

What are three different factors that contribute to software usability?

System Life Cycle Design Category

Quality,
Speed, and
Accuracy

INCORRECT

Readability, Simplicity, and Graphics

INCORRECT

Learnability,
Memorability, and
Discovery

CORRECT!



Qualitative data are data described verbally or graphically, and the results are subjective, depending on observers to provide information.



Data Management and Health Care Technology Category



Bandura's theory of social learning proposes that learning develops from observation, organizing, and rehearsing behavior that has been modeled. What are the four conditions required for modeling?

Foundations of Practice

Category

Environment,
Antecedents,
Enforcement, and
Rewards

INCORRECT

Awareness, Receptivity, Adaptation, and Replication

INCORRECT

Attention, Retention, Reproduction, and Motivation

CORRECT!



Black Box is a form of functional testing that determines what?

System Design Life Cycle Category

If an input results in the correct output

CORRECT!

If a graphical user interface meets end user expectations

INCORRECT

If the system can function after introduction of a new component

INCORRECT



NEXT SLIDE

What are the three factors to consider in a physical database design

Data Management and Health Care Technology Category

Operating system, RAM, and query language

INCORRECT

Queries, Updates, and Performance

CORRECT!



Redundancy, operating system, and security

INCORRECT

NEXT SLIDE



Structured query language (SQL) is a fourth-generation programming language that includes which elements?

System Life Cycle Design Category

Clauses, Expressions, Predicates, Queries, and Statements

CORRECT!

HL-7 structure, If-Then logic, Nodal reasoning, and Boolean truth values

INCORRECT

ANSI paradigm, Nodal reasoning, Command structure, and Boolean truth values

INCORRECT

NEXT SLIDE

What are three main threats for information stored in computerized systems?

Data Management and Health Care Technology Category

Theft, fraud, and malware

INCORRECT

Degradation, piracy, and corruption

INCORRECT

Quality, Availability, and Confidentiality

CORRECT!



The theory of reasoned action developed by **Martin Fishbein** and Icek Ajzen in 1975 is based on the premise that people's actions can be predicted based on their attitude and perceptions regarding a given action. What are the 3 basic concepts of the theory?

Foundations of Practice Category

External Influence,
Internal Determination,
and Perceived Threat

INCORRECT

Attitudes, Subjective Norms, and Behavioral Intention

CORRECT!

Social Determination, Decisive Aptitude, and Enforced Norms

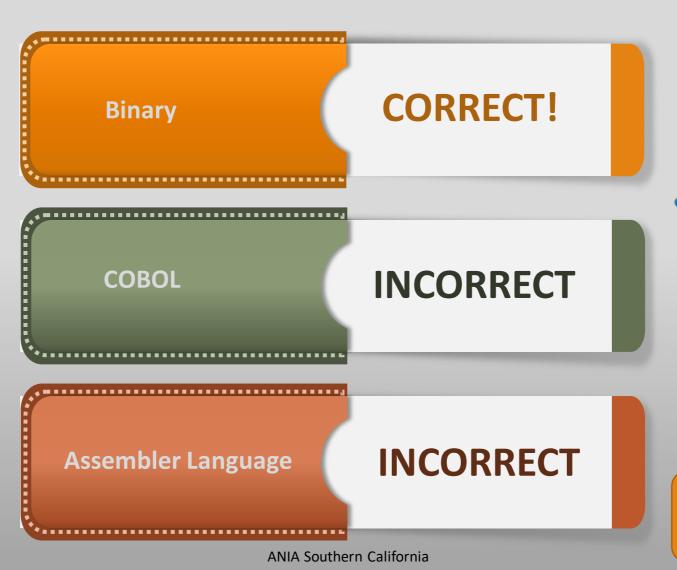
INCORRECT



NEXT SLIDE

All computer software is written in a specific programming language which have been divided into five separate generations based on how close they mimic human language. What was the first-generation programming language?

