MULTIPLE CHOICE (1% * 50 = 50%).　Choose the one alternative that best completes the statement or answers the question.

1) Converting raw data into a more meaningful form is called
A) processing.
B) organizing.
C) capturing.
D) feedback.

2) A managerial element in the UPS tracking system described in the chapter is
A) the decision to use automation.
B) taking inventory.
C) in-house package tracking software.
D) providing package status reports to customers.

3) An example of raw data from a national chain of automobile stores would be
A) 30 percent increase in Toyota RAV4 sales during September in Kentucky.
B) 1 Toyota RAV4 sold March 3, 2008 in Louisville, Kentucky.
C) an average of 13 Toyotas are sold daily in Kentucky.
D) all of the above.

4) _____ systems are designed to help firms manage their relationships with their customers.
A) MIS
B) CLE
C) CRM
D) CLU

5) Which of the following types of collaboration tools allows you to communicate with avatars using text messaging?
A) large audience Webinars
B) virtual worlds
C) screen sharing
D) collaborative writing

6) An example of a highly structured decision is
A) calculating the best trucking routes for product delivery.
B) granting credit to a customer.
C) estimating the effect of changing costs of supply materials.
D) creating a new product.

7) Barnes & Noble's apps for its e-reader, the Nook, is an example of a firm using information systems to
A) focus on market niche.
B) remove publishers from the industry value chain.
C) develop synergies with publishers.
D) strengthen ties to its customers.

8) The _____ model is used to describe the interaction of external forces that affect an organization's strategy and ability to compete.
A) network economics
B) competitive forces
C) demand control
D) competitive advantage

9) 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?
A) Freedom of Information Act
B) Gramm-Leach-Bliley Act
C) HIPAA
D) Privacy Protection Act

10) In the United States, the claim to privacy is protected primarily by each of the following *except*
A) COPPA.

B) Constitutional guarantees of freedom of speech and association.
C) Fourth Amendment protections against unreasonable search and seizure.
D) Privacy Act of 1974.

11) Connecting geographically remote computers in a single network to create a "virtual supercomputer" is called
A) edge computing.
B) co-location.
C) grid computing.
D) utility computing.

12) Which of the following is *not* an example of the emerging mobile computing platforms?
A) tablets
B) cell phones
C) CRM
D) the Kindle

13) The organization's rules for sharing, disseminating, acquiring, standardizing, classifying, and inventorying information is called a(n)
A) data definition file.
B) data quality audit.
C) data governance policy.
D) information policy.

14) *Big data* does *not* refer to
A) machine-generated data (i.e. from sensors).
B) data created by social media (i.e. tweets, Facebook Likes).
C) datasets with unstructured data.
D) datasets with fewer than a billion records.

15) What are the four layers of the TCP/IP reference model?
A) physical, application, transport, and network interface
B) application, hardware, Internet, and network interface
C) physical, application, Internet, and network interface
D) application, transport, Internet, and network interface

16) To use the analog telephone system for sending digital data, you must also use
A) a router.
B) a modem.
C) twisted wire.
D) DSL.

17) _____ controls ensure that valuable business data files on either disk or tape are not subject to unauthorized access, change, or destruction while they are in use or in storage.
A) Implementation
B) Administrative
C) Software
D) Data security

18) How do software vendors correct flaws in their software after it has been distributed?
A) re-release software
B) issue patches
C) issue bug fixes
D) issue updated versions

19) Selling a customer with a checking account a home improvement loan is an example of
A) direct marketing.
B) cross-channel promotions.
C) cross-selling.
D) operational CRM.

20) Supply chain _____ systems manage the flow of products through distribution centers and warehouses to ensure that products are delivered to the right locations in the most efficient manner.

A) demand
B) delivery
C) execution
D) planning

21) The process of sourcing goods and materials, negotiating with suppliers, paying for goods, and making delivery arrangements is called
A) e-procurement.
B) sourcing.
C) SCM.
D) procurement.

22) Which of the following best describes why small world theory is important to e-commerce?
A) The products bought online by one individual will influence purchases by others.
B) Global products create a global community.
C) The greater the number of people using your product, the more valuable it becomes.
D) You do not need to attract a large consumer base to become profitable.

23) Changing organizational behavior by sensing and responding to new experience and knowledge is called
A) change management.
B) organizational learning.
C) the knowledge value chain.
D) knowledge networking.

24) The five classical functions of managers are planning, organizing, deciding, controlling, and
A) managing.
B) coordinating.
C) leading.
D) negotiating.

25) Which process develops a detailed description of the functions that a new information system must perform?
A) systems design
B) test plan development
C) feasibility study
D) requirements analysis

26) Which of the following tools would you use to control risk factors in an information systems project?
A) external integration tools
B) internal integration tools
C) formal planning tools and formal control tools
D) A and B
E) A and C
F) all of the above

27) To avoid the cost and uncertainty of moving information across national boundaries, most multinational firms
A) develop separate systems within each country.
B) use microwave satellite transmission to move data.
C) maintain a master database at their head offices.
D) develop a master system that meets the standards of all the countries concerned.

28) Organizational culture is best described by which of the following statements?
A) It enables the organization to transcend the different levels and specialties of its employees.
B) It reflects the senior management's perspective on the organization and goals.
C) It encompasses the sum of beliefs and assumptions by all members.
D) It is a set of assumptions and values accepted by most members.

