i   **About the Exam**

EXAMINATION

Course code and name:

- ITL10715 IT i Virksomheter

Date and duration:

- 27.08.2018, 2 hours
- No supporting materials permitted.

Professor:

- Cathrine Linnes
- Per-Gunnar Fyhn

Examination:

- The final written exam consists of 60 multiple choice questions from chapeter 1-6.
- You are able to view only one question at the time.
- You may go back to view each question before you submit your exam.
- This exam is worth 40% of your final grade.

Results:

- Test results will be available on Studentweb.

1   **1**

Which of the following is *not* one of the six strategic business objectives of information systems?
Select one alternative:

- ○ Survival

- ○ Improved employee morale

- ○ Improved decision making

- ○ New products and services

- ○ Competitive advantage

Maximum marks: 1

2

2

Which of the following may lead to competitive advantage?
1. New products, services, and business models;
2. Charging less for superior products;
3. Responding to customers in real time

Velg ett alternativ

○ 1 and 3

○ 2 and 3

○ 1, 2, and 3

○ 1 only

○ 1 and 2

Maximum marks: 1

3

3

A firm that invests in an information system because it is a necessity of doing business does so because it is seeking to achieve which of the following business objectives?

Velg ett alternativ

○ Survival

○ Improved decision making

○ Competitive advantage

○ Customer intimacy

○ Operational excellence

Maximum marks: 1

4 **4**

The Mandarin Oriental's use of computer systems to keep track of guests' preferences is an example of which of the following?

Velg ett alternativ

- ○ Improved flexibility

- ○ Customer intimacy

- ○ Improved efficiency

- ○ Improved decision making

- ○ Operational excellence

Maximum marks: 1

5 **5**

Which of the following is an example of a business using information systems to create a new product?

Velg ett alternativ

- ○ Verizon's use of a web-based digital dashboard to provide real-time company information for managers

- ○ Walmart's Retail Link system

- ○ The Mandarin Oriental's use of computers to keep track of guest preferences

- ○ Apple's creation of the iPod

- ○ Kroger's use of sensors to monitor cold food storage temperatures

Maximum marks: 1

6 **6**

Approximately what percent of U.S. businesses have some form of remote work program?

Velg ett alternativ

- ○ About 35 percent

- ○ About 60 percent

- ○ About 15 percent

- ○ About 75 percent

- ○ About 25 percent

Maximum marks: 1

7 **7**

All of the following are new technology-related trends in MIS *except:*
Select an alternative:

○ co-creation of business value.

○ big data.

○ IoT.

○ the mobile digital platform.

○ cloud computing.

Maximum marks: 1

8 **8**

Which of the following statements about digital firms is *not* true?
Select an alternative:

○ In digital firms, time shifting and space shifting are the norm.

○ Today, most firms are fully digital.

○ Digital firms have more flexibility to survive in turbulent times.

○ Digital firms sense and respond to their environments more rapidly than traditional firms.

○ Digital firms offer extraordinary opportunities for flexible global organization and management.

Maximum marks: 1

9 **9**

The enormous volume of data generated by Internet activity, such as web traffic, email, and social media is referred to as:
Select an alternative:

○ cloud computing.

○ big data.

○ business intelligence.

○ IoT.

○ the mobile digital platform.

Maximum marks: 1

10

10

How many service jobs move offshore to lower-wage countries in a typical year?

Select an alternative:

- ○ 3,000
- ○ 300,000
- ○ 3 million
- ○ 30 million
- ○ 30,000

Maximum marks: 1

11

11

Which of the following is an example of a cross-functional business process?

Select an alternative:

- ○ Paying creditors
- ○ Transporting the product
- ○ Identifying customers
- ○ Assembling a product
- ○ Creating a new product

Maximum marks: 1

12

12

Which of the following would you use in order to determine which of your suppliers has the best and worst records for keeping to your production schedule?

Select an alternative:

- ○ UPS
- ○ MIS
- ○ TPS
- ○ CRM
- ○ DSS

Maximum marks: 1

13 **13**

A relocation control system that reports summaries on the total moving, house hunting, and home financing costs for employees in all company divisions falls into which of the following categories?

Select an alternative:

- ◯ ESS
- ◯ TPS
- ◯ MIS
- ◯ KMS
- ◯ DSS

Maximum marks: 1

14 **14**

Non-typical business problems with causes and effects that are rapidly changing are typically handled by which of the following types of information system?

