

i About the exam

EXAMINATION

Course code and name:

ITL31017 Business Intelligence

Date and duration:

25.4.2019, 2 hours

Permitted Resources:

No supporting materials permitted.

Instructor:

Cathrine Linnes

Examination:

- The final written exam consists of true/false and multiple choice questions, 50 questions total.
- The questions based on the textbook and lectures - Business Intelligence, Analytics, and Data Science: A Managerial Perspective
- You are able to view only one question at the time.
- This exam is worth 40 % of your final grade.

Results:

Final grades will be posted in Studentweb no later than **16.5.2019**.

1 Ny oppgave

Business intelligence (BI) is a specific term that describes architectures and tools only.

Select an alternative:

- True
- False

Maximum marks: 1

2 Ny oppgave

The growth in hardware, software, and network capacities has had little impact on modern BI innovations.

Select an alternative:

- True
- False

Maximum marks: 1

3 Ny oppgave

Major commercial business intelligence (BI) products and services were well established in the early 1970s.

Select an alternative

- True
- False

Maximum marks: 1

4 Ny oppgave

The use of statistics in baseball by the Oakland Athletics, as described in the Moneyball case study, is an example of the effectiveness of prescriptive analytics.

Select an alternative:

- True
- False

Maximum marks: 1

5 Ny oppgave

Data is the contextualization of information, that is, information set in context.

Select an alternative:

- True
- False

Maximum marks: 1

6 Ny oppgave

Data is the main ingredient for any BI, data science, and business analytics initiative.

Select an alternative:

- True
- False

Maximum marks: 1

7 Ny oppgave

Dashboards provide visual displays of important information that is consolidated and arranged across several screens to maintain data order.

Select an alternative:

- True
- False

Maximum marks: 1

8 Ny oppgave

Descriptive statistics is all about describing the sample data on hand.

Select an alternative:

- True
- False

Maximum marks: 1

9 Ny oppgave

The cost of data storage has plummeted recently, making data mining feasible for more firms.

Select an alternative:

- True
- False

Maximum marks: 1

10 Ny oppgave

Data mining can be very useful in detecting patterns such as credit card fraud, but is of little help in improving sales.

Select an alternative:

- True
- False

Maximum marks: 1

11 **Ny oppgave**

Ratio data is a type of categorical data.

Select an alternative:

- True
- False

Maximum marks: 1

12 **Ny oppgave**

Text analytics is the subset of text mining that handles information retrieval and extraction, plus data mining.

Select an alternative:

- True
- False

Maximum marks: 1

13 **Ny oppgave**

Categorization and clustering of documents during text mining differ only in the preselection of categories.

Select an alternative:

- True
- False

Maximum marks: 1

14 **Ny oppgave**

Articles and auxiliary verbs are assigned little value in text mining and are usually filtered out.

Select an alternative:

- True
- False

Maximum marks: 1

15 **Ny oppgave**

In text mining, if an association between two concepts has 7% support, it means that 7% of the documents had both concepts represented in the same document.

Select an alternative:

- True
- False

Maximum marks: 1

16 **Ny oppgave**

In sentiment analysis, it is hard to classify some subjects such as news as good or bad, but easier to classify others, e.g., movie reviews , in the same way.

Select an alternative:

- True
- False

Maximum marks: 1

17 **Ny oppgave**

In the Opening Vignette on Sports Analytics, what type of modeling was used to predict offensive tactics?

Select the best answer:

- cascaded decision trees
- heuristics
- sentiment analysis
- heat maps

Maximum marks: 1

18 Ny oppgave

What terminologies have been used to describe analytics since the 1970s until present - in correct order by year?

Select one alternative:

- Decision support systems, executive IS, enterprise, business intelligence, analytics, big data.
- Decision support systems, enterprise, executive IS, business intelligence, analytics, big data.
- Decision support systems, executive IS, enterprise, business intelligence, analytics, big data.
- Decision support systems, enterprise, executive IS, analytics, business intelligence, big data.

