

# Exam for course 3

## **Question 1 (G-3.1) : Clustering**

3

## **Question 2 (G-3.2) : Sparse Dictionary Learning**

1, 3

## **Question 3 (G-3.3) : Applications of unsupervised learning**

1, 3

## **Question 4 (B-3.1) : Unsupervised learning**

1, 2, 3

## **Question 5 (B-3.2) : Challenges of Unsupervised learning**

1, 2, 3

## **Question 6 (B-3.3) : Exploiting unsupervised learning for classification**

Once an efficient clustering has been found (e.g. using the elbow method, and checking the variance intra-cluster and inter-cluster), classification can simply be performed by assigning new examples to cluster labels. Alternatively, a trained clustering can be used as a first step in a supervised learning approach. . .