1) According to the decision school, bounded rationality is the very cause for the creation of organizations. Can organizations overcome the limits of individual bounded rationality?

1. No, since there exists also behavioral uncertainty in addition to environmental uncertainty

2. **Yes, but only if organizations create an information system**

3. Yes, but at the expense of market coordination mechanisms

4. Yes, but only in conditions of high environmental uncertainty

2) According to the decision school organizations should have information processing capacity that grows with uncertainty. What types of uncertainty are considered by the decision school?

1. Any type of uncertainty related to the nature of organizational task

2. In most cases, environmental uncertainty

3. Behavioural and environmental uncertainty

4. **Only environmental uncertainty**

3) According to the decision school, organizations should increase their information processing capacity that grows with environmental uncertainty. To increase their information processing capacity, organizations can:

1. **Build horizontal information systems.**

2. Increase their stock levels.

3. Shift from functional to divisional structure.

4. **Build vertical information systems.**

4) According to the decision school, vertical information systems collapse when:

1. Behavioral uncertainty is too high, and managers cannot cope with it in a reasonable time frame.
2. **Environmental uncertainty is too high and raises several exceptions that is too much to be handled by top managers in a reasonable time frame.**
3. Information management is supported by applying market coordination systems inside organizations.
4. Information processes aren't well managed.

5) According to SDG BI roadmap, can different functions/organizational units have a different maturity in their BI?

    a) No
    b) Yes
    c) Yes, but only in companies that have a non-relational data platform
    d) Yes, but only in the service industry.

6) According to the SDG BI roadmap, tick the types of BI that involve a big data architecture:

    1. **Predictive analytics**

    2. Collaborative BI

    3. Dashboards

    4. **Real-time analytics**

7) According to SDG consulting approach, what is predictive manufacturing.

    1. **It is a new manufacturing paradigm that leverages new smart sources of information to overcomes the limits of traditional BL.**

    2. It is a new manufacturing paradigm based on sales predictions and related production plans, supported by MRP

    3. It is a new manufacturing paradigm based on big data and augmented reality

    4. **It is a new manufacturing paradigm based on real-time analytics applied to make more informed decisions and take the appropriate action in real time.**

8) According to SDG, what are useful KPIs in the dashboard?

    a) Customer satisfaction

    b) Company's competitiveness

    c) Operations backlog

    d) Activity Processes

9) According to transaction economies how are make or buy decisions made?

    a) Based on cost trade-off: the opt for a make solution whenever the market is too far from perfect market conditions and price increase too much and is no longer a good indicator of actual quality.

    b) Based on the information of the top management

    c) Based on the ability to be competitive and grow in size to accommodate their "make" needs.

d) Based on market prices. If market prices are either too high or too low, the opt for make

10) AIRPASS Spa manages a group of Italian airports with revenues of 200M and 15M passengers. The management process includes boarding and landing operations of passengers and baggage. Departing passengers for international destinations go to the check-in desk to embark baggage and receive the boarding pass, they then go to passport/security check (average queueing time is 30 minutes) and eventually enter the boarding area. Departing passengers for domestic destinations might skip the check-in desk if they don't need to embark luggage or to receive the boarding pass, in peak hours the average queuing time is 20 minutes. Arriving passengers follow the same process in reverse order. Which of the following data warehouse dimensions are relevant in the described scenario?

1. Flight ticket.

2. **Passenger**

3. **Flight**

4. Revenues

11) Among following, select (tick) the correct definition(s) of planning information.

1. **Planning information defines operational production plans, that is the goals of operational activities, the resources that should be used and the responsibilities that are in charge of execution.**

2. Planning information is the information of the executive portfolio

3. Planning information is the information of the administrative portfolio

4. Planning information represents high-level strategic decisions on what the company should produce

5.

12) Among the following, select the correct and complete definition(s) of transaction information.
1. Transaction information describes only economic transaction with costumers and suppliers
2. Transaction information describes the structure of production processes
3. Transaction information describes production plans

4. **Transaction information describes exchanges with customers and suppliers, as well as between internal organizations units along production processes.**

13) Among the following, select (tick) the correct definition(s) of catalog information
1. Catalog information never changes over time
2. **Catalog information is the class of operational information with the greatest number of attributes**
3. **Catalog information does not change frequently over time**
4. Catalog information is the class of operational information that is the largest in size

14) Among the following, select the correct definition of inter-functional processes in a manufacturing company
1. The inter-functional processes in a manufacturing company are the sales and the production cycles
2. **The inter-functional processes in a manufacturing company are the development and the production cycles**
3. The inter-functional processes in a manufacturing company are the marketing and the production cycles
4. **The inter-functional processes in a manufacturing company are sets of activities that takes production resources as an input and produce an output that is relevant to a customer**

15) Among the following, select (tick) the correct definition(s) of operational information.
1. Information that is comprised of planning, market and catalog information categories
2. **Information that is comprised of planning, transaction and catalog information categories.**
3. Information that is comprised of planning, transaction and historical information categories
4. Information that is comprised of decision-making, transaction and catalog information categories

16) Among the following, select (tick) the correct example(s) of catalog information.

1. **Product catalog.**
2. **Supplier directory.**
3. Invoices.
4. Orders.

17) Among the following, select (tick) the correct statement(s).

