ENS1161 Computer Fundamentals

Module 6 – Revision Questions

1. Describe the function of primary and secondary storage and the main differences between them.

2. List the sequence of steps for a primary memory read. Explain how delays in these steps contribute to the access time.

3. Describe the similarities and differences between ROM and RAM.

4. What is firmware? Describe at least 2 applications for firmware.

5. What are the differences between static RAM and dynamic RAM? Based on their relative strengths and weaknesses, describe suitable applications for each.

6. What is cache memory and why is it needed? Describe the difference between L1 and L2 cache memory. Illustrate this using a diagram.

7. Describe the principles of operation of a hard disk drive. Explain the factors that contribute to the access time for a hard disk

8. How data is organised in a HDD? Explain how data is distributed to minimise access time.

9. How does an SSD work? What are the advantages of an SSD over HDD?

10. How do tape drives store data and what are they primarily used for? Give reasons why they are used for that application.