

**Module 3 – OOSAD using UML****Chapter 01: Information Systems – What Are They?**

Q1. Which one, you think, has brought immense change to the scope and nature of information systems?

- A. The application of Internet
- B. The application high-speed communication
- C. The application of information technology (IT)
- D. The rise of global market in modern times

**Answer: C [See page 1 for details]**

Q2. Which of the following is or are the elements of an IS?

- A. A human activity that needs information
- B. Some stored data
- C. An input method for entering data
- D. Some process that turns the data into information
- E. An output method for representing information
- F. Human operators to operate and make the system functional

**Answer: A, B, C, D, E [Some IS run without human operators]**

Q3. Which of the following is or are the typical advantages of using computers in a IS?

- A. High speed
- B. Low cost
- C. Low risk
- D. Reliability

**Answer: A, B, D [Computers bring risks in new dimension, see slide 5 of chapter 01]**

Q4. All useful systems \_\_\_\_\_ their inputs into useful outputs.

Which one best fits the blank space?

- A. deliver
- B. calculate
- C. transform
- D. magnify

**Answer: C [We build the system for this transformation]**

Q5. Which one is most important element of a system that endures?

- A. Boundary
- B. Environment
- C. Control mechanism
- D. Input

**Answer: C [All reliable and durable system has a control mechanism of some kind. See page 6]**

Q6. \_\_\_\_\_ allows communication between two systems.

Pick the most appropriate for the blank.

- A. An interface
- B. A control
- C. A subsystem
- D. A feedback loop

**Answer: A**

Q7. A system receives inputs from its \_\_\_\_\_.

Pick the most appropriate for the blank.

- A. environment
- B. boundary
- C. subsystems
- D. control mechanism

**Answer: A**

Q8. Many systems have a specialist sub-system whose function is to control the operation of the system as a whole. What do we call this type of sub-system?

- A. Control sub-system
- B. Balancing sub-system
- C. Interface
- D. Boundary

**Answer: A**

Q9. In some approach, inputs are fed into the system and outputs are delivered to the environment but internal processing is hidden. What do we call this type of approach?

- A. Hidden approach
- B. Sand-box approach
- C. Black-box approach
- D. Encapsulation approach

**Answer: C**

Q10. Control in a system relies on either \_\_\_\_\_ or \_\_\_\_\_.

- A. Checking
- B. Balancing
- C. Feedback

D. Feed-forward

**Answer: C, D**

Q11. Which of the following is or are the typical advantages of computers?

- A. High speed
- B. Low cost
- C. Reliability
- D. Intelligence

**Answer: A, B, C**

Q12. \_\_\_\_\_ assist or control business operations.

- A. Operational systems
- B. Real-time control systems
- C. Management support systems
- D. Control Systems

Answer: A

Q13. Which one of the following is responsible for identifying the hardware components and configuration for implementing an IS strategy in an organization?

- A. Business strategy
- B. IS strategy
- C. IT strategy
- D. IS modeling

**Answer: C**

Q14. All useful systems transform their inputs into useful outputs. This transformation is the whole reason for building and operating the system.

Do you agree?

- A. Yes
- B. No

**Answer: A**

Q15. A system contains a set of subsystems. Each subsystem is a system of its own right. Is it true?

- A. Yes
- B. No

**Answer: A**

Q16. Which type of control mechanism samples system's input rather than output?

- A. Feedback
- B. Feed-forward

**Answer: A**

Q17. Which of the following is or the role of a computer in an IS?

- A. Storage
- B. Display
- C. Calculation
- D. Communication

**Answer: A, B, C, D**

Q18. Which one correctly defines the **black box** approach?

- A. It treats a system an opaque box whose inputs and outputs are not known
- B. It treats a system an opaque box whose internal workings are hidden completely hidden
- C. It treats a system as an opaque box which takes inputs but delivers no outputs
- D. It treats a system as an opaque box which takes no inputs but delivers outputs

**Answer: B [Encapsulation in OOP is an example of black box approach]**

Q19. Some features of a system does not present in any of its component but in the whole system. What do we call this type of properties?

- A. Control property
- B. Emergent property
- C. Feedback
- D. Feed-forward

**Answer: B**

Q20. \_\_\_\_\_ typically operate physical equipment, often in safety-critical settings.

Which one best fits the blank.

- A. Operational Systems
- B. Management support Systems
- C. Real-time Control Systems
- D. Security Systems

**Answer: C**