1. Banks and insurance companies have a similar degree of managerial orientation towards IT
2. **Banks and insurance companies have approximately the same degree of information intensity**
3. Compared to an insurance company, a bank has greater information intensity
4. **Compared to a bank, an insurance company has lower IT intensity**

18) Among the following, select (tick) the correct statement(s) describing incentive systems.
1. The performance of a sales agent is greater if it's paid with a fixed salary compared to a percentage on sales.
2. **The performance of a sales agent is maximum if it's allowed to act as an entrepreneur inside the company by requiring the payment of structure costs but leaving to employees any additional revenue.**
3. The performance of a sales agent is maximum if it's paid with a fixed salary.
4. **The performance of a sales agent is greater if it can keep all gains above a given threshold compared to percentage on sales.**

19) Among the following, select (tick) the correct statement(s) describing the organizational impact of IT innovation
1. **IT innovation is associated with both scale and scope economies**
2. **IT innovation increases both organizational efficiency and effectiveness**
3. IT innovation decreases the efficiency of market systems in favor of hierarchical coordination
4. **IT innovation is associated with lower managerial complexity(i.e. it simplifies management)**

20) Among the following, select (tick) the correct statement(s) on CIM

1. **Robots represent an enabling technology of CIM since without robots control information would be difficult to store in a company's IS.**

2. **Robots represent an enabling technology of CIM since without robots transaction information should be inserted manually in a company's information system and the cost of data entry is so high that CIM would not be economically convenient.**

3. Robots represent an enabling technology of CIM since without robots catalog information would not be complete

4. **Robots represent an enabling technology of CIM since without robots the flow of planning and control information would not be seamless.**

21) Among the following, select (tick) the correct statement(s) on CIM

1. CIM enables the integration of operational information, which, in turn, act as a precondition to allow greater information intensity.
2. CIM has an impact on the effectiveness of operating manufacturing processes.
3. **CIM has impact on the efficiency of operating manufacturing processes.**
4. **CIM represents the technology supporting the horizontal integration of the operational portfolio in a manufacturing company.**

22) Among the following, select (tick) the correct statement(s) on MRP
1. MRP has an impact on concurrent engineering
2. **MRP requires concurrent engineering and inside-out production to be implemented in order for companies to experience performance increases as consequence of MRP**
3. MRP has an impact on organizational efficiency since it enhances groupwork

4. **MRP has an impact on organizational effectiveness since it enables faster and less expensive planning adjustments**
5.

23) Among the following, select (tick) the correct statement(s) on MRP.
1. MRP enables the integration of catalog information, which, in turn, is a precondition to allow greater information intensity.
2. MRP represents the technology supporting the horizontal integration of the operational portfolio in a manufacturing company.
3. **MRP has an impact on the effectiveness of operating manufacturing company.**
4. **MRP represents the technology supporting the vertical integration of the operational**

portfolio in a manufacturing company.

24) Among the following, tick the correct statement(s) on middle management control.
1. **Middle management control is a cyclical activity.**
2. Middle management control is in charge of the definition of KPIs for all managerial activities.
3. **Middle management control is responsible for high level budgeting and reporting.**
4. **Middle management control is primarily concerned with financial resources.**

25) Baggage&Co. Spa manages a group of Italian airports with revenues of 200M$ and 15M paggengers.The management process includes board and landing operations of passengers and baggage. Departing passengers for international destinations go to the check-in desk to embark baggage and receive the boarding pass, they then go to passport/security check (average queueing time is 30 minutes) and eventually enter the boarding area. Departing passengers for domestic destinations might skip the check-in desk if they don't need to embark luggage or to receive the boarding pass, in peak hours the average queueing time is 20 minutes. Arriving passengers follow the same process in reverse order. Which of the following I/O KPIs are relevant in the described scenario?
1. **Baggage**
2. Aircraft
3. **Passengers**
4. Flight tickets

26) Bank of Little Island is a small bank with 100 branches in 80 cities and 4 states. The costumer support center manages only phone calls. Services offered by the bank are categorized into basic, including banking services, and gold, including trading and loan services. Costumers are classified into corporate and retail costumers, the latter are further classified into mass, mass-affluent, affluent with reference to their assets. Corporate costumers are managed by higly experienced operators. The number of available operators might change according to weekdays and time slots, this is a critical information as it might influence the efficiency of the process. Costumer statisfaction is assessed by an external company through periodic surveys. The CEO is interested in assessing the performance of the costumer support center. Which of the following concept hierarchies are relevant in the described scenario?

1. **Costumer [corporate, retail]**

   2. Service [basis, gold]

   3. Company [internal, external]

   4. Basic service [banking services], Gold service [trading services, loan services]

27) Bounded rationality is a characteristic of individuals and can be defined as follows:
1. **The limited individual ability to process information**
2. The limited individual ability to cooperate within an organization or a market system
3. The limited individual ability to process information within a traditional hierarchical structure
4. The limited individual ability to work in group

28) Business scenario:
a) **Is software independent and typically includes system and non-system process steps**
b) Is the source for defining the integration test scenarios which are used to verify the solution readiness to the company's business requirements
c) Is confined to company's internal department
d) Details who is responsible for each process and who should be consulted and informed

