

QUESTION 1

Question 1

27.5 / 30 pts

1.1	(no title)	3 / 3 pts
1.2	(no title)	2.5 / 4 pts
1.3	(no title)	3 / 3 pts
1.4	(no title)	3 / 3 pts
1.5	(no title)	4 / 4 pts
1.6	(no title)	5 / 5 pts
1.7	(no title)	3 / 4 pts
1.8	(no title)	4 / 4 pts

QUESTION 2

Question 2

24 / 25 pts

2.1	(no title)	3 / 3 pts
2.2	(no title)	3 / 3 pts
2.3	(no title)	5.5 / 6 pts
2.4	(no title)	3.5 / 4 pts
2.5	(no title)	6 / 6 pts
2.6	(no title)	3 / 3 pts

QUESTION 3

Question 3

16 / 20 pts

3.1	(no title)	3 / 3 pts
3.2	(no title)	1 / 3 pts
3.3	(no title)	2.5 / 3 pts
3.4	(no title)	4 / 5 pts
3.5	(no title)	5.5 / 6 pts

MISTAKES

1.2:

- **1 pts** The sample numbers identified are different from the correct ones
- **0.5 pts** Furthest samples are very different indicating that they may have been labelled wrongly

1.7:

- **1 pts** Your discussion is too short - you should relate to your results from previous questions, and talk more specifically about the dataset.

2.3:

- **0.5 pts** You could have pointed out that linear decision boundaries are well explained by the fact that a logistic regression classifier is a linear classifier

2.4:

- **0.5 pts** You could have pointed out that non-linear decision boundaries are well explained by the fact SVM with an RBF kernel is a non-linear classifier.

3.2:

- **1 pts** Your plot of cluster centres do not match the correct one
- **1 pts** You failed to provide your findings or the findings are completely misleading

3.3:

- **0.5 pts** Need more details about findings.

3.4:

- **0.5 pts** Your discussions lack some theoretical aspects
- **0.5 pts** You did not write a conclusion or it is wrong

3.5:

- **0.5 pts** You failed to compare the two types of GMMs in your discussions from theoretical aspects. The full covariance model has a large number of parameters to train than diag-cov