

### FORM 3 HOLIAY ASSIGMENT TERM ONE 2016

1. (a). What is a Programming language?  
(b). Explain the two levels of programming languages.
2. (a). What is meant by 'Machine language'?  
(b). Explain why machine language programming is so error-prone.  
(c). Show the difference between Machine language and Assembly language.  
(d). Give two advantages & three disadvantages of Machine language programming.
3. (a). What are High-level languages?  
(b). Give the features/characteristics of high-level programming languages.  
(c). Describe briefly how a program written in high-level programming language becomes a machine code program ready for operational use.  
(d). Explain the advantages and disadvantages of using a High-level programming language for writing a program.  
(e). List four examples of high-level programming languages. Indicate the application of each language in computing.
4. (a). What is meant by *program portability*?  
(b). Why are low-level languages not considered to be portable?
5. List 8 factors that need to be considered when selecting a programming language.
6. What is program designing?
7. (a). Define program documentation.  
(b). What does a program documentation contain?
8. Briefly explain how each of the following documents are useful in programming?
  - a. User manual / guide.
  - b. Reference guide.
  - c. Quick reference guide.
9. Program documentation is different from Implementation. Explain.
10. Outline and briefly explain the stages involved in program development.
11. Define the following:
  - a. Algorithm.
  - b. Pseudocode.
  - c. Flowchart.
12. (a). State the various types of flowcharts.  
(b). Discuss the advantages and disadvantages of flowcharts.