29) DSTP has faced make or buy decision on their IT platform. What are the reasons why they made a make decision?
1. to avoid low-level programming by choosing the most suitable development environment
2. **to reduce costs.**
3. **to have more control over their need for hardware resources.**
4. to be able to use a standard solution and reduce their need to write code

30) DSTP works in the advertising marketing industry. What are typical channels of Direct Digital Advertising?
1. **WhatsApp**
2. Banners
3. **e-mail**
4. **SMS**

31) FlySafe Spa manages a group of Italian airports with revenues of 200M $ and 15M passengers. The management process includes boarding and landing operations of passengers and baggage. Departing passengers for international destinations go to the check-in desk to embark baggage and receive the boarding pass, they then go to passport/security check (average queuing time is 30 minutes) and eventually enter the boarding area. Departing passengers for domestic destinations might skip the check-in desk if they don't need to embark luggage or to receive the boarding pass, in peak hours the average queuing time is 20 minutes. Arriving passengers follow the same process in reverse order. Which of the following data warehouse dimensions are relevant in the described scenario?
1. **Airport**
2. Flight tickets
3. **Flight**

4. Aircraft

5. Passenger
6. **Flight**
7. Flight ticket
8. Revenues

32) Environmental uncertainty is a very high-level and abstract concept, but it has very practical determinants. What are the determinants of environmental uncertainty?
   1. The level of competence of the organization
   2. **The risk associated with the business (industry, country, etc.)**
   3. **The number and diversity (heterogeneity) of suppliers**
   4. **The number and diversity (heterogeneity) of customers**

33) For which type of Company has been designed 1C:Drive?
   1. **Companies that requires a flexible solution at an affordable price**
   2. Insurance and bank sector
   3. Large Enterprises
   4. **Small and Medium Enterprises**

34) FREX Spa manages a group of Italian airports with revenues od 200M $ and 15M passengers. The management process includes boarding and landing operations of passengers and baggage. Departing passengers for international destinations go to the check-in desk to embark baggage and receive the boarding pass, they then go to passport/security check (average queueing time is 30 minutes) and eventually enter the boarding area. Departing passengers for domestic destinations might skip the check-in desk if they don't need to embark luggage or to receive the boarding pass, in peak hours the average queuing time is 20 minutes. Arriving passengers follow the same process in reverse order. Which of the following I/O KIPs are not relevant in the described scenario?
   1. Passenger
   2. Baggage
   3. **Aircraft**
   4. **Flight ticket**

35) From an architecture point of view, which of the following are data warehouse models?
   1. **Virtual warehouse**
   2. Relational database
   3. **Data mart**
   4. **Enterprise warehouse**

36) From an information system perspective, what is(are) the role(s) of PAM's loyalty card "Per Te"?
   1. The loyalty card "Per Te" enables proximity marketing with WiFi based technologies.
   2. **The loyalty card allows PAM to analyze the historical behavior of customers.**
   3. **The loyalty card is key to run market segmentation analytics with clustering algorithms such ask means.**
   4. **The loyalty card allows PAM to identify their customers.**

37) GPMS is a small bank with 100 branches in 80 cities and 4 states...Which of the following data warehouse dimensions are not relevant in the described scenario?
   1. Time
   2. Service
   3. Operator
   4. Customer

38) How do executives express their information requirements?
   1. By identifying key performance indicators to be calculated based on financial data only
   2. By selecting the most appropriate ERP

3. By specifying the schema of operational information that is key to decision making
4. **By identifying key performance indicators to be calculated based on all operational data**
5.

39) How do the costs of markets compare with the cost of hierarchies?
1. Markets have higher production costs compared to hierarchies.
2. Markets have lower production and coordination costs compared to hierarchies.
3. **Markets can have higher coordination costs compared to hierarchies.**
4. **Markets have lower production costs compared to hierarchies.**

40) How is the value of an indicator (i.e. executive information) defined?
1. The value of an indicator represents a statistical measure, typically the mean value of a variable.
2. The value of an indicator is an adimensional number calculated by aggregating low level information according to decision-making needs.
3. **The value of an indicator is a number defined at the intersection of multiple dimensions associated with the indicator.**
4. **An indicator can be seen as a multidimensional hypercube. The value is a number associated with a cell of the hypercube.**

41) How would you define strategy?
1. Strategy represents the industry where the company operates.
2. Strategy represents the collective knowledge of managers that provides the organizational policies for all operational activities.
3. **Strategy represents the set of decisions that top managers have to make on what products the company should produce for what markets.**
4. Strategy represents the very high level of organizational control.

42) Information is an intangible resource and therefore:
1. **Given that information is self-generating and non-depletable, it can cause vicious circles in non-well managed information process.**
2. Information is depletable
3. Information is self-generating only if the organization is well managed.
4. **Information is self-generating.**

43) In perfect market conditions, what is the information system of the market coordination mechanism according to transaction economics?
1. **The price system**
2. The information describing an organization's processes.
3. Activity based costing and related internal prices
4. The exchange of information occurring between the two parties during negotiation

44) In the literature there is a traditional debate on the impact of technical innovation on organizational change. According to this debate, traditional non-IT technologies have an impact on:
1. **Efficiency only**
2. Efficiency and effectiveness
3. **Efficiency, typically through scale economies.**
4. Efficiency, through both scale and scope economies

