

8. (a) In the context of the object-oriented programming language Java, explain the meaning of each of the following terms, using example code to illustrate your explanation. Note that you will not be penalised for minor syntactical errors in your examples.
- (i) Comparator [4 marks]
 - (ii) Iterator [5 marks]
 - (iii) Casting [4 marks]
 - (iv) Generics [4 marks]
- (b) Using the Queue ADT as an example, explain the role of an Interface in implementing an ADT using Java. [7 marks]