2 Bioinformatics (PL)

(a) Discuss how to efficiently cluster a set of gene expression data. [5 marks]

(b) Explain with one example how you would detect CG islands in a genome. [5 marks]

(c) Discuss the use of the Burrows-Wheeler transform in genome assembly and its algorithmic complexity. [6 marks]

(d) Compare the advantages and disadvantages of having long versus short k-mers in genome assembly. [4 marks]