Maximum marks: 1

19 Ny oppgave

Relational databases began to be used in the

Select the best answer:

- 1990s
- 1970s
- 1980s
- 1960s

Maximum marks: 1

20 Ny oppgave

The need for more versatile reporting than what was available in 1980s era ERP systems led to the development of what type of system?

Select the best answer:

- management information systems
- executive information systems
- data warehouses
- relational databases

Maximum marks: 1

21 Ny oppgave

Which of the following is an umbrella term that combines architectures, tools, databases, analytical tools, applications, and methodologies?

Select the best answer:

- BI
- ERP
- MIS
- DSS

Maximum marks: 1

22 Ny oppgave

BI applications must be integrated with

Select the best answer:

- legacy systems
- databases
- all of these
- enterprise systems

Maximum marks: 1

23 Ny oppgave

What type of analytics seeks to recognize what is going on as well as the likely forecast and make decisions to achieve the best performance possible?

Select the best answer:

- domain
- prescriptive
- predictive
- descriptive

Maximum marks: 1

24 Ny oppgave

What type of analytics seeks to determine what is likely to happen in the future?

Select the best answer:

- domain
- predictive
- descriptive
- prescriptive

Maximum marks: 1

25 Ny oppgave

The Internet emerged as a new medium for visualization and brought all the following EXCEPT

Select the best answer:

- immersive environments for consuming data.
- new forms of computation of business logic.
- new graphics displays through PC displays.
- worldwide digital distribution of visualization.

Maximum marks: 1

26 Ny oppgave

Which kind of chart is described as an enhanced version of a scatter plot?

Select the best answer:

- heat map
- bullet
- pie chart
- bubble chart

Maximum marks: 1

27 Ny oppgave

Which type of visualization tool can be very helpful when a data set contains location data?

Select the best answer:

- highlight table
- geographic map
- tree map
- bar chart

Maximum marks: 1

28 Ny oppgave

Which type of question does visual analytics seeks to answer?

Select the best answer:

- What is happening today?
- Why is it happening?
- What happened yesterday?
- When did it happen?

Maximum marks: 1

29 Ny oppgave

What is the fundamental challenge of dashboard design?

Select the best answer:

- ensuring that the organization has access to the latest Web browsers
- ensuring that users across the organization have access to it
- ensuring that the organization has the appropriate hardware onsite to support it
- ensuring that the required information is shown clearly on a single screen

Maximum marks: 1

30 **Ny oppgave**

This measure of dispersion is calculated by simply taking the square root of the variations.

Select the best answer:

- range
- standard deviation
- arithmetic mean
- variance

Maximum marks: 1

31 **Ny oppgave**

All of the following statements about data mining are true EXCEPT

Select the best answer:

- the process aspect means that data mining should be a one-step process to results.
- the novel aspect means that previously unknown patterns are discovered.
- the valid aspect means that the discovered patterns should hold true on new data.
- the potentially useful aspect means that results should lead to some business benefit.

Maximum marks: 1

32 **Ny oppgave**

The data field "ethnic group" can be best described as

Select the best answer:

- ratio data
- ordinal data
- nominal data.
- interval data

Maximum marks: 1

33 **Ny oppgave**

Which variable would be considered to be measured at the ordinal level

Select the best answer:

- Gender (male, female)
- Car type (compact, mid-size, full-size)
- SAT scores
- Temperature

Maximum marks: 1

34 **Ny oppgave**

Which is considered the least precise level of measurement?

Select the best answer:

- ratio
- interval
- nominal
- ordinal

Maximum marks: 1

35 **Ny oppgave**

A data mining study is specific to addressing a well-defined business task, and different business tasks require

Select the best answer:

- different sets of data.
- general industry data.
- general organizational data.
- general economic data.