45) In the SDG pharma knowledge management case, what are the main business needs?
1. **Have a single point of access to all types of information, both structured and unstructured.**
2. **Be able to create links between different information items.**
3. Be able to send key information via email to predefined mailing list
4. **Have a user experience similar to that of a search engine.**

46) Knowledge management is among the inter-functional information flows in service companies. What is (are) the correct definition(s) of knowledge management?
1. **Knowledge management is an inter-functional information flow that supports the transformation of information collected during service production and distribution into knowledge useful to improve future service production and distribution activities.**
2. knowledge management is an inter-functional information flow that supports the collection of information on competitors
3. Knowledge management is an inter-functional information flow that supports transformation of information collected during sales and marketing into knowledge useful to improve future service production activities
4. Knowledge management is an inter-functional information flow that supports the collection of information on customers and suppliers

47) Neiman & Brothers concept hierarchies:
1. **Customer (retail, corporate)**
2. **Service (basic, gold)**
3. **Retail (mass, mass affluent, affluent)**
4. **Basic (banking services) and Goal (trading, loan services)**

48) Neiman & Brothers is a small bank with 100 branches in 80 cities and 4 states.
The customer support center manages only phone calls. Services offered by the bank are categorized into basic, including banking services, and gold, including trading and loan services. Customers are classified into corporate and retail customers, the latter are further classified into mass, mass affluent, affluent with reference to their assets. Corporate customers are managed by highly experienced operators. The number of available operators might change according to weekdays and time slots, this is a critical information as it might influence the efficiency of the process. Customer satisfaction is assessed by an external company through periodic surveys. The CEO is interested in assessing the performance of the customer support center. Which of the following data warehouse dimensions are relevant in the described scenario?
1. **Operator.**
2. Branch.
3. **Time.**
4. **Service.**

1. **N of phone calls.**
2. Customer satisfaction
3. N. of employees (operators)
4. **N. of customers.**

49) Operations in OL<u>T</u>P:
a) Pivot
b) Roll-up
c) Roll-down
d) Drill-down
e)

50) Please, tick correct layers of the logical architecture of PAM's datawarehouse:
  1. **Web layer.**
  2. **Machine learning layer.**
  3. Syntactic layer.
  4. **Staging layer.**

51) Please, tick correct statement(s) on innovation with WIS.
  1. **Companies are connected with their retail customers**
  2. **The Web is a window on a company's processes (an their quality)**
  3. **The quality of Web sites and portals cannot be high if companies have not completed the integration of their information processes (common unified data, consistent omni-channel processes)**
  4. **As omni-channel integration is deployed, the Web becomes the single access point for both customers and internal users**

52) Please, tick the correct statement(s) on ERP
  1. ABC can be defined as a module of ERPs providing strategic cost KPIs.
  2. **ACB is a module of ERPs integrating administrative and operational information on costs.**
  3. **ERP includes Activity Based Costing (ABC).**
  4. ERPs replace part of the administrative portfolio with a new module called ABC.

53) Please, tick the correct answer(s) on the administrative portfolio

  1. **It is (almost) industry independent**
  2. It is non functionally complex (e.g. the balance sheet)
  3. It is (almost) country independent
  4. **It represents the first step of automation (together with office automation), as it involves number crunching**

54) Please, tick the correct definition(s) of "delegation" according to agency theory.
  1. Delegation represents a continuous learning process that allows employees to be promoted to higher job positions in the hierarchy.
  2. **Delegation represents an organizational must to make vertical information systems more efficient when environmental uncertainty is too high.**
  3. Delegation represents a task with which a responsibility higher in the hierarchy enables another responsibility lower in the hierarchy to execute a set of production activities.
  4. **Delegation represents a task with which a responsibility higher in the hierarchy enables another responsibility lower in the hierarchy to make decisions on a set of interrelated activities.**

55) Please, tick the correct definition(s) of "delivery" according to Porter's value chain for service companies.
  1. Delivery is front-office tasks + marketing&sales
  2. Delivery is synonymous of distribution
  3. **Delivery is front-office tasks +back-office tasks**
  4. Delivery is back-office tasks + service set up
  5.

56) Please, tick the correct statement(s) on core ERP.
   1. **Core ERP is any functionality of a company's information system that belongs either to the operational, or executive, or administrative**
   2. Core ERP is any functionality of a company's information system that is key to the effectiveness of the company
   3. **Core ERP includes (but is not limited to) the executive portfolio**
   4. Core ERP is any functionality of a company's information system that is key to the efficiency of the company

57) Please, tick the correct statement(s) on matrix structures.
   1. **A matrix structure is used only in conditions of high environmental uncertainty , due to the complexity of coordinating a matrix with low uncertainty**
   2. **In matrix structures, employees refer to multiple managers (more than one) and are tied by a hierarchical relationship with each one of them**
   3. Matrix structures represent totally flat hierarchies, where hierarchical relations are replaced by coaching relations
   4. **As an example, in a matrix structure employees may have a regional manager and a functional manager**

58) Please tick the correct statement(s) on the price system
   1. Price represents an indicator that measures the efficiency of the market system at reducing environmental uncertainty
   2. **Prices are not set by production costs only, but also by the market system**
   3. **If the market system works properly, price is not too far from production costs and is a good indicator of quality**
   4. **The price system is the information system of the market coordination mechanism**

