

CSM481 INFORMATION SYSTEMS I

Index Number

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TIME ALLOWED: 1 HOUR.

Answer ALL questions by *shading* the appropriate letter on the scannable form provided and circling the letter corresponding to the correct answer on the question paper.

1. The traditional systems lifecycle
 - I. has a very formal division of labor between end-users and information systems specialists.
 - II. is suitable for applications that need a rigorous and formal requirements analysis.
 - III. discourages freezing of specifications early in the development
 - a. I and II only
 - b. I and III only
 - c. II and III only
 - d. I only
2. The _____ stage of the system lifecycle determines whether or not the organization has a problem and whether or not the problem can be solved by launching a system project.
 - a. design
 - b. project definition
 - c. installation
 - d. system study
 - e. post implementation
3. The system lifecycle is
 - I. iterative
 - II. time-consuming
 - III. inflexible
 - IV. costly
 - a. I, & II only
 - b. I & III only
 - c. I, II & III only
 - d. II, III & IV only
 - e. III & IV only

4. A prototype
- I. is most useful when there is some uncertainty about requirements or design solutions
 - II. replaces unplanned work with planned iteration
 - III. is especially valuable for the design of end-user interfaces
 - IV. discourages end-user participation
- a. I & II only
 - b. I, III & IV only
 - c. II & III only
 - d. III & IV only
 - e. I, II & III only
5. Some of the disadvantages of prototyping are
- I. It may lack adequate testing
 - II. It may not easily accommodate large quantities of data in a production environment
 - III. Applications with extensive procedural logic and updating requirements cannot be handled
 - IV. It is likely that it may lack adequate requirements determination
- a. I & II only
 - b. II & III only
 - c. II, III & IV only
 - d. I, II, III & IV
 - e. I, II & III only
6. _____ encourages intense end-user involvement throughout the system development lifecycle.
- I. Traditional System lifecycle
 - II. End-user computing
 - III. Outsourcing
 - IV. Prototyping
- a. I, III & IV only
 - b. II, III & IV only
 - c. I & III only
 - d. II & IV only
 - e. I & IV only
7. Application software packages are
- I. for small desktop microcomputer systems
 - II. pre-designed, pre-tested and pre-maintained
 - III. supported by vendors
- a. I & II only
 - b. I & III only
 - c. I only
 - d. III only
 - e. I, II & III

8. With _____ system building, user requirements may have to be molded to the features of the software.
- outsourcing
 - end-user
 - prototyping
 - traditional systems lifecycle
 - application software package
9. A detailed list of questions submitted to vendors of packaged software to enable them evaluate the available packages in order to make a selection is known as _____.
- Evaluation criteria
 - Package evaluation
 - Evaluation list
 - Request for evaluation
 - Request for proposal
10. Information centers that provide support for end-users
- prevent the creation of redundant applications
 - establish and enforce standards for hardware and software
 - contract computer center operations or applications development to external vendors
 - promote data sharing and minimize integrity problems
- II, III & IV only
 - I, II & IV only
 - I & III only
 - II & IV only
 - I & IV only
11. Which of the following system development approaches can lead to a proliferation of uncontrolled information systems?
- outsourcing
 - prototyping
 - traditional systems lifecycle
 - application software package
 - end-user development
12. Which of the following system development approaches can lead to the loss of control over the information systems function?
- outsourcing
 - prototyping
 - traditional systems lifecycle
 - application software package
 - end-user development
13. The entire set of relationships between various sub-systems which contribute to the overall behavior of the system is referred to as the _____ of the system.
- relationships
 - interfaces
 - hierarchy
 - structure
 - emergent properties