Maximum marks: 1

36 **Ny oppgave**

Clustering partitions a collection of things into segments whose members share

Select the best answer:

- similar characteristics
- dissimilar characteristics
- similar collection methods
- dissimilar collection methods

Maximum marks: 1

37 **Ny oppgave**

All of the following statements about data mining are true EXCEPT

Select the best answer:

- The ideas behind it are relatively new
- Its techniques have their roots in traditional statistical analysis and artificial intelligence
- Intense, global competition make its application more important
- The term is relatively new

Maximum marks: 1

38 **Ny oppgave**

What does the robustness of a data mining method refer to?

Select the best answer:

- its ability to construct a prediction model efficiently given a large amount of data
- its speed of computation and computational costs in using the mode
- its ability to predict the outcome of a previously unknown data set accurately
- its ability to overcome noisy data to make somewhat accurate predictions

Maximum marks: 1

39 Ny oppgave

What does the scalability of a data mining method refer to?

Select the best answer:

- its ability to construct a prediction model efficiently given a large amount of data
- its speed of computation and computational costs in using the mode
- its ability to overcome noisy data to make somewhat accurate predictions
- its ability to predict the outcome of a previously unknown data set accurately

Maximum marks: 1

40 Ny oppgave

According to Gartner Group, the following software are the leaders in the magic quadrant

Select the best answer:

- Tableau, Salesforce, Qlik
- Tableau, IBM, Microsoft
- Tableau, Microsoft, Micro Strategy
- Tableau, Qlik, Microsoft

Maximum marks: 1

41 Ny oppgave

In text mining, tokenizing is the process of

Select the best answer:

- creating new branches or stems of recorded paragraphs.
- categorizing a block of text in a sentence.
- transforming the term-by-document matrix to a manageable size.
- reducing multiple words to their base or root.

Maximum marks: 1

42 Ny oppgave

All of the following are challenges associated with natural language processing EXCEPT
Select the best answer:

- dividing up a text into individual words in English.
- recognizing typographical or grammatical errors in texts.
- distinguishing between words that have more than one meaning.
- understanding the context in which something is said.

Maximum marks: 1

43 Ny oppgave

Natural language processing (NLP) is associated with which of the following areas?
Select the best answer:

- computational linguistics
- text mining
- all of the above
- artificial intelligence

Maximum marks: 1

44 Ny oppgave

In the research literature case study, the researchers analyzing academic papers extracted information from which source?

Select the best answer:

- the main body of the paper
- the paper keywords
- the paper references
- the paper abstract

Maximum marks: 1

45 Ny oppgave

In sentiment analysis, which of the following is an implicit opinion?

Select the best answer:

- Our new mayor is great for the city.
- The hotel we stayed in was terrible.
- The cruise we went on last summer was a disaster.
- The customer service I got for my TV was laughable.

Maximum marks: 1

46 Ny oppgave

In text analysis, what is a lexicon?

Select the best answer:

- a catalog of words, their synonyms, and their meanings
- a catalog of customers, products, words, and phrases
- a catalog of customers, their words, and phrases
- a catalog of letters, words, phrases, and sentences

Maximum marks: 1

47 Ny oppgave

What types of documents are BEST suited to semantic labeling and aggregation to determine sentiment orientation?

Select the best answer:

- large-sized documents
- collections of documents
- small- to medium-sized documents
- medium- to large-sized documents

Maximum marks: 1

48 Ny oppgave

What does Web content mining involve?

Select the best answer:

- analyzing the universal resource locator in Web pages
- analyzing the unstructured content of Web pages
- analyzing the PageRank and other metadata of a Web page
- analyzing the pattern of visits to a Web site

Maximum marks: 1

49 Ny oppgave

Breaking up a Web page into its components to identify worthy words/terms and indexing them using a set of rules is called

Select the best answer:

- creating the term-by-document matrix.
- preprocessing the documents.
- document analysis.
- parsing the documents.

Maximum marks: 1

50 Ny oppgave

What does advanced analytics for social media do?

Select one alternative:

- It identifies the biggest sources of influence online.
- It examines the content of online conversations.
- It identifies links between groups.
- It helps identify your followers.

Maximum marks: 1