System Design Life Cycle Category



Relational databases have largely been replaced with Hierarchical databases.

Data Management and Health Care Technology Category





FALSE

CORRECT!

NEXT SLIDE

Necessary steps when upgrading or implementing an information system are:

- Planning and administration of project
- Delivery of hardware and software
- Program installation
- Policies and Procedures
- Training
- Maintenance and support

Systems Design Life Cycle Category





CORRECT!!!



INCORRECT

Discrete data are usually used to represent the count of something and are those having a specific value and cannot be further quantified.

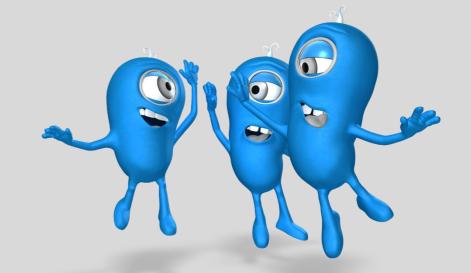
Data Management and Health Care Technology Category



Change theory
was developed
by Kurt Lewin
and modified by
Edgar Schein. This
management
theory is based
on three stages:

- Motivation to change (unfreezing)
- Desire to change (unfrozen)
- 3. Development of permanent change (refreezing)

Foundations of Practice Category



TRUE

CORRECT!!!

FALSE

INCORRECT

NEXT SLIDE

Attributes are assigned to data that an organization collects. What are the two important pieces of information that must be assigned to attributes?

Data Management and Health Care Technology Category

Name and Domain

CORRECT!

Value and Hierarchy

INCORRECT

Identifier and Unique Code

INCORRECT



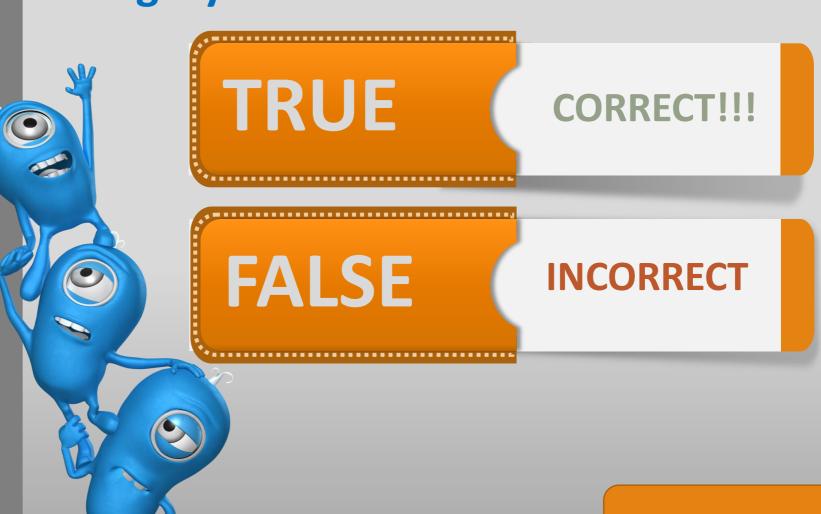
NEXT SLIDE

Murray Bowen's family systems theory consists of 8 interrelated concepts:

- 1. Triangle theory
- 2. Self-differentiation
- 3. Nuclear family patterns
- 4. Projection within a family
- 5. Transmission
- 6. Emotional isolation
- 7. Sibling order
- 8. Emotional process

Foundations of Practice Category

NIA Southern California

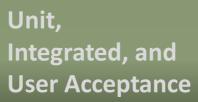


Systems integration testing (SIT) is a part of software/hardware testing that determines if hardware or software applications can work together. What are different approaches to SIT?

System Design Life Cycle Category

Big Bang,
Top Down, and
Bottom Up

CORRECT!