Select an alternative:

- ◯ MIS
- ◯ KMS
- ◯ DSS
- ◯ ESS
- ◯ TPS

Maximum marks: 1

15 **15**

Which level of the organization is an ESS specifically designed to serve?

Select an alternative:

- ◯ Middle management
- ◯ End-user
- ◯ Operational
- ◯ Senior management
- ◯ Knowledge workers

Maximum marks: 1

16

All of the following are examples of business intelligence systems *except* a system that:

Select an alternative:

- focuses on problems that are unique and rapidly changing.

- summarizes and reports on a company's basic operations.

- tracks the flows of materials in a factory.

- addresses non-routine decisions.

- compares total annual sales figures for specific products to planned targets.

Maximum marks: 1

17

What is the most important function of an enterprise application?

Select an alternative:

- Enabling a company to work collaboratively with customers and suppliers

- Increasing speed of communicating

- Enabling cost-effective e-business processes

- Enabling business functions and departments to share information

- Enabling inventory and supply chain management

Maximum marks: 1

18

The four major types of enterprise applications are:

Select an alternative:

- ERP, SCM, CRM, and KMS.

- SCM, CRM, ESS, and KMSs.

- TPS, MIS, DSS, and ESS.

- SCM, CRM, DSS, and KMS.

- ERP, SCM, DSS, and CRM.

Maximum marks: 1

19 **19**

Which of the following types of system enables management to make better decisions regarding organizing and scheduling sourcing, production, and distribution?

Select an alternative:

- ○ MIS
- ○ ERP
- ○ KMS
- ○ SCM
- ○ TPS

Maximum marks: 1

20 **20**

Which of the following would you use to consolidate the relevant knowledge and experience in the firm and make it available to improve business processes and management decision making?

Select an alternative:

- ○ CRM
- ○ MIS
- ○ KMS
- ○ TPS
- ○ An extranet

Maximum marks: 1

21 **21**

The interaction between information technology and organizations is influenced:

Select an alternative:

- ○ solely by the decision making of middle and senior managers.
- ○ by the rate of growth of the organization.
- ○ by the development of new information technologies.
- ○ by many factors, including structure, politics, culture, and environment.
- ○ by two main macroeconomic forces: capital and labor.

Maximum marks: 1

22 **22**

Which of the following is an example of a divisionalized bureaucracy?
Select an alternative:

- ○ Midsize manufacturer

- ○ Fortune 500 firm

- ○ Startup firm

- ○ University

- ○ Consulting firm

Maximum marks: 1

23 **23**

According to research on organizational resistance, the four components that must be changed in an organization in order to successfully implement a new information system are:
Select an alternative:

- ○ technology, people, culture, and structure.

- ○ organization, culture, management, and environment.

- ○ tasks, technology, people, and structure.

- ○ costs, tasks, structure, and management.

- ○ environment, organization, structure, and tasks.

Maximum marks: 1

24 **24**

Which model is used to describe the interaction of external forces that affect an organization's strategy and ability to compete?
Select an alternative:

- ○ Network economics model

- ○ Competitive advantage model

- ○ Demand control model

- ○ Competitive forces model

- ○ Agency costs model

Maximum marks: 1

25

25

Which of the following industries has the lowest barrier to entry?
Select an alternative:

- ○ Small retailer

- ○ Airline

- ○ Solar energy

- ○ Automotive

- ○ Computer chip

Maximum marks: 1

26

26

All of the following are competitive forces in Porter's model *except:*
Select an alternative:

- ○ suppliers.

- ○ customers.

- ○ substitute products.

- ○ new market entrants.

- ○ external environment.

Maximum marks: 1

27

27

All of the following are IT-enabled products and services providing competitive advantage *except:*
Select an alternative:

- ○ Apple's iPod and iTunes.

- ○ PayPal's online person-to-person payment system.

- ○ Nike's use of celebrities to market their products.

- ○ Amazon's one-click shopping.

- ○ Ping's golf club customization.

Maximum marks: 1

28 **28**

Which of the following would a company employ to measure and compare its business processes to similar processes of other companies within their industry?

Select an alternative:

○ Best practices

○ Strategic systems analysis

○ Secondary activities

○ Value chain analysis

○ Benchmarking

Maximum marks: 1

29 **29**

The most successful solutions or methods for achieving a business objective are called:

Select an alternative:

○ core competencies.

○ benchmarks.