59) Please, tick the correct statement(s) on the dimensions of the indicators (i.e. executive information).
   1. **A fundamental dimension is time. Time is defined in terms of extension and granularity.**
   2. A fundamental dimension is products, defined as the main industry where the company operates.
   3. **A fundamental dimension is responsibility, defined as the organizational unit which the indicator refers to.**
   4. **A fundamental dimension is clients, defined as the market segment which the indicator refers to.**

60) Scale economies involve
   1. A decrease in unit costs related to a decrease in individual opportunism
   2. **Greater production efficiency upon an initial investment in a new technical system**
   3. **An increase in the minimum optimal size of organizations**
   4. A decrease in total production costs

61) Scale economies involve
   1. **A reduction of total production costs only above break-even production volumes**
   2. **A reduction of unit production costs**
   3. An increase in annual investments in research and development(R&D)
   4. A reduction of unit production costs only above break-even production volumes

5.

62) Select (tick) functionalities that belong to the administrative portfolio.
1. Production planning functionalities.
2. **Accounting functionalities.**
3. **Human resource management functionalities.**
4. **Tax payment functionalities.**

63) The process Supplier Invoice business process enables you as an accountant to:
1. Purchase stock materials
2. Purchase non-stock materials
3. **To approve Supplier Invoice created by the other user accountant**
4. Enter invoices, credit memos and down payment

64) The Procure-To-Pay Business (Non-Stock) business scenario is usually involving:
1. Warehouse manager
2. Sales manager
3. **Strategic Buyer**
4. **Operational Buyer**

65) Vertical information systems are based on vertical communication along the organizational hierarchy. According to the decision school, information is sent by a unit in the hierarchy to its upper level when:
1. When there is an exception caused by behavioral uncertainty.
2. **When the lower unit does not have all information needed to make a decision on how to deal with the organization.**
3. **When there is an exception caused by environmental uncertainty.**
4. When the exception is beyond the limits of individual bounded rationality

66) What are correct difference(s) between service and manufacturing companies?
1. Unlike manufacturing in service companies, IT is not a production technology
2. **Unlike manufacturing companies, service companies produce products that are made of bits**
3. Unlike manufacturing companies, service companies do not need to produce services, they just need to distribute services
4. Unlike services, in manufacturing IT is simultaneously a production technology and a distribution channel

67) What are correct interfunctional information flow(s) in service companies
1. **Order management**
2. Logistic management
3. Materials management
4. **Knowledge management**

68) What are correct statement(s) on the ERP vision of information integration?
1. Horizontal data layering (with core functionalities)
2. **Vertical data consistency (from operations to executive dashboards**
3. Horizontal data consistency (with ETL)
4. **Conceptual consistency: one, common, integrated data model**
5.

69) What are enabling technologies of Business Process Reengineering (that is the horizontal and vertical integration of the operational portfolio in service companies)?
1. PCs and robots.
2. **Client server architectures and PCs.**
3. Client server architectures and mini computers.
4. Client server architectures and networks.

70) What are enabling technologies of CIM?
a) **Robots and mini computers are enabling technologies of CIM.**
b) **Mini computers are an enabling technology of CIM.**
c) MRP (Material Requirements Planning) is an enabling technology of CIM.
d) Client server and mini computers are enabling technologies of CIM.

71) What are levels of the executive information system according to Anthony's pyramid?
1. CIM and MRP in manufacturing companies, BPR in service companies
2. Strategic, administrative, operational
3. Planning, control and continuous adjustment
4. **Strategic, management control (or executive, or middle management), operational**

72) What are the correct components of agency costs?
1. Control costs, communication costs and residual loss.
2. Control costs, decision costs and opportunity costs.
3. Decision costs, communication costs and opportunity costs.
4. **Control costs, warranty costs and opportunity costs.**

73) What are the correct inter-functional information flow(s) in service companies?
1. Materials management
2. **Knowledge management**
3. **Order management**
4. Operations management

74) What are the effect(s) on individual work caused by Business Process Reengineering (that is the horizontal and vertical integration of the operational portfolio in service company)?
1. The degree of delegation increases, limited to production activities.
2. **The degree of delegation increases.**
3. **The degree of specialization of individual work decreases, i.e. employees become more generalist.**
4. The degree of specialization of individual work increases.

75) What are the limitations of agency theory?
1. **There exist hierarchical coordination mechanisms inside market transactions**
2. **The agency school neglects the uncertainty caused by the nature of the task to be executed**
3. **Technical innovation represents a driver of organizational change that, depending on the nature of tasks, can change the cost balance among different coordinating mechanisms**
4. **The role of technology is strongly tied to the nature of tasks**

76) What are the main functional areas (or portfolios) of core ERP?
1. CRM, WTM, SCM

2. administrative, CRM, SCM, WIS, executive, operational.
3. administrative, CRM, SCM, WIS, executive
4. administrative, operational, executive.

77) What are the main insights that PAM's customer analytics team can obtain from customer database?
1. Price sensitivity.
2. Stock levels
3. Store replenishment decisions
4. Sales trends.

78) What are the main technical innovations of DSTP?
1. De-duplication.
2. Optimized contact redistribution.
3. Adoption of established technical solution.
4. Integration with other IT vendors.

79) What are the main types of horizontal information system?

