A \_\_\_\_\_\_\_\_ is capable of answering "what if" questions.

A) transaction processing system

B) business-to-business system

C) business intelligence system

D) all of these

ANSWER: C

A business intelligence system consists of a set of subsystems and applications that allow the management to \_\_\_\_\_\_\_\_.

A) analyze operational and market data

B) create models

C) make forecasts

D) virtually test business decisions

E) all of these

ANSWER: E

A data management system must:

A) organize the stored data in a manner that can be retrieved as needed

B) establish relationship between data

C) ensure the integrity of data

D) all of these

ANSWER: D

A set of systems that supports the basic functions of an enterprise are:

A) infrastructural information systems

B) technology systems

C) support systems

D) communication systems

ANSWER: A

A subsystem is a system that functions as a component of another \_\_\_\_\_\_\_\_.

A) system

B) organization

C) computer

D) application

ANSWER: A

Any \_\_\_\_\_\_\_\_ consists of communication devices, protocols, and the connections between those devices.

A) transaction processing system

B) decision support system

C) communication system

D) expert system

ANSWER: C

Both B2B and B2C are often called \_\_\_\_\_\_\_\_.

A) OLAP

B) eCommerce

C) web services

D) all of these

ANSWER: B

Communication subsystem of an information system is part of \_\_\_\_\_\_\_\_.

A) people component

B) information technology component

C) procedure component

D) application component

ANSWER: B

In an accounting system, how the database stores invoices and payments, how it retrieves them, and how the integrity of data is insured are all related to \_\_\_\_\_\_\_\_.

A) design

B) analysis

C) implementation

D) requirement

ANSWER: A

Information systems are products and like other products, they must satisfy their \_\_\_\_\_\_\_\_.

A) user

B) developer

C) programmer

D) system analyst

ANSWER: A

Information systems help the \_\_\_\_\_\_\_\_ of business processes.

A) creation

B) automation

C) evaluation

D) suspension

ANSWER: B

Information systems must be developed by following \_\_\_\_\_\_\_\_ that assures the best possible quality and the best possible use of resources.

A) rules of thumb

B) a methodology

C) government regulations

D) pricing theory

ANSWER: B

Information technology is the know-how, methods, tools and material used to support \_\_\_\_\_\_\_\_.

A) information systems

B) desk tops

C) virtual memory

D) network systems

ANSWER: A

Methodologies for software development are a set of \_\_\_\_\_\_\_\_.

A) practices

B) procedures

C) rules and techniques

D) all of these

ANSWER: D

Protocols are a set of rules or standards that allow two devices to communicate. Like data and information, the protocols are \_\_\_\_\_\_\_\_.

A) virtual

B) physical

C) encoded

D) decoded

ANSWER: A

Quality of the final product depends on the quality of \_\_\_\_\_\_\_\_.

A) process

B) methodology

C) project management

D) all of these

ANSWER: D

Requirements are closely related to \_\_\_\_\_\_\_\_ of a software application.

A) objectives

B) specifications

C) maintenance

D) testing

ANSWER: A

Systems that allow businesses to conduct transactions on line are:

A) business-to-business system

B) transaction processing systems

C) business intelligence system

D) none of these

ANSWER: A

Systems that record and process data about the routine activities of an enterprise are:

A) business-to-business systems

B) transaction processing systems

C) business-to-customer systems

D) business intelligence system

ANSWER: B

The deliverable must be \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_.

A) obvious, valuable

B) measurable, verifiable

C) countable, realistic

D) none of these

ANSWER: B

The differences between a system and a network is that while the elements within a system \_cannot\_ function the same way if they are taken out of the system, elements within a network are more or less able to function independently. Therefore, workstations connected to the Internet are members of a:

A) computer system

B) network

C) universal system

D) information system

ANSWER: B

The element (s) of an information system is (are):

A) data

B) information

C) processing

D) all of these

ANSWER: D

The information technology is to support information systems; the task of information systems is to support:

A) information technology

B) human enterprise

C) network systems

D) computer system

ANSWER: B

The more complex a product is, \_\_\_\_\_\_\_\_ we can rely on purely personal experiences to develop it.

A) the less

B) the more

C) the same

D) the two are not related

ANSWER: A

The quality of an information system is often decided by weighing several factors, including:

A) correctness

B) availability

C) robustness

D) all of these

ANSWER: D

The relationship between data and information is hierarchical, therefore, one person's information is another person's \_\_\_\_\_\_\_\_.

A) treasure

B) data

C) idea

D) logical view

ANSWER: B

The task of a communication device is to \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_ messages for the benefit of the recipient.

A) read, write

B) encode, decode

C) open, close

D) read, correct

ANSWER: B

To achieve the maximum possible quality in a product \_\_\_\_\_\_\_\_ must be built into the process of its production.

A) quality control

B) visibility

C) resources

D) feasibility study

ANSWER: A

Understanding the problem space is the job of \_\_\_\_\_\_\_\_ whereas in the solution space we \_\_\_\_\_\_\_\_ the product.

A) requirement. analysis

B) life cycle, design

C) analysis, design

D) implementation, analysis

ANSWER: C

We can view an information system from various perspectives such as \_\_\_\_\_\_\_\_.

A) goals

B) processes

C) components

D) all of these

ANSWER: D

We need \_\_\_\_\_\_\_\_ to achieve the connection between the virtual world of the information system and the real world, and maintain and manage the technology that supports such connections.

A) operating systems

B) utility systems

C) Control bus

D) all of these

ANSWER: D

When developing a system, the achievement of a sub -goal that results in a deliverable is called \_\_\_\_\_\_\_\_.

