Marking Guidelines

Question 1.

Items	Marks
A detail description and explanation of the algorithm used	1
Use the right algorithm and generate correct results (please provide the codes to repeat what you have done)	2
Good presentation, e.g. writing, visualisation, clear arguments	1

Question 2.

Items	Marks
A detail description of the algorithm used	1
Use the right algorithm and generate correct results (please provide the codes to repeat what you have done)	2
Good presentation, e.g. writing, visualisation, clear arguments	1

Question 3.

Items	Marks
A detail description and explanation of the algorithm used	1
Use the right algorithm and generate correct results (please provide the codes to repeat what you have done)	2
Good presentation, e.g. writing, visualisation, clear arguments	1

Question 4.

Items	Marks
A detail description and explanation of the algorithm used	1
Generate the correct parent and children set using PC-simple (please provide the codes to repeat what you have done)	1
Naïve Bayes classification using all genes	1
Naïve Bayes classification using PC set	1
Compare and discuss the accuracy of the two models	1
Good presentation, e.g. writing, visualisation, clear arguments	1

Question 5a.

Items	Marks
Describe how to construct the probability tables. Good presentation. Using the right format of conditional probability tables in Bayesian network, good writing style and good visualisation.	1
Correct probability tables	2

Question 5b,c. The table shows the marks for each of the questions (b and c).

Justify the type of the query used and describe how to do the estimation. Good presentation, e.g. writing, visualisation, clear arguments	1
Correct results with codes included	1

Question 5d.

Using suitable and correct mathematical formula	1
The proof leads to the correct result	1

Question 5e.

Use the logical and right arguments in the explanation	2
Correct result	1