1. Liason roles, task forces, independent organizational unit, and matrix structures

2. Task forces, teams, warehouses, and matrix structures

3. Liason roles, task forces, team, and market structures

4. Liason roles, task forces, team, and matrix structures

80) What are the phases of an economic transaction for a commodity?
1. Choice of market system, choice of payment system, payment, post settlement
2. Choice of shop, choice of product, payment, replacement of good if flawed
3. Choice of market, choice of good, payment, complaints
4. Choice of shop, choice of good, payment, replacement of good if flawed

81) What are the pillars of the ERP paradigm?
1. Extension and vertical solutions
2. Information consistency
3. Extension and modularity
4. Process prescriptiveness

82) What are the reason(s) why executive information is called "indicator"?
1. Executive information is called "indicator" as it provides strategic indications on critical decisions
2. Executive information is called "indicator" as it provides indications on the financial performance of companies
3. Executive information is called "indicator" as it aggregate information providing indications on a variety of organizational performance objectives, typically by means of KPIs.
4. Executive information is called "indicator" by analogy with finance

83) What are the reason(s) why organizations complement their vertical information systems with horizontal information systems?

1. **Because environmental uncertainty is too high and raises too many exceptions to be dealt with by means of the vertical information systems**
2. **Because individuals have bounded rationality and when they represent high-level nodes in a hierarchy they cannot deal with a number of exceptions that is beyond the limits of their individual rationality**
3. Because vertical information systems are suitable only for organizations that do not have a fully integrated information system
4. Because vertical information systems are suitable only for small organizations

84) What are the steps of the CSF method?
1. Interview, analysis, documentation, implementation
2. Preparation, documentation, interview, reporting
3. **Preparation, interview, robustness analysis, refinement**
4. Preparation, interview, reporting, implementation

85) What are the typical functional modules of SAP By Design?
1. **Built-in analytics.**
2. **Cloud platform.**
3. **Financial management.**
4. **Mobile access.**

86) What are typical characteristics of SAP's concept of "business scenario"?
1. **To cross multiple internal departments**
2. To be industry-independent
3. **To be the source for defining integration test scenarios**
4. **To include best practices**

87) What information is store in an operational DB?
1. **The data describing the execution of transactions with customers and suppliers**
2. **The data describing the execution of internal transactions**
3. The indicators of the executive information systems
4. **The data describing the status of operational activities**

88) What is 1C:Drive?
1. **An ERP system**
2. An algorithm used to calculate the profit of a company
3. A Database software
4. **It is an application based on 1C:Enterprise platform that allows a company to manage its Business processes**

89) What is 1C:Enterprice Platform?
1. **A programming environment with its own scripting language that allows to run ERP applications**
2. Financial rules used for managing a company
3. **A platform created to easily develop ERP applications**
4. A set of rules used to define the KPIs of a Company

90) What is a data warehouse?
1. A data warehouse is a collection of data that supports decision making process
2. A data warehouse is a subject-oriented, time-variant, nonvolatile collection of data that supports decision making process
3. **A data warehouse is a subject-oriented, integrated, time-variant, nonvolatile collection of data that supports decision making process.**

4. A data warehouse is a integrated, time-variant and nonvolatile collection of data that supports decision making process
5.

91) What is(are) enabling technology(es) of MRP (Material Requirement Planning)?

1. The enabling technologies of MRP are CIM and mini computers.

2. The enabling technologies of MRP are PCs.

3. **The enabling technology of MRP is CIM (Computer Integrated Manufacturing).**

4. The enabling technologies of MRP are robots and CIM.

92) What is the main business benefit of running a project Management Business Scenario on top of the ERP processes?

1. To simulate duration and cost of complex activities and to keep track of the progress during their execution
2. To track the execution of single tasks of a customer project and register the achievement of billing milestones so that customers can be invoiced with the right amount of services delivered
3. To improve the purchases business processes with a better delivering time and less cost
4. To have a common repository where document can be stored and shared among colleagues of different departments

93) What is SAP By Design?

1. It's SAP's programming environment for small businesses.
2. It's SAP's cloud platform.
3. **It's SAP's mid-market suite in a box.**
4. It's SAP's big data solution.

94) What is the ASN used for?

1. **To update the forecasted Delivery Dates with the latest (still forecasted) information from the supplier, and have more reliable supply plans**
2. To update the customer demand with the latest forecasted of delivery
3. To track the supplier that has sent the required quantities of raw materials
4. To provide the MRP with updated customer requirements

95) What is the fundamental integration step(s) of the information systems enabled by ERPs?
1. ERPs allow full control of a company's financial processes
2. **ERPs complete the integration among the three core portfolios, executive, administrative and operational**
3. ERPs integrate the administrative and operational portfolios, by enabling better operational control

4. ERPs represent off-the-shelf packages completing the vertical integration between the operational and executive portfolios

96) What is the last step(s) of integration enabled by ERPs?
   1. **Integration between all the portfolios, operational, executive and administrative**
   2. Integration between the executive and operational portfolios
   3. Integration between the administrative and executive portfolios
   4. Full integration of the operational portfolio
   5.

