

ENS1161 Computer Fundamentals

Module 5 – Revision Questions

1. Briefly describe the advantages of using assembly language.
2. What are the two main functions of an assembler?
3. What is a high-level language and what are the advantages of using one for programming?
4. Briefly describe the functions of a compiler.
5. Show with the aid of diagrams how conditional branches and unconditional jump statements are used to implement the following high-level programming constructs:
 - a. IF .. THEN .. ELSE conditional statement
 - b. WHILE loop
 - c. DO .. WHILE loop
6. Briefly explain (with the aid of diagrams) how data is stored and retrieved from a *stack*, including the role of the SP register.
7. Explain the role of CALL and RETURN instruction when implementing subroutines and the role of the stack in the execution of these instructions.
8. List the advantages of using subroutines when writing programs.
9. Describe the function of a *linker*.