1. The main component of hadoop are

2. The only existing cypher system, used propertly, is mathematical secure, meaning that no amount of time or processing power can recover the plain

2   -0,05 / 0,2 puntos

The only existing cypher system that, used properly, is mathematically secure, meaning that no amount of time or processing power can recover the plain text from the cypher text is

○ Kerckhoffs

✗ ◉ Vingené

Respuesta correcta: **one-time pad**

○ playfair

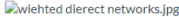🚀   Volver

○ playfair

○ Kasiski

○ one-time pad

3. The following network is

3   0,2 / 0,2 puntos

The following network is:

wiehted dierect networks.jpg

✓ ◉ weighted indirect

○ unweighted direct

○ unweighted indirect

○ weighted direct

4. In the following graph, what is/are the most relevant

4   0,2 / 0,2 puntos

In the following graph, what is/are the most relevant node/s using the eigenvector centrality measure? (3 iterations =POPULARITY + 2 TIMES)

netwrok.jpg

☐ D

In the following graph, what is/are the most relevant node/s using the eigenvector centrality measure? (3 iterations =POPULARITY + 2 TIMES)

netwrok.jpg

☐ B

☐ D

✓ ☑ A

✓ ☑ F

5. We upload a file in the HDFS **(este ejercicio es el de los cuadrados y corazones)**

6. Representing values as colors is particulary useful when we want to show how data values vary across geographic regions. In this case, we can draw a map of the geographic regions and color them by data value. Such as maps called...

Representing data values as colors is particularly useful when we want to show how the data values vary across geographic regions. In this case, we can draw a map of the geographic regions and color them by the data values. Such maps are called _____

✓ choroplets

7. Scytale is a

7 0,1 / 0,1 puntos

Scytale is a

☐ transposition polyalphabetic cipher

✓ ☑ transposition monoalphabetic cipher

☐ substitution polyalphabetic cipher

☐ substitution monoalphabetic cipher

8. The sorts of interest that might be thought to ground a right to privacy are (select all that apply)

8 0 / 0,2 puntos

The sorts of interests that might be thought to ground a right to privacy are (select all that apply)

✗ ☑ property

Respuesta seleccionada: incorrecta

✗ ☐ power

Opción omitida: incorrecto

☑ derivative

☑ control

9. What is the betweeness of node B (DECIMALS WITH comma)

9 0,2 / 0,2 puntos

What is the betweenness of node B (DECIMALS WITH comma)

BETWEEN 2.jpg

✓ 2,5

10. Data science can be perpetuate and reinforce prejudice
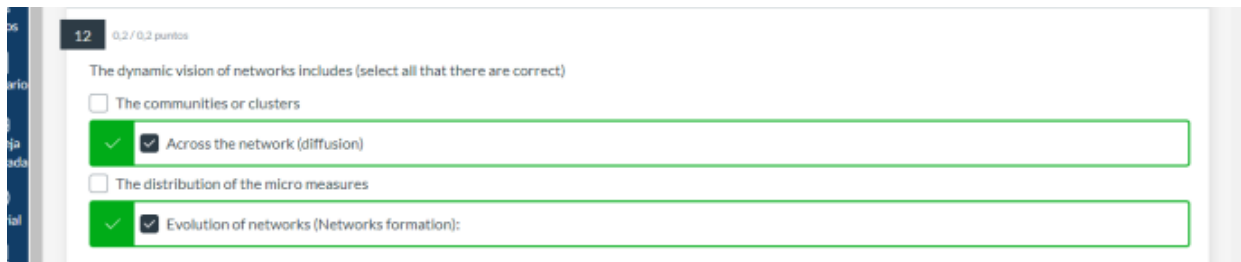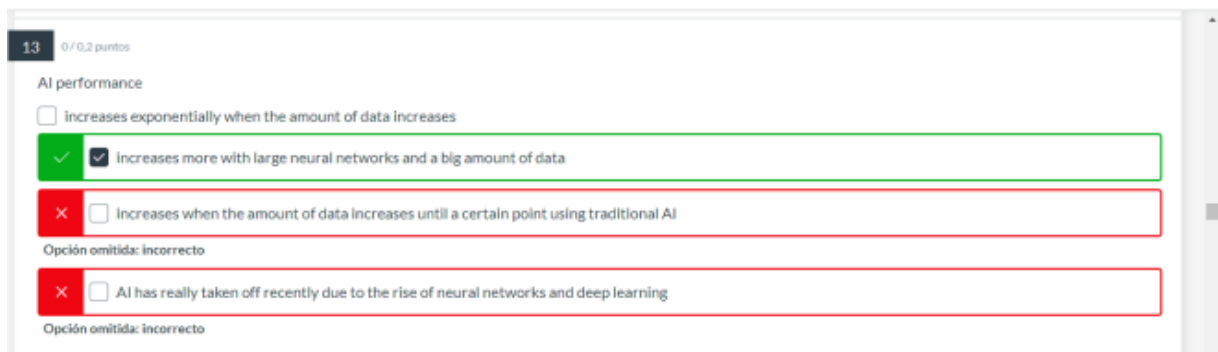
10 0,2 / 0,2 puntos

data science can perpetuate and reinforce prejudice

✓ ⦿ Verdadero

11. We know that the message "khuh zh duh" has been encrypted using a shift of the Cesar Cypher. Please answer is (number) rotation to decrypt the previous cipher using the english alphabet.