97) What is the main task of the supply planner?
   a) **Optimize requisitioning and manufacturing to fulfill customer demand within resource load constraints**
   b) Keep the warehouse full so that the customer can always be confirmed
   c) Make sure that the Manufacturing Dept. isn't running on low-stock exceptions
   d) Find the best suppliers to provide raw materials and sub-components

98) What is the purpose of the Critical Success Factor (CSF) method?
   1. The CSF method supports requirement analysis for the integration of the administrative portfolio with the operational and executive portfolios.
   2. The CSF method supports the elicitation of information requirements enabling the design of the operational DB.
   3. **The CSF method supports the elicitation of information requirements of top managers, as a fundamental input to the requirement analysis of the Executive Information System.**
   4. The CSF method supports business process reengineering in service companies.

99) What is the purpose of the preparation phase of the CSF method?
   1. **the purpose of the preparation phase of the CSF method is to prepare for the interview phase, given that the interviewees are executives with a very short time and span of attention.**
   2. the purpose of the preparation phase of the CSF is to gather information on the managerial style of the company's CEO and his/her managerial inclination toward IT
   3. **the purpose of the preparation phase of the CSF is to gather information on the industry, competitive position, and possibly/likely CSFs of the target company.**
   4. the purpose of the preparation phase of the CSF is to gather information on the functionalities and usability of the dashboard that is currently in use

100) What would you say is an important feature of an operational DB?
   a) Being free of charge
   b) Being hosted on a Cloud Environment
   c) **Having enough level of detail to support management planning and control activities.**
   d) Being stored and managed with a non-relational infrastructure

101) Which are common modules of an ERP systems?
   1. ISO 9001
   2. **Accounting**
   3. **CRM**
   4. APM

102) Which are correct instances of SAP's concept of "business scenario"?
   1. **Order-to-cash for products.**
   2. **Order-to-cash for services.**
   3. Order-to-warehouse.
   4. Order-to-logistic.

103) What are the main advantages of Direct Digital Advertising according to DSTP?
   1. Lower costs.
   2. **Effective communication.**
   3. **Personal communication.**
   4. Lower risk of over frequencies

5.

104) Which are the main benefits of a company that uses an ERP?
   1. **Better efficiency in the business processes of the company**
   2. **The correct registration of all financial documents**
   3. The possibility to improve the generation of commercial leads
   4. Reduction of taxes

105) Which are the main OLAP features

   1. **Stored data are summarized and consolidated**

   2. **OLAP systems main performance metric is query throughput**

   3. Sored data comprises primitive, raw data

   4. OLAP systems main performance matric is transaction throughput

106) Which are the main OLAP features?
   1. OLAP systems main function is to support day to day operation
   2. **Stored data are historical data, accuracy is maintained over time**
   3. **OLAP systems main function is decision support**
   4. Stored data are guaranteed to be updated

107) Which are the main OLTP features?
   1. Stored data are historical data, accuracy is maintained over time
   2. **Stored data are guaranteed to be updated**
   3. OLTP systems main function is decision support
   4. **OLTP systems main function is to support day to day operation**

108) Which are the main OLTP features?
   1. Stored data are summarized and consolidated.
   2. OLTP systems main performance metric is query throughput.
   3. **Stored data comprises primitive, raw data.**
   4. **OLTP systems main performance metric is transaction throughput.**

109) Which are the main purposes of an ERP?
   1. **To register all financial related operations of a Company**
   2. **To manage financial company documents**
   3. **To register double entry operations**
   4. To improve sales

110) Which KPI category includes custumer satisfaction?

   1. Service
   2. Cost
   3. I/O
   4. **Quality**

111) Which KPI category includes revenues?

   1. Service.
   2. **I/O.**
   3. Resources.
   4. Costs.
   5.

112) Which one(s) is/are the correct definition(s) of agency costs?

    a) Costs that organizations have to take on to either control or provide monetary incentives to employees to whom they delegate decision making activities.
    b) Costs that are due to less than perfect market conditions
    c) Costs that are due to behavioral uncertainty.
    d) Costs that are due to excessive hierarchical coordination

113) Which of the following are the two correct sequences for the Order-To-Cash business scenario?

    1. Sales Opportunity, Sales Order, Customer Delivery, Customer Invoice
    2. Marketing Campaign, Sales Order, Customer Invoice, Customer Delivery
    3. Sales Lead, Sales Order, Sales Quote, Customer Invoice
    4. Demand Planning, Sales Quote, Customer Return, Sales Order

114) Which of the following components are included into a metadata repository?
    1. Datawarehouse schema, views and dimensions
    2. Business metadata
    3. ER schemas of relational data sources
    4. Measure definition functions

115) Which of the following conceptual models applied to data warehouse systems?
    1. The snowflake schema is a refinement of a star schema where some dimensional hierarchy is normalized by forming a shape similar to a snowflake.
    2. The fact constellation schema comprises multiple fact tables and shared dimension tables.
    3. The star schema is composed by a fact table in the middle connected to a set of dimension tables.
    4. The galaxy schema comprises multiple fact tables and shared dimension tables.

116) Which of the following conceptual models <u>cannot</u> be applied to data warehouse systems?
    1. The star schema is composed by a fact table in the middle connected to a set of dimension tables
    2. None of the others
    3. The fact constellations schema comprises multiple fact tables and shared dimension.tables
    4. The galaxy schema comprises multiple fact tables and shared dimension tables

117). Which of the following dimensions are always considered in a data warehouse?
    1. Customer
    2. Time
    3. Service
    4. Product
    5.