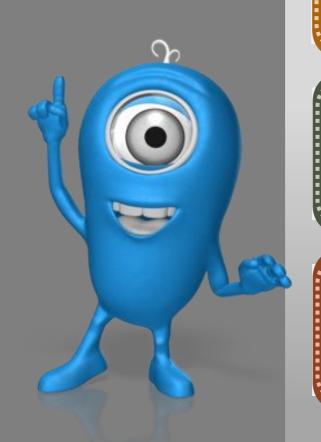


INCORRECT

Proof of Concept,
Integrated, and
Workflow Dress Rehearsal

INCORRECT

What areas are sometimes found to be deficient with a disaster recovery plan?



Data Management and Health Care Technology Category

Clinician Compliance, Recovery Time, Communication, and Support

INCORRECT

Documentation, Equipment, Data Storage, and an Updated Plan

CORRECT!

Metrics, Redundancy, Communication, and Recovery Time

INCORRECT



NEXT SLIDE

What are the five types of malicious computer programs?

Foundations of Practice Category

Viruses, Trojan Horses, Phishing Bots, Mimics, and Hostile Syntax

INCORRECT

Viruses, Worms, Trojan Horses, Logic Bombs, and Bacteria

CORRECT!

Malware, Viruses,
Phishing Bots, SQL
Injection, and Worms

INCORRECT

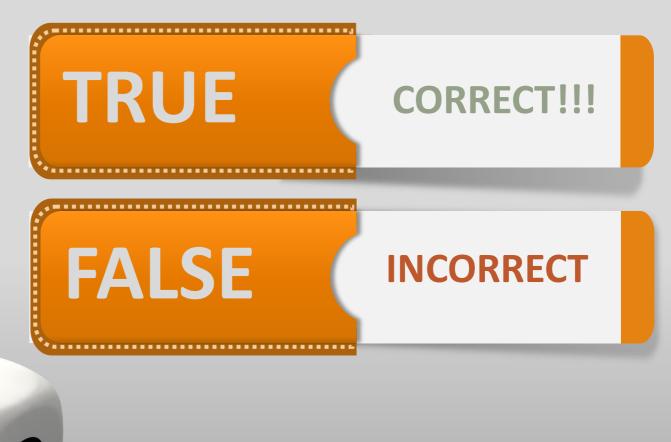


NEXT SLIDE

Closed systems are selfcontained and isolated from the environment. With the exception of an external energy source, closed systems do not receive input from the environment and all output is contained within the system. In computing, when the source code is locked by the vendor, the program acts as a closed system.

System Design Life Cycle Category

ANIA Southern California



Clinical decision support systems (CDSS) are designed for nonpatient care staff who provide a variety of supportive and administrative health care functions.

Data Management and Health Care Technology Category



INCORRECT



CORRECT!

Bloom's taxonomy outlines behaviors necessary for learning. What are the three types of learning described by the theory?

Foundations of Practice Category

Cognitive, Affective, and Psychomotor

CORRECT!

Asynchronous, Facilitated, and Independent

INCORRECT

Spontaneous, Vicarious, and Intentional

INCORRECT



NEXT SLIDE

Data conversion/ Migration occurs when data are translated from one format to another. During implementation of a new system, data migration must occur for the new system to use legacy data. What are the primary stages to the migration of data?

System Design Life Cycle Category

Setting scope,
Smoke screen testing,
and Execution

INCORRECT

Scrubbing, Aligning, and Packaging

INCORRECT

Planning,
Performance, and
Validation

CORRECT!



NEXT SLIDE

What are three tools that data mining uses to look for patterns?

Data Management and Health Care Technology Category

Association Rule
Mining, Classification,
and Clustering

CORRECT!

Boolean Logic, Data Spikes, and Mnemonic Patterns

INCORRECT

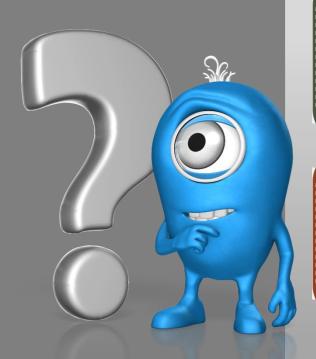


Query Language, Redundant Loops, and Delphi Searches

INCORRECT

NEXT SLIDE

What are two main concerns for Informaticists related to the collection and storage of patient computer records?