14. _____ is often expressed in the saying that "a system is more than the sum of its parts".
- Efficiency
 - Effectiveness
 - Systems view
 - Holism
 - Reductionism
15. _____ is the measure for disorder or energy degradation.
- Feedback
 - Entropy
 - Holism
 - Reductionism
 - Equifinality
16. When information systems development for applications is measured by adherence to budget and development standards, this is a measure of _____.
- Control
 - Standards
 - Project management
 - Effectiveness
 - Efficiency
17. Which level of managerial decision making are made up of business professionals in self-directed teams as well as business unit managers who develop short and medium-range plans, schedules, and budgets?
- Operational management
 - Tactical management
 - Knowledge management
 - Strategic management
 - Executive management
18. If you can check information to make sure that it is correct, perhaps by checking many different sources for the same information, then it is _____.
- Secure
 - Accurate
 - Reliable
 - Complete
 - Verifiable
19. Which of these is most closely associated with system control?
- boundary
 - environment
 - feedback
 - interface
 - outputs
20. Which of these is the most personalized?
- data-processing systems
 - decision support systems
 - expert systems
 - management information systems
 - office automation systems

21. Which of these systems allows management to think about strategic problems?
- group decision support systems.
 - expert systems
 - management information systems
 - executive support systems
 - decision support systems
22. When groups need to work together to make semistructured or unstructured decisions, a solution is to use a(n):
- executive support system.
 - group decision support system.
 - expert system.
 - knowledge work system.
 - Neural nets
23. The nesting of systems within systems and within systems is referred to as system _____.
- emergent properties
 - interfaces
 - hierachy
 - structure
 - design
24. Which of these focuses primarily on supporting information and knowledge work?
- Artificial intelligence systems
 - Office automation systems
 - Data mining systems
- I only
 - I and II only
 - II and III only
 - I and III only
 - I, II & III
25. Which of these are not considered part of office automation system?
- document creation and processing
 - codified knowledge
 - high speed digital communication service
 - powerful workstation
- I and II only
 - II and III only
 - III and IV only
 - II and IV only
 - IV only
26. A document imaging system may include _____.
- High resolution scanners
 - Workstations and disk
 - Index servers
 - Optical disk drivers

- a. I and II only
- b. I and III only
- c. II and III only
- d. I, II and III
- e. I, II, III and IV

27. Knowledge workers perform the following roles.

- I. Serve as internal consultants on the areas of their knowledge
- II. Manage documents including document creation, storage, retrieval and dissemination
- III. Keep the organizations up-to-date in knowledge as it develops in the external world.
- IV. Acts as change agents - evaluating, initiating and promoting change projects

- a. I and II only
- b. I and III only
- c. II and III only
- d. III and IV only
- e. I, III and IV

28. Which of these is true of DSS? It _____.

- I. makes use of sophisticated analytical models
- II. supports group organizational decision-making
- III. can support semi-structured decision making
- IV. is used to organize and evaluate ideas.

- a. I & II only
- b. I & III only
- c. I, II & III only
- d. I, II, & IV only
- e. I, II, III & IV only

29. Groupware systems allows groups of people to work together on documents and also

- I. schedule meetings
- II. route electronic forms
- III. develop shared databases
- IV. create and provide a collaborative meeting atmosphere

- a. I and II only
- b. II and III only
- c. I and IV only
- d. I, II and III only
- e. I, III and IV only

30. Existing artificial intelligence systems

- I. are based on human expertise and knowledge
- II. do come up with new and novel solutions to problems.
- III. lack the common sense and generality of human beings
- IV. lack the ability to create metaphors and analogies

- a. I and II only
- b. II and IV only
- c. III and IV only
- d. I, II and III only
- e. I, III and IV only

31. The most important factors in DSS success are

- I. Its use of sophisticated IT
- II. Novelty of application
- III. User training and involvement in its development

- a. I and II only
- b. I and III only
- c. II and III only
- d. I, II and III only
- e. III only

32. For a good quality and effective meeting, one can turn to _____.

- I. Executive Support Systems
- II. Decision Support Systems
- III. Group Decision Support Systems
- IV. Groupware

- a. I and II only
- b. II and III only
- c. III and IV only
- d. II and IV only
- e. III only

33. An electronic meeting system will have

- I. Workstations
- II. File Server
- III. Overhead projectors

- a. I and II only
- b. I and III only
- c. II and III only
- d. I, II and III
- e. III only

34. Which models ask 'What if' questions repeatedly to determine the impact of changes in one or more factors or outcomes?

