Week 05 Assessment

Due Oct 7 at 9am **Points** 9 **Questions** 9 **Available** until Oct 28 at 9am
Time Limit None **Allowed Attempts** 2

Instructions

Reminder: In all weekly assessments, you will be allowed two attempts (though only one is required), and your average score will be kept. You're welcome to watch the lecture videos between or even during your attempts.

Attempt History

	Attempt	Time	Score
KEPT	Attempt 2	1 minute	8 out of 9
LATEST	Attempt 2	1 minute	8 out of 9
	Attempt 1	25 minutes	8 out of 9

Score for this attempt: **8** out of 9
Submitted Oct 6 at 7:43pm
This attempt took 1 minute.

Question 1 — 1 / 1 pts

Property testing algorithms for a specific property:

- Pass inputs that have the property
- Fail inputs that are not even close (in some predefined sense) to having the property
- May pass or fail inputs that do not have the property, but are close to having it
- Run in sub-linear time

Correct!

- [x] All of the above

Question 2

1 / 1 pts

Property testing algorithms:

- [ ] Are useful when an exact answer is needed

Correct!

- [x] Are useful when when time is crucial
- [ ] Are only useful on graphs

Question 3

1 / 1 pts

Name one advantage of streaming over sampling:

- [ ] Low space usage

Correct!

- [x] No data element is missed
- [ ] Low running time

Question 4

1 / 1 pts

Which of the following situations are not amenable to coreset compression:

- [ ] GPS travel data
- [ ] Hospital patient logs

Correct!

- (•) Uniformly distributed synthetic data
- ( ) Biased uniformly distributed synthetic data

Question 5

1 / 1 pts

Using topic models in multi-aspect summarization increases prediction accuracy because:

- ( ) It helps to predict the number of aspects

Correct!

- (•) It helps to disambiguate word usage in the context of the corresponding aspects
- ( ) It makes summaries more fluent
- ( ) It identifies common words that can be excluded from an output summary

Question 6

0 / 1 pts

The method for multi-aspect summarization utilizes unlabeled data to learn:

- ( ) The likelihood of transition between topics
- ( ) The likelihood of sentence label given its topic and the words which it contains

'ou Answered

- (•) The likelihood of a sentence given its topic

orrect Answer

The likelihood of a sentence given its topic and the likelihood of transition between topics

Question 7

1 / 1 pts

Which of the following is most likely to provide useful information about changes in the state of a hospitalized patient?

- Billing records
- Pharmacy records

Correct!

- Demographic information about the patient.

Question 8

1 / 1 pts

Consider building a feature vector by binarizing the data in an EMR. The resulting feature vector is likely to be:

- Poorly correlated with the patient's health status.
- Very sparse.

Correct!

- Low dimensional.

Question 9

1 / 1 pts

What do linear-time algorithms allow us to do that most sublinear-time algorithms do not?

- Execute the computation faster
- Approximate the desired answer

Correct!

- (•) Determine the exact answer
- Code the algorithm faster

Quiz Score: **8** out of 9