1. DSS (Decision Support Systems) and BI (Business Intelligence) are similar because: $^\star$
They appeared in the same time
BI evolved from DSS
Both can rely on a data warehouse
DSS evolved from BI
2. DSS and BI are different because: *
direct vs. indirect support for decision making
indirect vs. direct support for decision making
support for large vs. any organizations
support for any vs. small organizations
support for any vs. large organizations
3. Data Mining and Predictive Analysis are core tools: *
○ in BI
O in DSS
in both areas

4. Select the true statements: ^
DSS methodologies were developed mostly in the academic world
DSS methodologies were developed mostly by software companies
BI methodologies were developed mostly in the academic world
BI methodologies were developed mostly by software companies
5. What are the interpersonal managerial roles (Mintzberg)? *
✓ Figurehead
✓ Leader
✓ Liaison
Monitor
Negociator
6. What are the informational managerial roles (Mintzberg)? *
Figurehead
✓ Monitor
✓ Disseminator
✓ Spokesperson
Disturbance handler

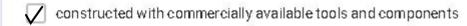
7. What are the decisional managerial roles (Mintzberg)?*
Leader
Monitor Monitor
✓ Entrepreneur
✓ Disturbance handler
Resource allocator
✓ Negociator
8. Enumerate the phases of the decision-making process after Simon. *
8. Enumerate the phases of the decision-making process after Simon. *  Intelligence
✓ Intelligence
✓ Intelligence  Analysis
✓ Intelligence  Analysis  Design
✓ Intelligence  Analysis  Design  Projection
<ul> <li>✓ Intelligence</li> <li>☐ Analysis</li> <li>✓ Design</li> <li>☐ Projection</li> <li>✓ Choice</li> </ul>

9. What means Predictive BI? *
Ad-hoc reporting
Statistical Analysis
✓ Data Mining
Management Science
10. What means Reporting / Descriptive BI? *
Visualization
Ad-hoc reporting
Data Mining
Management Science
11. What means Prescriptive BI? *
Visualization
Statistical Analysis
Management Science
Models and solutions

12. Check the correct components of a DSS. *
Decision Maker / Manager
✓ User Interface
✓ Data Management
✓ Model Management
13. Select the correct key characteristics of DSS. *
support for structured problems
support for semi-structured or unstructured problems
✓ interactive
hard to use
easy to develop by end-users
14. Herbert Simon is well-known: *
for the theory of bounded rationality
as director of the Center for Adaptive Behavior and Cognition-Max Planck Institute for Human Development
for receiving the Nobel Prize in Economics in 1978
for receiving the Turing Award in 1975

15. Check the correct features of BI&A (Business Intelligence & Analytics) 1.0 *
Internet and Web
Mobile Devices
Internet of things
16. Check the correct features of BI&A2.0 *
RDBMS
ETL
OLAP and simple reporting tools
✓ triggered by advances in Internet and Web technologies
✓ triggered by advances in Internet and Web technologies               ✓ triggered by advances in text mining, web search engines, and e-commerce development
triggered by advances in text mining, web search engines, and e-commerce development
√ triggered by advances in text mining, web search engines, and e-commerce development  17. Check the correct features of BI&A3.0 *  18. Check the chec

18.	ΒI	tools	are	,



constructed for very unstructured problems

constructed for specific requirements but they require more programming because of customization needs

19.In terms of KPIs, we can distinguish between: *
quantitative indicators
✓ directional indicators
✓ actionable indicators
✓ financial indicators
✓ practical indicators
20.Interms of OLAP, DAX stands for:
Data Analysis eXpressions
O Data Analysis indeX
O Deutscher Aktien indeX
O Data & Cross(X) Analysis
21.The RELATED function in PowerPivot is *
easier to use than the Excel function VLOOKUP
more difficult to use than the Excel function VL OOKUP
more difficult to use than SQL queries with JOIN clauses
easier to use than SQL queries with JOIN clauses

- 22. X 33%! 67% V. Percentages in this formatting rule create.. \*
- thresholds (as Min.Val.+%\*Amplitude) for generating the formatting symbols "X", "!" and "V"
- thresholds (as Amplitude +%\*Min.Val.) for generating the formatting symbols "X", "!" and "V"
- thresholds (as Min.Val. +%\*Max.Val.) for generating the formatting symbols "X", "!" and "V"
- thresholds (as Amplitude+%\*Max.Val.) for generating the formatting symbols "X", "!" and "V"

## 23. Discretization in Data Mining means \*

- √ to convert continuous valued numerical variables to ranges and categories
- to convert ranges and categories to continuous valued numerical variables
- to respect the principle of non-transparency in the design of data processing algorithms
- not to attract attention

24.	Point out the correct differences between Data Mining and Statistics:
	both look for relationships within data
V	Statistics starts with a well-defined hypothesis while DM starts with a loosely defined one
	DM starts with a well-defined hypothesis while Statistics starts with a loosely defined one
Z	Statistics collects a data sample while DM use all of the existing data
	DM collects a data sample while Statistics use all of the existing data

\*