Foundations of Practice Category

Integrity and Continuity

INCORRECT

Retrieval and Accuracy

INCORRECT

Privacy and Confidentiality

CORRECT!

Stand Alone Systems are also called dedicated or turnkey systems and are used only for a specific function that does not require connectivity.



Data Management and Health Care Technology Category



NEXT SLIDE

The System Development Life Cycle is divided up into what four phases?



System Design Life Cycle Category

Needs Assessment,
System Selection,
Implementation, and
Maintenance

CORRECT!

Proposal,
Planning,
Execution, and
Evaluation

INCORRECT

Needs Assessment, Proof of Concept, Testing, and Acceptance

INCORRECT

NEXT SLIDE

What are the four main categories of threat to a computer system which can incapacitate it?

Foundations of Practice Category

Environmental
Disasters, Human Error,
Equipment Failure, and
Human Mischief

CORRECT!

Circuit
Overload/Surge,
Malware, Moisture,
and Human Error

INCORRECT

Viruses, Heat, Moisture, and Fine Particles (Dust)

INCORRECT

NEXT SLIDE

A user interface allows interaction between the user and the machine, permitting the user to make input and to see output as a result. Which are examples of user interfaces?

System Design Life Cycle Category

Thin-Client, Full-Client, Handheld, and Projected

INCORRECT

High Resolution,
Intuitive, Interactive,
and Simultaneous

INCORRECT

Graphical User,
Gesture, Natural
Language, and Zero
Input

CORRECT!



Data aggregation refers to:

Data Management and Health Care Technology Category

The ability to reproduce data sets in a non-production environment.

INCORRECT

Secure storage of data that is highly sensitive.

INCORRECT

The collection and summation of data for further use.

CORRECT!



A simplistic definition of systems theory is that a system is more than the sum of its parts and it not equal to the function of its individual parts.

System Life Cycle Design Category



CORRECT!!!



INCORRECT



NEXT SLIDE

Measures of averages locate the center point of a group of data. Mode is one of these measures that indicates?

Data Management and Health Care Technology Category

The 50th percentile.

INCORRECT

The number occurring with the highest frequency.

CORRECT!



The average taken across the entire distribution of data.

INCORRECT

NEXT SLIDE

What are four types of teaching models?

Foundations of Practice Category

Classroom, Virtual, Asynchronous, and Project-based

INCORRECT

Anchored, Cooperative, Guided Focus, and Goal Focused

CORRECT!

Direct Instruction, Computer Module, Self-Study, and Facilitated

INCORRECT

NEXT SLIDE

What are the three basic forms of data representation?

Data Management and Health Care Technology Category

Verbal, Analog, and Digital

CORRECT!

Graphical, Narrative, and Schematic

INCORRECT

Linear, Numeric, and Graphical

INCORRECT



NEXT SLIDE

What are the three components of the system selection process?

System Design Life Cycle Category

Vendor comparison,
System demonstration,
and
Cost comparison

INCORRECT

Needs Assessment, Request for Proposal (RFP), and Contract Negotiation

CORRECT!

Cost-Benefit Analysis, Gap Assessment, and User Acceptance

INCORRECT

NEXT SLIDE



What two steps are performed for data transformation?

Data Management and Health Care Technology Category

Data Scrubbing and Regression Analysis

INCORRECT

Data Mapping and Code Generation

CORRECT!

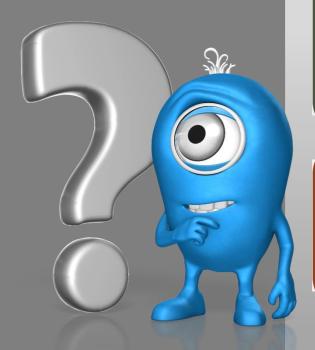
Conversion Analysis and Universal Character Set Assignment

INCORRECT



NEXT SLIDE

Betty Neuman's total person systems model of nursing focuses on an individual's reaction to stress with which types of interventions?