○ best processes.

○ value activities.

○ best practices.

Maximum marks: 1

30 **30**

Information systems enhance core competencies by:

Select an alternative:

○ providing better reporting facilities.

○ allowing operational employees to interact with management.

○ encouraging the sharing of knowledge across business units.

○ fostering synergies among departments.

○ creating educational opportunities for management.

Maximum marks: 1

31   **31**

Which of the following best describes the effect that new information technology has on society?
Select an alternative:

- ○ It has a waterfall effect in raising ever more complex ethical issues.

- ○ It is beneficial for society as a whole, while raising dilemmas for consumers.

- ○ It has a dampening effect on the discourse of business ethics.

- ○ It has a ripple effect, raising new ethical, social, and political issues.

- ○ It has a magnifying effect, creating increasing numbers of ethical issues.

Maximum marks: 1

32   **32**

Which of the following is *not* one of the current key technology trends that raises ethical issues?
Select an alternative:

- ○ Advances in networking technology

- ○ Increase in use of mobile devices

- ○ Data storage improvements

- ○ Increase in data quality

- ○ Data analysis advancements

Maximum marks: 1

33   **33**

All of the following are steps in the process for analyzing an ethical issue *except:*
Select an alternative:

- ○ identifying and clearly describing the facts.

- ○ assigning responsibility.

- ○ identifying the stakeholders.

- ○ identifying the potential consequences of your options.

- ○ identifying the options you can reasonably take.

Maximum marks: 1

34 **34**

Which ethical rule states that if an action cannot be taken repeatedly, it is not right to take at all?
Select an alternative:

- ○ Slippery-slope rule

- ○ High-failure cost rule

- ○ Golden Rule

- ○ Utilitarian principle

- ○ Lemming rule

Maximum marks: 1

35 **35**

Which of the following ethical guidelines suggests that you put yourself in the place of others, and think of yourself as the object of the decision?
Select an alternative:

- ○ the utilitarian principle

- ○ the "no free lunch" rule

- ○ Kant's categorical imperative

- ○ the risk aversion principle

- ○ the Golden Rule

Maximum marks: 1

36 **36**

Which of the following restricts the information that the U.S. federal government can collect about an individual and regulates what it can do with the information?
Select an alternative:

- ○ The Gramm-Leach-Bliley Act

- ○ HIPPA

- ○ COPPA

- ○ The Privacy Act

- ○ The Freedom of Information Act

Maximum marks: 1

37 **37**

Which of the following U.S. laws gives patients access to personal medical records and the right to authorize how this information can be used or disclosed?

Select an alternative:

- ○ Privacy Protection Act
- ○ HIPAA
- ○ Gramm-Leach-Bliley Act
- ○ Freedom of Information Act
- ○ COPPA

Maximum marks: 1

38 **38**

The U.S. Department of Commerce developed a _____ framework in order to enable U.S. businesses to legally use personal data from EU countries.

Select an alternative:

- ○ P3P
- ○ FIP
- ○ safe harbor
- ○ PGP
- ○ COPPA

Maximum marks: 1

39 **39**

In the _____ model of informed consent, personal information can be collected until the consumer specifically requests that his or her data not be collected.

Select an alternative:

- ○ P3P
- ○ PGP
- ○ opt-out
- ○ opt-in
- ○ safe habor

Maximum marks: 1

40 **40**

What percent of global Internet users use Google Search and other Google services?
Select an alternative:

○ Nearly 80 percent

○ About 50 percent

○ Less than 10 percent

○ Around 25 percent

○ Over 90 percent

Maximum marks: 1

41 **41**

Place the following eras of IT infrastructure evolution in order, from earliest to most recent: 1. Cloud Computing Era; 2. Client/Server; 3. Enterprise Era; 4. Personal Computer; and 5. Mainframe and Minicomputer.
Select an alternative:

○ 5, 2, 3, 4, 1

○ 5, 4, 2, 1, 3

○ 4, 5, 2, 3, 1

○ 5, 4, 2, 3, 1

○ 4, 5, 3, 2, 1

Maximum marks: 1

42 **42**

Firms that allow employees to use their own devices are embracing which of the following?
Select an alternative:

○ Mobile consolidation

○ Wearable computing

○ Cloud computing

○ BYOD

○ Self computing

Maximum marks: 1

43

43

Interpretations of Moore's law assert that:
Select an alternative:

- ○ PCs decrease in market share by 9% every 5 years.