- a. Statistical models
- b. Optimization models
- c. Forecast models
- d. Sensitivity analysis models
- e. None of the above

35. Which of these GDSS tools aid meeting organizers in pre-meeting planning?

- I. Group Dictionaries
- II. Electronic brainstorming tools
- III. Electronic questionnaires

- a. I only
- b. II only
- c. III only
- d. I and II only
- e. II and III only

36. Which of these GDSS software tools allows individuals to simultaneously and anonymously contribute ideas on the topic of a meeting?
- I. Electronic questionnaires
 - II. Electronic brainstorming tools
 - III. Idea organizers
- a. I only
 - b. II only
 - c. III only
 - d. I and II only
 - e. II and III only
37. When a feedback loop reinforces the current behaviour of a system, this is referred to as _____.
- a. feedback
 - b. feedback control
 - c. cybernetics
 - d. negative feedback
 - e. positive feedback
38. Which of the following is **not** a characteristic of a TPS?
- a. Small amounts of data are processed
 - b. Sources of data are mainly internal
 - c. There is low computational complexity
 - d. There is high level of accuracy, data integrity, and security
 - e. There is high level of detail
39. Which of the following is **not** a characteristic of a structured decision?
- a. Its routine
 - b. Structured solution exists
 - c. Human intuition is involved
 - d. Known algorithms provide solution
 - e. Its repetitive
40. A system that exhibits more activity is said to be _____.
- a. Open
 - b. Artificial
 - c. Continuous
 - d. Deterministic
 - e. Dynamic
41. The general principle in decomposition which assumes that components are considered to be part of the same subsystem if they perform or are related to the same function is _____.
- a. simplification
 - b. functional cohesion.
 - c. Decoupling
 - d. suboptimization
 - e. factorization

42. The following are examples of business intelligence tools.

- I. Enterprise Resource Planning
- II. Knowledge management systems
- III. Transaction Processing Systems
- IV. Online Analytical Processing

- a. I & II only
- b. I & III only
- c. II & III only
- d. III & IV only
- e. II & IV only

43. "Flatter organizations"

- I. Is synonymous with virtual organizations
- II. Have lower-level employee being given greater decision making authority
- III. Have automated work processes and procedures

- a. I & II only
- b. I & III only
- c. II & III only
- d. II only
- e. I, II & III

44. Which of the following characteristics do data in Transaction Processing Systems have? They are:

- I. processed in distributed fashion
- II. routine and recur often
- III. processed only in batch mode
- IV. organized to provide quick answers to user queries

- a. I & II only
- b. I & III only
- c. II & III only
- d. II & IV only
- e. III & IV only

45. _____ refers to the ability to look at the database from different viewpoints.

- a. Consolidation
- b. Slicing and dicing
- c. Data mining
- d. Knowledge discovery
- e. Drill-down

46. The following are all examples of TPS except _____
- Hotel Reservation Systems
 - Inventory Control Systems
 - Shipping
 - Employee Record Keeping
 - Sales order entry
47. Which of these types of Information Systems is used by middle managers?
- MIS
 - DSS
 - KWS
 - ESS
- I and II only
 - I and III only
 - I and IV only
 - II only
 - IV only
48. Which of these types of information systems use compressed transaction data from TPS and usually presents long reports that are produced on a regular basis?
- TPS
 - OAS
 - MIS
 - KWS
 - ESS
49. _____ provide support for decisions and problems whose solutions cannot be specified in advance.
- MIS
 - OAS
 - DSS
 - ESS
 - GDSS
50. Data mining is used to aid in
- operational management
 - analyzing past decision made by managers
 - detecting patterns in operational data
 - retrieving archival data
 - providing fast access to massive amounts of data
51. _____ is the distribution of processed information to the people or activities where it will be used.
- Networks
 - Groupware
 - Output
 - Feedback
 - Interface

