects to a binary format

- D) When you want to include complex data types

\*\*Answer:\*\* B

12. \*\*Which attribute is used to specify the name of the XML element for a property?\*\*

- A) `[XmlElement]`

- B) `[XmlAttribute]`

- C) `[XmlProperty]`

- D) `[XmlName]`

\*\*Answer:\*\* A

13. \*\*What is the main difference between `XmlSerializer` and `DataContractSerializer`?\*\*

- A) `XmlSerializer` supports XML attributes, while `DataContractSerializer` does not

- B) `DataContractSerializer` supports XML attributes, while `XmlSerializer` does not

- C) `XmlSerializer` is faster than `DataContractSerializer`

- D) `DataContractSerializer` supports JSON serialization

\*\*Answer:\*\* A

14. \*\*Which class is used to serialize and deserialize objects to and from XML in C#?\*\*

- A) `XmlSerializer`

- B) `BinaryFormatter`

- C) `JsonSerializer`

- D) `DataContractSerializer`

\*\*Answer:\*\* A

15. \*\*What attribute is used to mark a class for binary serialization?\*\*

- A) `[Serializable]`

- B) `[DataContract]`

- C) `[XmlRoot]`

- D) `[JsonObject]`

\*\*Answer:\*\* A

16. \*\*Which property of the `DataContractSerializer` class allows specifying the type of object to be deserialized?\*\*

- A) `KnownTypes`

- B) `TypeResolver`

- C) `TypeMapping`

- D) `ObjectType`

\*\*Answer:\*\* A

17. \*\*What is the role of the `OnSerializing` attribute?\*\*

- A) To mark a method to be called after serialization

- B) To mark a method to be called before serialization

- C) To mark a method to be called during deserialization

- D) To specify how to handle non-serializable fields

\*\*Answer:\*\* B

18. \*\*Which attribute would you use to make a property non-serializable in XML serialization?\*\*

- A) `[XmlIgnore]`

- B) `[IgnoreDataMember]`

- C) `[NonSerialized]`

- D) `[DataMember]`

\*\*Answer:\*\* A

19. \*\*What method of `BinaryFormatter` is used to serialize an object?\*\*

- A) `Serialize`

- B) `Deserialize`

- C) `WriteObject`

- D) `ReadObject`

\*\*Answer:\*\* A

20. \*\*Which C# attribute is used to define a custom XML root element name?\*\*

- A) `[XmlRoot]`

- B) `[XmlElement]`

- C) `[XmlAttribute]`

- D) `[XmlNamespace]`

\*\*Answer:\*\* A