- ○ computing power will eventually level off.

- ○ data storage costs decrease by 50% every 18 months.

- ○ transistors decrease in size 50% every two years.

- ○ computing power doubles every 18 months.

Maximum marks: 1

44

44

The development of TCP/IP occurred during the _____ era.
Select an alternative:

- ○ enterprise computing

- ○ client/server era

- ○ general-purpose mainframe and minicomputer

- ○ cloud and mobile computing

- ○ personal computer

Maximum marks: 1

45

45

Which of the following is a multitasking, multi-user, operating system developed by Bell Laboratories that operates on a wide variety of computing platforms?
Select an alternative:

- ○ OS X

- ○ Linux

- ○ Unix

- ○ DOS

- ○ COBOL

Maximum marks: 1

46

_____are computers consisting of a circuit board with processors, memory, and network connections that are stored in racks.

Select an alternative:

○ Rack servers

○ Mainframes

○ Blade servers

○ Cloud servers

○ Hybrid servers

Maximum marks: 1

47

Which of the following is _not_ an example of the mobile digital platform?

Select an alternative:

○ Apps

○ CRM

○ Tablets

○ Cell phones

○ Kindle

Maximum marks: 1

48

At what percent of capacity do most servers operate?

Select an alternative:

○ 80-90%

○ 15-20%

○ approximately 70 percent

○ 40-50%

○ 100%

Maximum marks: 1

49

49

Which of the following enables a single physical resource (such as a server or a storage device) to appear to the user as multiple logical resources?

Select an alternative:

○ Cloud computing

○ Autonomic computing

○ Virtualization

○ Ubiquitous computing

○ Multicore processing

Maximum marks: 1

50

50

Which of the following types of computing involves purchasing computing power from a remote provider and paying only for the computing power used?

Select an alternative:

○ Edge

○ Quantum

○ On-demand

○ Grid

○ Autonomic

Maximum marks: 1

51

51

A characteristic or quality that describes a particular database entity is called a(n):

Select an alternative:

○ attribute.

○ field.

○ key field.

○ relationship.

○ tuple.

Maximum marks: 1

52

52

_____ creates confusion that hampers the creation of information systems that integrate data from different sources.

Select an alternative:

○ Online processing

○ Batch processing

○ Data redundancy

○ Data quality

○ Data independence

Maximum marks: 1

53

53

A(n) _____ represent data as two-dimensional tables.
Select an alternative:

○ relational DBMS

○ object-oriented DBMS

○ mobile DBMS

○ non-relational DBMS

○ hierarchical DBMS

Maximum marks: 1

54

54

Which of the following tools enables users to view the same data in different ways using multiple dimensions?
Select an alternative:

○ Hadoop

○ SQL

○ Predictive analysis

○ data mining

○ OLAP

Maximum marks: 1

55

A field identified in a table as holding the unique identifier of the table's records is called the:

Select an alternative:

- ⊙ primary key.

- ⊙ unique ID.

- ⊙ primary entity.

- ⊙ key field.

- ⊙ primary field.

Maximum marks: 1

56

The process of streamlining data to minimize redundancy and awkward many-to-many relationships is called:

Select an alternative:

- ⊙ data scrubbing.

- ⊙ optimization.

- ⊙ normalization.

- ⊙ data defining.

- ⊙ data cleansing.

Maximum marks: 1

57

A schematic of the entire database that describes the relationships in a database is called a(n):

Select an alternative:

- ⊙ entity-relationship diagram.

- ⊙ intersection relationship diagram.

- ⊙ data dictionary.

- ⊙ data definition diagram.

- ⊙ data analysis table.

Maximum marks: 1

58

58

A one-to-many relationship between two entities is symbolized in a diagram by a line that ends with:
Select an alternative:

○ three short marks.

○ two short marks.

○ a crow's foot topped by a short mark.

○ one short mark.

○ a crow's foot.

Maximum marks: 1

59

59

You are creating a database to store temperature and wind data from various airports. Which of the following fields is the most likely candidate to use as the basis for a primary key in the Airport table?
Select an alternative:

○ Address

○ Airport code

○ City

○ Day

○ State

Maximum marks: 1

60

60

All of the following are technologies used to analyze and manage big data *except:*
Select an alternative:

○ analytic platforms.

○ in-memory computing.

○ Hadoop.

○ noSQL

○ cloud computing.

Maximum marks: 1