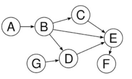
Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 80%. We keep your highest score.

Next Item →

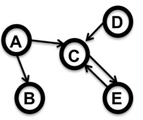
1. Which of the following are graphs? (check all that apply) 1 / 1 point

- [ ] 

- [x] 

Correct

2. Which of the following is the correct adjacency matrix for this graph? 1 / 1 point



- ○

From \ To	A	B	C	D	E
A	0	0	0	0	0
B	1	0	0	0	0
C	1	0	0	0	1
D	0	0	0	0	0
E	0	0	1	0	0

- ○ Neither option is correct.
- ◉

From \ To	A	B	C	D	E
A	0	1	1	0	0
B	0	0	0	0	0
C	0	0	0	0	1
D	0	0	1	0	0
E	0	0	1	0	0

Correct

3. Which of the following content would be objects (or nodes) in a graph that represents the activity in a facebook page? 1 / 1 point

- [ ] Created_post (the action of creating a post)
- [ ] friends (the action of making someone your friend)
- [x] post text

Correct

- [x] location

Correct

- [x] comment text

Correct

4. Based on the videos, which kinds of analysis might one be able to perform on a tweet graph? 1 / 1 point

- [x] extract conversation threads

Correct
Review this at the end of this video.

- [x] find interacting groups of users

Correct
Review this at the end of this video.

- [x] find influencers in a twitter community

Correct
Review this at the end of this video.

5. The key reason mentioned in the video that biology applications need Big Data analytics is... 1 / 1 point

- ○ The complexity of interactions that correlate to inform phenotypes.
- ◉ The integration of multiple data sources from different researchers and of different sources of information.
- ○ The new use of computational techniques to explore new areas of biology research more quickly than can be done with "live" or wetlab experiments.

Correct
Integration of multiple data sets, especially from different sources and different types gets at one of the core concepts that underlies the need for Big Data -- integration.

6. Which of the Vs BEST describes the result in constant increasing in the number of edges in a graph, sometimes causing challenges in knowing when one has found "an answer" to one's analysis question? 1 / 1 point

- ○ Variety
- ○ Volume
- ◉ Velocity
- ○ Valence

Correct

7. Which of the Vs results in increased algorithmic complexity (which can cause analyses to not be able to finish running in reasonable amounts of time)? 1 / 1 point

- ○ Velocity
- ○ Variety
- ○ Valence
- ◉ Volume

Correct

8. Which of the Vs results in challenges due to graphs created from varying kinds, formats, sources, and meanings of data? 1 / 1 point

- ◉ Variety
- ○ Valence
- ○ Velocity
- ○ Volume

Correct

9. Which of the Vs causes increased interconnectivity of a graph -- which can cause problems in analysis due to density? 1 / 1 point

- ○ Variety
- ○ Volume
- ◉ Valence
- ○ Velocity

Correct

10. Updating a graph with a stream of posting information on facebook is an example of which of the Vs? 1 / 1 point

- ◉ Velocity
- ○ Volume
- ○ Variety
- ○ Valence

Correct

11. Studying Amarnath's gmail interactions over time (as gmail started to be used by more and more people) is BEST defined as an impact of which of the Vs? 1 / 1 point

- ◉ Valence
- ○ Velocity
- ○ Variety
- ○ Volume

Correct

12. Which of the Vs is most relevant to the kinds of graph analysis you are interested in? Tell us why in a sentence or 2. (Any response will be counted correct.) 1 / 1 point

I am interested in Social media analysis and Velocity is the most relevant V for this kind of analysis

Feedback
Thanks for thinking about this! Research shows that effortfully reflecting on how something applies to your interests helps you in remembering and understanding new material better!

Thanks for making the effort!