

# Latent Dirichlet Allocation

Quiz, 7 questions

✓ **Congratulations! You passed!**

Next Item



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point

1.

Choose correct statements that describe the main aspects of topic modelling.



Topic is a distribution over words that are present in the texts, with relevant words having higher probability of occurrence.



**Correct**



Topic is a set of words which describe it best.



**Un-selected is correct**



Topics are assigned to particular texts.



**Un-selected is correct**



Topics are assigned to all texts at the same time but with different probability of presence in each text.



**Correct**



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2.

Which of the following has impact on the topics?



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Sequence of words or combinations of words.

Frequency of words or combinations of words.

**Correct**



Both.



None.

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point

3.

Let there be three articles and three topics. The first article is 53% biology, 34% chemistry and 13% physics. The second article is 46% biology, 43% chemistry and 11% physics. The third article is 62% biology, 29% chemistry and 9% physics. Which of the articles, the second or the third, is most similar to the first article according to cosine similarity?



Second



Third

**Correct**

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4.

What is the support of the Dirichlet distribution?



Simplex.

**Correct**



Positive axis.



Plane.

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5.

Beta distribution is a special case of Dirichlet distribution with:

☒  $K = 2$ .



Correct

☐  $K = 3$ .

☐  $\alpha = (1, \dots, 1)^T$



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point

6.

Which set of parameters  $\alpha$  for  $K = 3$  in Dirichlet distribution corresponds to uniform distribution?

☒  $(1, 1, 1)$



Correct

☐  $(0.1, 0.1, 0.1)$

☐  $(10, 10, 10)$



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point

7.

Which tasks can be solved using LDA model?

☒ Dimensionality reduction for document representation.



Correct

☒ Search for similar documents in the corpus.



Correct

# Latent Dirichlet Allocation

Quiz, 7 questions Document clustering.



**Correct**



Generation of coherent texts on particular topic.



**Un-selected is correct**