52. Which of these is true of Management level systems?
- I. Some tend to focus on less structured decisions for which information requirements are not clear.
 - II. They provide periodic reports rather than instant information on operations.
 - III. They match changes in the external environment with existing organizational capabilities.
- a. I and II only
 - b. I and III only
 - c. II and III only
 - d. I only
 - e. II only
53. The purpose of _____ system is to help the business firm integrate new ideas into the business and to help the organization control the flow of paper work.
- a. Operations level
 - b. Knowledge level
 - c. Managerial level
 - d. Strategic level
 - e. Transaction level
54. Information systems may be considered as _____ systems.
- I. Open
 - II. Artificial
 - III. Deterministic
 - IV. Static
- a. I, II, and III only
 - b. I, II and III, IV
 - c. II, III and IV only
 - d. I and III only
 - e. I and II only
55. The interconnections and interactions between subsystems are termed _____.
- a. boundaries
 - b. interfaces
 - c. data
 - d. feedback
 - e. input/output
56. The features which define and delineate a system from it's _____.
- a. interface
 - b. boundaries
 - c. environment
 - d. black box
 - e. process
57. A subsystem at the lowest level which has its inputs and outputs defined but not how the inputs are transformed to outputs are termed as a _____.
- a. black box
 - b. module
 - c. suprasystem
 - d. units
 - e. components

58. A system that designs promotional display for a firm's product should be a _____ level system under the sales function.

- a. Operational
- b. Strategic
- c. Management
- d. Knowledge
- e. Transaction

59. Which of these are considered as knowledge assets?

- I. Knowledge-intensive technology
- II. Financial assets
- III. Core competencies

- a. I & II only
- b. I & III only
- c. II & III only
- d. I, II, & III only
- e. I only

60. The fastest-growing Information Systems applications for over a decade has been

- I. Transaction processing systems
- II. Office automation systems
- III. Professional work systems

- a. I & II only
- b. I & III only
- c. II & III only
- d. I, II, & III only
- e. II only

61. Compared to data workers, knowledge workers

- I. routinely exercise independent judgment.
- II. process data into information for research
- III. are members of professional organizations
- IV. are responsible for office activities.

- a. I & II only
- b. II & III only
- c. III & IV only
- d. I & III only
- e. I & IV only

62. Knowledge work systems require

- I. quick and easy access to external databases
- II. great computing power to rapidly handle complex calculations and sophisticated graphics
- III. expert systems
- IV. user-friendly interface

- a. I, II & III only
- b. I, II & IV only
- c. II, III & IV only
- d. I, & II only
- e. II & IV only

_____ systems automate the creation and revision of design, using computers and sophisticated graphics software.

- a. CAD
- b. CAM
- c. Virtual reality
- d. Expert
- e. Desktop publishing

64. The basic components of a DSS include

- I. a model base
- II. a database
- III. a inference engine
- IV. an intranet

- a. I & II only
- b. II & III only
- c. II, III & IV only
- d. I, II, & III only
- e. III only

65. Which of these models of DSS would use linear programming to determine the best resources allocated to maximize or minimize specific variables such as cost or time?

- a. sensitivity analysis models
- b. forecasting models
- c. decision models
- d. regression analysis models
- e. optimization models

66. Specific GDSS software tools include the following

- I. Digital imaging tools
- II. Electronic brainstorming tools
- III. Group dictionaries

