

**Q.1 Answer the following questions related to Cybersecurity Concepts:**

- (a) Define and differentiate between symmetric and asymmetric encryption. Provide examples.
- (b) Discuss the role of firewalls in network security. How do they prevent cyber threats?
- (c) Explain how social engineering attacks work and how to mitigate them.
- (d) What is multi-factor authentication (MFA), and why is it important in cybersecurity?
- (e) Discuss the implications of ransomware attacks and preventive measures.

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