Foundations of Practice Category

Psychosocial, Pharmaceutical, and Physical

INCORRECT

Reframing, Removal, and Retraining

INCORRECT

Primary,
Secondary, and
Tertiary

CORRECT!

A feasibility study will help to define the problem(s) that a new information system is expected to address. What other questions should it answer?

System Design Life Cycle Category

Marketing, User Acceptance, and Lifespan

INCORRECT

Cost, Goals, and Specific Outcomes

CORRECT!

Specific Team
Members, Testing
Strategy, and Project
Tools

INCORRECT



NEXT SLIDE

What are the three major classes of computers?

Data Management and Health Care Technology Category

Supercomputer,
Mainframe Computer,
and Minicomputer

INCORRECT

Cloud-Based, Virtual Machines, and Physical Towers

INCORRECT

Analog, Digital, and Hybrid

CORRECT!



Hildegard Peplau's interpersonal relations model of nursing focuses on the quality of the nurse-client interaction with the premise that patients deserved human care by educated nurses and should be treated with dignity and respect.



Foundations of Practice Category



A scattergram is a graphic display of three or more variables plotted on a graph and with enough data input will begin to form a pattern.

Data Management and Health Care Technology Category





FALSE

CORRECT!

NEXT SLIDE

Patricia Brenner developed the stages of clinical competence for nurses based on the Dreyfus **Model of Skill** Acquisition. What are the five stages?

Foundations of Practice Category

Entry, Awareness, Internalization, Proficiency, and Mentor

INCORRECT

Novice, Advanced
Beginner, Competent,
Proficient, and Expert

CORRECT!

Introductory,
Awareness,
Demonstration,
Competent, and Expert

INCORRECT

NEXT SLIDE

List three classification systems used in nursing informatics.

System Design Life Cycle Category

AMA, NNCS, and HCIS-N

INCORRECT

NANDA-1, NIC, and NOC

CORRECT!

NNCS, ANCC, and NAANI

INCORRECT



What are the four different types of networks?

Data Management and Health Care Technology Category

Local Area, Metropolitan Area, Wide Area, and Internet

CORRECT!

Local Area, Federal, Private, and Public

INCORRECT



Fiber Optic, Wireless, Cable, and Satellite

INCORRECT

NEXT SLIDE

What steps are involved in administering the system implementation process?

System Design Life Cycle Category

Identify stakeholders, Team building, Build the system, and Test the system

INCORRECT

Develop a schedule,
Assign tasks, Establish
communication plan,
and Test the system

............

CORRECT!

Feasibility study,
Budgeting, Gain end
user acceptance,
Review lessons learned

INCORRECT



NEXT SLIDE

Systems theory, developed by **Ludwig von** Bertalanffy, is an approach that considers an entire system holistically in which all of the elements of a system and their interrelationships need to be understood. What are the five elements of a system?

Foundations of Practice Category

Holism, Specificity, Interrelationships, Structure, and Throughput

INCORRECT

Components, interrelationships, Structure, Connectivity, and Value

INCORRECT

Input, Throughput, Output, Evaluation, and Feedback

CORRECT!



NEXT SLIDE

Functional testing is performed in the development phase of a system and is done from the perspective of the build analyst or programmer.

System Design Life Cycle Category



TRUE

INCORRECT

FALSE

CORRECT!

What are the four different types of data?

Data Management and Health Care Technology Category

Qualitative, quantitative, primary, and secondary

CORRECT!

Quantitative, quantitative, discrete, and non-discrete

INCORRECT



Discrete, non-discrete, linear, and parametric.

INCORRECT

NEXT SLIDE

Logical **Observation Identifiers Names** and Codes (LOINC) is a manual used to cross-reference **CMS** reimbursement rates for private sector insurance companies.