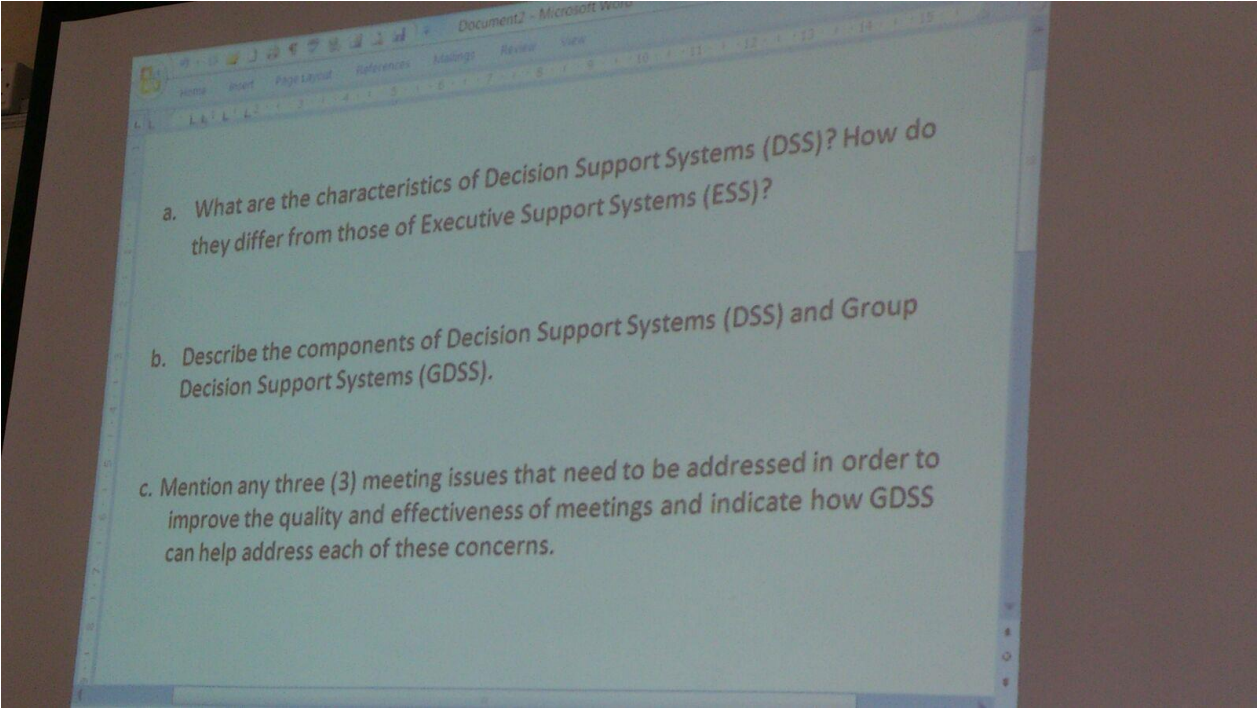
- a. I & II only
- b. I & III only
- c. II & III only
- d. I, II, & III only
- e. I only

67. The new manager relies on

- I. informal commitments and networks to establish goals
- II. a flexible arrangement of teams and individuals working in task forces
- III. nearly instant information.

- a. I & II only
- b. I & III only
- c. II & III only
- d. II only
- e. I, II & III

68. The managers' conventional responsibilities include
- I. perceiving business challenges in the environment
 - II. Setting the organizational strategy for responding to challenges,
 - III. creating new products and services
- a. I & II only
 - b. I & III only
 - c. II & III only
 - d. III only
 - e. I, II & III
69. For a large organisations to achieve some of the agility and responsiveness of small organisations information technology can be use to
- I. analyzing massive databases of customers purchasing records to know their customers' needs and preferences as easily as local merchants
 - II. control tools that provide the precision, speed and quality of giant manufacturers.
 - III. keeping track of inventory with very few clerks and managers
- a. I & II only
 - b. I & III only
 - c. II & III only
 - d. I only
 - e. I, II & III
70. Interorganisational systems that provide services to multiple organisations by linking together many buyers and sellers create an electronic market that provide lowered cost for typical market transactions such as
- I. advertising
 - II. establishing prices
 - III. ordering goods
 - IV. selecting suppliers
- a. I & III only
 - b. II & IV only
 - c. I, II & III only
 - d. II, III & IV only
 - e. I, II, III & IV

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- a. What are the characteristics of Decision Support Systems (DSS)? How do they differ from those of Executive Support Systems (ESS)?
- b. Describe the components of Decision Support Systems (DSS) and Group Decision Support Systems (GDSS).
- c. Mention any three (3) meeting issues that need to be addressed in order to improve the quality and effectiveness of meetings and indicate how GDSS can help address each of these concerns.