118) Which of the following documents are managed by 1C:Drive
   1. **Production Order**
   2. **Good issue**
   3. **Supplier's invoice**
   4. **Quotation**

   5. Quality
   6. **Sales**
   7. **Warehouse**
   8. **Production**

119) Which of the following function categories can be applied to data warehouse measures?

   1. **Holistic functions i.e. functions that cannot be computed by applying a distributive function.**
   2. **Algebraic functions, i.e., functions with M arguments each of which is obtained by applying a distributive function.**
   3. None of the others
   4. **Distributive functions, i.e.m functions that can be computed in a distributed manner.**

120) Which of the following groups are composed by costs KPIs?
   1. **Costs for system maintenance**
   2. Customer satisfaction
   3. **Lost sales due to discounts**
   4. **Employee efficiency (hours at work/available hours)**

121) Which of the following groups are composed by costs KPI?
   1. Customer satisfaction
   2. Revenues
   3. Number of employees
   4. **Employee efficiency (hours at work/available hours)**

122) Which of the following groups are composed by I/O KPIs?
   1. Customer satisfaction
   2. **Revenues**
   3. **Customers**
   4. Revenues and customer satisfaction

123) Which of the following groups are composed by I/O KPIs?
   1. **Revenues**.
   2. Revenues, margins, customer satisfaction.
   3. Revenues, customer satisfaction.
   4. Customer satisfaction.

124) Which of the following groups are composed by quality KPIs?
   1. Revenues, customer satistaction
   2. Revenues
   3. **Customer satisfaction**
   4. Revenues, margins, customer satisfaction

125) Which of the followings is a key business benefit of the ATP feature?
1. It gives the sales people the possibility to confirm a delivery date to their customers
2. It warms the warehouse manager if someone is selling products which aren't available
3. It reserves stock availability when the sales quoted is approved
4. **It allows to know if a sales order can be delivered on time**

126)) Which of the following is not a standard business scenario for SAP Business By Design?
1. Order-to-Cash
2. Make-to-Stock
3. **Repair-to-Resell**
4. Procure-to-Pay

127) Which of the following operations can be applied in OLAP systems?
1. **Pivot**
2. **Roll-down**
3. **Dice**
4. **Slice**

128) Which of the following operations can be applied in OLAP systems?
1. **Pivot**
2. **Roll-down**
3. **Roll-up**
4. **Roll-down**

129) Which professional(s) is(are) in charge of data integration with Talend in PAM?
a) Developer
b) Data scientist
c) Technical analyst
d) **Data manager.**

130) Which statement(s) apply to the concept of market transaction?
1. **A market transaction is an exchange executed in four phases: match making (or search), negotiation, execution, post settlement**
2. **A market transaction is an exchange between two parties in which a party called the customer pays another party called the customer pays another party called supplier to buy a good/service**
3. A market transaction is an exchange between two parties that involves no payment
4. A market transaction is an exchange executed to prevent behavioral uncertainty

131) Which technology(ies) is(are) used in PAM to design the workflow integrating data from different sources?
a) **Talend.**
b) PostgreSQL
c) R and/or R Studio
d) Shiny

132) Why are market systems based on trust?
1. **Because the parties in market transactions have an unconscious trust in the ability of a market system to lead to a good quality-as-price made though the competition mechanisms**

2. Because the parties in market transactions have long-lasting business relationships
3. **Because the parties in market transactions have no control on each other's production processes**
4. **Because it is difficult for a buyer to assess the actual quality of products**

133) Why are PCs enabling technologies of Business Process Reengineering (that is horizontal and vertical integration of the operational portfolio in service companies)?
1. PCs are enabling technologies of BPR since they help horizontal coordination.
2. **PCs are enabling technologies of BPR since they help individual workers overcome the boundaries of their individual rationality and become generalists.**
3. **PCs are enabling technologies of BPR since they support the knowledge management process.**
4. **PCs are enabling technologies of BPR since they represent the key technology to collect operating information in electronic format at the time when it is first created (similar to robots in manufacturing).**

134) Why is executive information stored in a datawarehouse?
1. Because the datawarehouse can be supported by modern big data technologies
2. Because the datawarehouse replaces the operational database
3. Because a datawarehouse can be supported by cloud services
4. **Because a datawarehouse stores pre-processed information that can be queried in real time**

135) Why is (or is not) CIM an enabling technology of MRP?
1. **CIM is an enabling technology of MRP because it enables the availability and integration of operational information which is required by MRP.**
2. CIM is an enabling technology of MRP because CIM has an impact on operational effectiveness
3. CIM is an enabling technology of MRP because CIM enables the vertical integration of operational information which is required by MRP
4. CIM is an enabling technology of MRP because CIM has an impact on operational efficiency

136) Why is the market system more suitable than the hierarchical system to cope with behavioral uncertainty?
1. **Because in a pure market system, individuals produce for themselves and, therefore, their objectives coincide with their organizational objectives as entrepreneurs.**
2. Because in a market system, individuals are not subject to hierarchical control.
3. Because in a market system, organizations can resort to "buy" solutions in make or buy decision processes.
4. **Because the coincidence between individual and organizational objectives in a pure market system makes individuals more willing to work and achieve their goals as entrepreneurs.**