System Design Life Cycle Category



TRUE

INCORRECT

FALSE

CORRECT!

Computer Science began before modern computers were invented and is the study of how information is manipulated to solve problems or answer questions.

Foundations of Practice Category



CORRECT!!!



INCORRECT

NEXT SLIDE

It is not a requirement to use mathematical formulas to code data, also known as encryption, when transmitting patient information from a database to another location.

Foundations of Practice Category





What are the six elements necessary in the formation of a system?

System Design Life Cycle Category

Concept, Research,
Requirements,
Measurement,
Execution, and Analysis

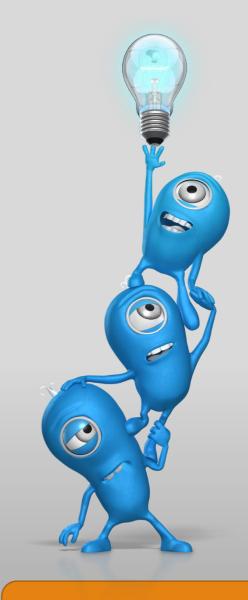
INCORRECT

Interdependency,
Inputs, Process,
Output, Control, and
Feedback

CORRECT!

Proposal, Evaluation,
Plan, Assignments,
Execution, and
Maintenance

INCORRECT



NEXT SLIDE



Dorothy Orem's general theory of nursing is actually a collection of what three theories?

Foundations of Practice Category

Self-care,
Self-care Deficit, and
Nursing Systems

CORRECT!

Holism, Evidence-Based, and Unconditional Regard

INCORRECT

Interpersonal, Transformational, and Unitary

INCORRECT

ICD codes were developed by CMS and are used to track sociocultural variances based upon patient self reporting

Data Management and Health Care Technology Category





INCORRECT

FALSE

CORRECT!

Load or volume testing is a type of nonfunctional reliability testing that evaluates the system's ability to function under different loads and must be completed after the system is live.

System Design Life Cycle Category



INCORRECT

FALSE

CORRECT!



The Unicode standard coding scheme is a standardized coding system that has a large capacity and can be used to represent text for most languages.

Data Management and Health Care Technology Category



CORRECT!!!



INCORRECT

What are the four primary characteristics of Martha Roger's theory of the science of unitary human beings?

Foundations of Practice Category

Connectivity, Locus of Control, Individualization, and Self-Realization

INCORRECT

Solidarity, Individualization, Purpose, and Control

INCORRECT

Energy field, Openness, Pattern, and Pan-Dimensionality

CORRECT!



Quality information is defined by the following factors:

- Timeliness
- Precision
- Accuracy
- Measurability
- Independently verifiable
- Availability

Systems Design Life Cycle Category





CORRECT!!!



INCORRECT

What are the different types of systems that a healthcare facility might use?

Data Management and Health Care Technology Category

Internal, Bidirectional, Hierarchal, and External

INCORRECT

Clinical, Financial, Inventory, and Risk

INCORRECT

Decision Support, Expert, Artificial Intelligence, and Natural Language

CORRECT!



The humancomputer interaction (HCI) framework by **Nancy Staggers** applies concepts related to psychology and technology to explain human interactions with computers over a period of time in different contexts. What are these contexts?

System Design Life Cycle Category

Recreational use, Business use, Military use, and Health Care use

INCORRECT

Providers,
Patients, and
Interactions between
providers and patients

CORRECT!

Novice,
Competent,
Experienced, and
Expert

INCORRECT



NEXT SLIDE

Florence
Nightingale, the
founder of
modern nursing,
established which
basic standards
for patient care?

Foundations of Practice Category

Cleanliness, Patient Rights, and Documentation

INCORRECT

Repositioning Patients, Sunlight, and Daily Dressing Changes

INCORRECT

Sanitary Conditions, Adequate Nutrition, and Kindness

CORRECT!

