**Quiz 04**

**Cyber Security Time Allowed: 30 Minutes**

**Date: 18/05/2023 Marks [05 x 02]**

**Q 1.** Alice and Bob are employees at a company that handles sensitive financial data. They need to securely communicate with each other over an insecure network. The company's security policy requires the use of cryptographic algorithms.

Which category of cryptographic algorithms would be most suitable for Alice and Bob to use in their communication?

a) Symmetric key algorithms

b) Asymmetric key algorithms

c) Hash functions d) Digital signatures

Please select the correct answer from the options provided and provide a brief explanation.

**Q2.** Sarah is a software developer who wants to implement encryption in her application to protect sensitive user data. She is considering using software-based encryption methods.

What are the advantages and disadvantages of using software-based encryption for data protection in Sarah's application?

Please provide a brief explanation highlighting both the advantages and disadvantages of software-based encryption in this scenario.