| 12 | 0,2 / 0,2 puntos |

The dynamic vision of networks includes (select all that there are correct)

☐ The communities or clusters

✓ ☑ Across the network (diffusion)

☐ The distribution of the micro measures

✓ ☑ Evolution of networks (Networks formation):

12. AI performance

| 13 | 0 / 0,2 puntos |

AI performance

☐ increases exponentially when the amount of data increases

✓ ☑ Increases more with large neural networks and a big amount of data

✕ ☐ Increases when the amount of data increases until a certain point using traditional AI

Opción omitida: incorrecto

✕ ☐ AI has really taken off recently due to the rise of neural networks and deep learning

Opción omitida: incorrecto

14. In the table, we have assigned the points to the first random centroids.

| 14 | 0,1 / 0,1 puntos |

In the table below, we have assigned the points to the first random centroids. Please calculate the new centroids given the class assigned in the first iteration

WhatsApp ✕

Business+ADE
Rebeca UFV: hdfs y mapreduce

Escribe aquí para buscar   10:26 17/12/2021

fotos.pdf INTRODUCCIÓN AL B ✕ +

ufv-es.instructure.com/courses/20091/external_tools/retrieve?display=full_width&url=https%3A%2F%2Fufv--es.quiz-lti-dub-prod.instructure.com%2Flti...

15. Has an additional interpretative layer

| 15 | 0,2 / 0,2 puntos |

_____ has as an additional interpretative layer, a narrative structure, on top of the data visualization: Visualization + narrative

✓ story telling

| 16 | 0,2 / 0,2 puntos |

16- DDOS or distributed denial of service attack refers to:

A saturation is achieved by overloading the servers and usually the attack comes from several points such as a network of bots(machines).

17- Direct methods for scanning to the flatland could be:

-3D models

-Perspective (3D representations in 2D space)

18- Rootkit is malware that provides privileged (root-level) access to a computer.

19- A data warehouse is a type of database that integrates copies of transaction data from disparate source systems and provisions them for analytical use. The important fact is that a transactional database does not lend itself to analytics.16- DDOS or distributed denial of service attack refers to:

A saturation is achieved by overloading the servers and usually the attack comes from several points such as a network of bots(machines).

17- Direct methods for scanning to the flatland could be:

-3D models

-Perspective (3D representations in 2D space)

18- Rootkit is malware that provides privileged (root-level) access to a computer.

19- A data warehouse is a type of database that integrates copies of transaction data from disparate source systems and provisions them for analytical use. The important fact is that a transactional database does not lend itself to analytics.

25. Select which of this data constriction examples are incorrectly named

26. Valence (select all that apply)

28. Over the years, the structured query language (SQL) has evolved in lock step with RDBMS technology and is the most widely used mechanism for creating, querying, maintaining, and operating relational databases. These tasks are referred to as CRUD (select all that apply)

29. the major goals of cryptography are

36. Data STREAMING is data generatied continously by thousands of data sources, which typically send in the data records simoultaneously, and in small sizes (order of kylobytes)

37. Symmetric encription is:

A form of cryptosystem in which encryption and decryption are performed using the same key. It is also known as conventional encryption.

38. "CHARTJUNK" word coined by Edward Tufte that refers to the elements or noisy decoration in the graphs that have no purpose

39. Using the Vigenéere cypher give the plaintext of "serendipity" using the key lemon

DIDSAOM

40.Using the following web page. USe kisiki method to discover the key to the following cipher

TOBE

41. No se ve

42. The trade off Variance Bias

-variance refers to the error in the result because of the change of the training set. Bias refers to the error in the result because of the change in the shape of the function. And in more flexible methods, the variance will increase, and the bias will decrease. Therefore, on many ocassions, a simple method outperforms the more flexible.