29) A _____ is a senior manager who oversees the use of IT in the firm.
A) CIO
B) CEO
C) CTO
D) CFO

30) A large bureaucracy existing in a slowly changing environment that produces standard products and is dominated by centralized management making is classified by Mintzberg as a _____ bureaucracy.
A) professional
B) divisionalized
C) machine
D) multidivisional

31) In general, it is very difficult to hold software producers liable for their software products when those products are considered to be
A) services.
B) artistic expressions.
C) similar to books.
D) part of a machine.

32) Which model can be used to analyze the direct and indirect costs to help firms determine the actual cost of specific technology implementations?
A) breakeven point
B) cost-benefit analysis
C) total cost of ownership
D) return on investment

33) DBMS for midrange computers include all of the following *except*
A) Oracle.
B) Microsoft SQL Server.
C) Microsoft Access.
D) DB2.

34) Instant messaging is a type of _____ service.
A) chat
B) wireless
C) e-mail
D) cellular

35) Pharming involves
A) pretending to be a legitimate business's representative in order to garner information about a security system.
B) setting up fake Web sites to ask users for confidential information.
C) redirecting users to a fraudulent Web site even when the user has typed in the correct address in the Web browser.
D) using e-mails for threats or harassment.

36) Supply chain software can be classified as either supply chain _____ systems or supply chain _____ systems.
A) upstream; downstream
B) planning; execution
C) demand; continual
D) push; pull

37) The effort required to locate a suitable product is called
A) search costs.
B) menu costs.
C) shopping costs.
D) price discrimination.

38) Which of the following systems is *not* used to capture tacit knowledge?
A) expert system
B) neural network
C) fuzzy logic
D) case-based reasoning

39) The concern that the structure of data is consistent within an information source reflects which quality dimension of information?
A) accuracy
B) integrity

C) consistency

D) validity

40) In the direct cutover conversion strategy, the new system

A) is introduced in stages.

B) replaces the old one at an appointed time.

C) and the old are run together.

D) is tested by an outsourced company.

41) The principal capital budgeting models for evaluating information technology projects are the payback method, the accounting rate of return on investment (ROI), the net present value, and the

A) external rate of return.

B) internal rate of return.

C) future present value.

D) ROPM.

42) Which types of systems are widely used by manufacturing and distribution firms to connect to suppliers on a global basis?

A) CRM systems

B) TPS systems

C) EDI systems

D) none of the above

43) The move of retail banking to use ATMs after Citibank unveiled its first ATMs illustrates the use of information systems to achieve which business objective?

A) survival

B) improved efficiency

C) competitive advantage

D) customer and supplier intimacy

44) What is the most important function of an enterprise application?

A) enabling business functions and departments to share information

B) enabling a company to work collaboratively with customers and suppliers

C) increasing speed of communicating

D) enabling cost-effective e-business processes

45) As described in the chapter case, the competitive force of _____ resulted in Starbuck's downturn in 2008, and it employed information systems in a strategy of _____ to combat this force.

A) traditional competitors; product differentiation

B) customers; customer intimacy

C) substitute products; market niche

D) new market entrants; product specialization

46) Which of the five moral dimensions of the information age does spamming raise?

A) quality of life

B) information rights and obligations

C) accountability and control

D) system quality

47) The marketplace for computer hardware

A) has expanded to include a wide variety of start-up and mobile-computing firms.

B) has been decimated by mobile and cloud computing.

C) has become increasingly concentrated in top firms.

D) has moved significantly to Asian firms.

48) You are creating a database to store temperature and wind data from national airport locations. Which of the following fields is the most likely candidate to use as the basis for a primary key in the Airport table?

A) airport code

B) city　C) state

D) address

49) Which protocol is the Internet based on?

A) packet-switching
B) FTP
C) TCP/IP
D) HTTP

50) All of the following are methods of ensuring software quality *except* for
A) internal corporate back-end system.
B) systems analysis.
C) software testing.
D) walkthroughs.

ESSAY (5% * 10 = 50%).　Write your answer in the space provided or on a separate sheet of paper.

1) What is the difference between information technology and information systems? Describe some of the functions of information systems.

2) What is the connection between organizations, information systems, and business processes?

3) Value chain analysis is useful at the business level to highlight specific activities in the business where information systems are most likely to have a strategic impact. Discuss this model, identify the activities, and describe how the model can be applied to the concept of information technology.

4) How does the use of electronic voting machines act as a "double-edged sword?" What moral dimensions are raised by this use of information technology?

5) A small design agency you are consulting for will be creating client Web sites and wants to purchase a Web server so they can host the sites themselves. How will you advise them on this purchase?

6) You have been hired by a national furniture leasing company to implement its first business intelligence systems and infrastructure. To prepare for your initial report, describe the types of data in their firm they can use to support business intelligence and the systems that you will implement to support both their power users and casual users, and explain how these systems or tools work together.

7) Identify the layers of the Department of Defense reference model for TCP/IP, and describe how this model works.

8) Discuss the issue of security challenges on the Internet as that issue applies to a global enterprise. List at least five Internet security challenges.

9) Identify five benefits of customer relationship management systems.

10) What methods could a portal use to generate revenue? Which do you think might be most successful, and why?