43. Kerckhoffs principle posits that

-that a cryptosystem should remain secure, even if the adversary knows every detail of the system, except the key.
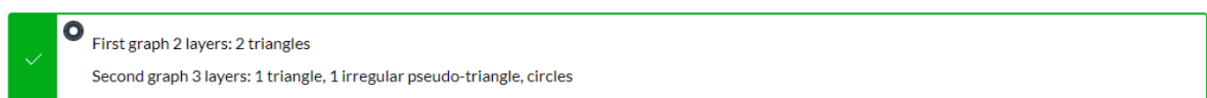
44. A bipartite network is

-a two-type node network

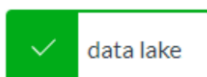45. The betweenness and the eigenvector centrality distribution

-are both higly skewed

Xayiy

46. Layering and separation Usually nvolve creating a hierarchy of visual effects, possibly matching an ordering of information content. How many layers can be seen in the picture below

First graph 2 layers: 2 triangles
Second graph 3 layers: 1 triangle, 1 irregular pseudo-triangle, circles

47. A _____ is a massive storage depository with huge processing power and ability to handle a very large number of concurrences, data management and analytical tasks. In a data lake is not storage into a ware unless they are in use

✓ data lake

48. In this architecture a Data warehouse is used because

☐ to analyse streaming-realtime data

✕	☐ to prepare datamarts to perform different analysis for different departments in a company

Opción omitida: incorrecto

✕	☐ we have several transactional databases and there must be combined and prepare for the analysis

Opción omitida: incorrecto

✕	(sin respuesta)

50. The accuracy of Y as a prediction for Y depends on two quantities, which we will call

○ variance and bias

○ high bias and irreducible error

○ reducible error and high bias

○ reducible error and the irreducible error

✕	(sin respuesta)

Respuesta correcta: **reducible error and the irreducible error**

51. There are four elements that underlythe structure of all structures, including those we write on science

There are four elements that underly the structure of all stories, including those we write in science (Schimel, 2012, p. 27) (OCAR):

✓	☑ Challenge

☐ Climax

✓	☑ Opening

✓	☑ Resolution

✓	☑ Action

21. Data munging is the initital process of refining raw data into content or formats better suited for consumption by downstream systems and users.

21   0,1 / 0,1 puntos

Data munging is the initial process of refining raw data into content or formats better suited for consumption by downstream systems and users. This concept includes (select all that apply)

✓	☑ data transformation and integration

✓	☑ data validation

✓	☑ data enrichment

✓	☑ data exploration

22. Using gradient descent to optimize the least squares using the following formula, calculate the

Solución: 0,345

23. Visual discovery includes

Visual discovery includes

☐ idea generation

✓ ☑ visual confirmation

✓ ☑ visual exploration

☐ idea illustration

24. We use Playfair Cypher with the key

-key: SPAIN

The cypher of the word SPACE is _____

24   0 / 0,2 puntos

We use Playfair Cypher with the key (no spaces in the encryption answer and capital letter)
- key: SPAIN

Imagen1.jpg
The cipher of the word SPACE is _____ (USE CAPITAL LETTER TO ANSWER)

✗   LCKYGTVQTKAR

Respuesta correcta: **PAPDDY**

25. Select which of this data constriction are incorrectly named

25   0 / 0,1 puntos

select which of this data constriction examples are **incorrectly named**

✓ ☑ Surname is alphanumeric: Estructural

✗ ☑ Age cannot be negative: Value constriction

Respuesta seleccionada: incorrecta

☐ each person has between 1 and 5 phone numbers: Cardinality

☐ Days are from 1 to 31: Domain

30.researches from the university of toronto and MIT (Goldfarb & Tucker, 2011) used the enactment of a privacy-protection bill in the European Union (EU)2 that limited the ability of advertising companies to track users' online behaviour in order to compare the effectiveness of online advertising under the new restrictions (E. Commission, 2021). The study found that online advertising was equally effective under the new restrictions.

30 0,2 / 0,2 puntos

Researchers from the University of Toronto and MIT (Goldfarb & Tucker, 2011) used the enactment of a privacy-protection bill in the European Union (EU)2 that limited the ability of advertising companies to track users' online behaviour in order to compare the effectiveness of online advertising under the new restrictions (E. Commission, 2021). The study found that online advertising was equally effective under the new restrictions

○ Verdadero

✓ ● Falso

31.Micro / Macro Readings

31 0,2 / 0,2 puntos

Micro / Macro Readings

○ the relevant thing is to provide the general data in clear and simple graphs

○ None of the other questions is correct

○ Micro details provoke graphs difficult to read and understand

✓ ● Micro details permit both a macro panorama and a personalised analysis of a particular detail of interest

32. Select all the supervised learning capabilities

select all the supervised learning capabilities

✗ ☐ prediction

Opción omitida: incorrecto

✗ ☑ clustering

Respuesta seleccionada: incorrecta

✓ ☑ classification

✓ ☑ inferences

33.for a prediction, If we change the training set and the parameters calculated for a prediction changes a lot then we have

33 0,1 / 0,1 puntos

for a prediction, If we change the training set and the parameters calculated for a prediction changes a lot then we have

☐ low variance

☐ Low variance high reducible error

☐ big irreducible error

✓ ☑ High variance

34. The SIR model refers to

34 -0,05 / 0,2 puntos

The SIR model refers to

○ Macro perspective network measure

✕ ⦿ network formation model

Respuesta correcta: **network diffusion model**

○ static network analysis

○ network diffusion model