A) milestone

B) objective

C) delivery

D) project

ANSWER: A

Which of the following is an example of data?

A) words

B) newspaper

C) newspaper report

D) bank statement

ANSWER: A

Which of the following is NOT a communication system?

A) telephone system

B) postal services

C) transaction processing system

D) network of geocentric satellites

ANSWER: C

Which of the following is NOT a major components of any information system?

A) applications

B) information technology

C) people

D) the company

ANSWER: D

Which of the following is NOT an element of a filing system?

A) receipts

B) canceled checks

C) correspondence

D) operating system

ANSWER: D

Which of the following is NOT an example of application software?

A) operating system

B) ERP by peoplesoft

C) CRM by Siebel

D) internet explorer

ANSWER: A

Which of the following is NOT an example of information?

A) a news report in the paper, on the radio or on TV

B) a fire alarm

C) customer name and address

D) the itinerary of your upcoming trip

ANSWER: C

Which of the following is the purpose of Television Report?

A) to communicate the what, the when, the where, the how and the why of an event to its audience

B) to report how much money you had in your account at the beginning of the month, the amounts that you deposited or withdraw during the month, bank charges, and how much you have now

C) to tell shareholders how well the corporation did in the previous year and what to expect for the next year

D) none of these

ANSWER: A

Which of the following sectors depends on information systems for their operations?

A) airlines

B) government

C) manufacturing

D) all of these

ANSWER: D

\_\_\_\_\_\_\_\_ is the condition of an object at a certain stage in its lifetime.

A) Attribute

B) Identity

C) Operation

D) State

ANSWER: D

\_\_\_\_\_\_\_\_ literally means "many shapes".

A) Polymath

B) Polynomial

C) Polymorphism

D) Polypheric

ANSWER: C

"Art" is an example of:

A) abstract object

B) concrete object

C) real object

D) virtual object

ANSWER: A

A "student becomes a graduate" describes the \_\_\_\_\_\_\_\_ of object "student."

A) state

B) attribute

C) name

D) identity

ANSWER: A

A class is a (an)\_\_\_\_\_\_\_\_ for a virtual object.

A) abstraction

B) template

C) collection

D) both abstraction & template

ANSWER: D

A subclass results from \_\_\_\_\_\_\_\_ a superclass.

A) generalization

B) class hierarchy

C) specializing

D) all of these

ANSWER: C

A superclass results from \_\_\_\_\_\_\_\_\_\_ a set of classes.

A) generalizing

B) class hierarchy

C) specializing

D) all of these

ANSWER: A

A system development team is an example of \_\_\_\_\_\_\_\_ relationship

A) composition

B) generalization

C) aggregation

D) public class

ANSWER: C

An infant boy grows to be a 80-year old man. The new state of the object is:

A) a grandfather

B) an old and rich man

C) an old and wise man

D) all or any of these

ANSWER: D

An instance is the concrete manifestation of a \_\_\_\_\_\_\_\_.

A) class

B) object

C) state

D) attribute

ANSWER: A

An object can be an instance of numerous classes that have \_\_\_\_\_\_\_\_ relationships to each other

A) parallel

B) hierarchical

C) both parallel & hierarchical

D) none of these

ANSWER: C

An object is a thing and can be:

A) animate or inanimate

B) human or non-human

C) tangible or non-tangible

D) any of these

ANSWER: D

An object is the \_subject\_ of a sentence with an \_active\_ voice, and the \_\_\_\_\_\_\_\_ EXPRESSES an operation.

A) action

B) active

C) verb

D) voice

ANSWER: C

An object is:

A) something that is perceived as an entity and referred to by name.

B) something perceptible by one or more of the senses

C) something intelligible or perceptible by the mind

D) all of these

ANSWER: D

Analysis of system helps us discover the concepts of the real world and build a \_\_\_\_\_\_\_\_ of the product.

A) conceptual model

B) abstract model

C) physical model

D) concrete model

ANSWER: A

Attributes are usually paired with:

A) vales

B) features

C) identity

D) name

ANSWER: A

Attributes of an object constitute what an object \_\_\_\_\_\_\_\_ while operations describe what it \_\_\_\_\_\_\_\_.

A) does, is

B) is, does

C) has, predict

D) suggests, presents

ANSWER: B

Class is a set of objects that share the same \_\_\_\_\_\_\_\_.

A) name

B) state

C) attributes and operations

D) all of these

ANSWER: D

Consider the two phrases describing a telephone: Has a microphone and can connect to the telephone network. these two phrases are \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_ respectively.

A) attribute, operation

B) operation, attribute

C) state, attribute

D) state, operation

ANSWER: A

Design develops the results of analysis into a \_\_\_\_\_\_\_\_ for building the system.

A) conceptual

B) abstract

C) concrete model

D) physical

ANSWER: C

Features, properties, or characteristics of an object are represented by its:

A) values

B) identity

C) attributes

D) name

ANSWER: C

From UML perspective \_\_\_\_\_\_\_\_ view reflects the conceptual view of the system.

A) developer

B) Owner

C) analyst

D) designer

ANSWER: B

From UML perspective \_\_\_\_\_\_\_\_ view reflects the logical view of the system.

A) developer

B) owner

C) architect

D) client

ANSWER: C

From UML perspective \_\_\_\_\_\_\_\_ view reflects the Physical\_\_view of the system.

A) builder

B) owner

C) client

D) architect

ANSWER: A

Human body is an example of \_\_\_\_\_\_\_\_ relationship.

A) composition

B) generalization

C) aggregation

D) public class

ANSWER: A

In object oriented technique, the opposite of generalization is \_\_\_\_\_\_\_\_.

A) degeneralization

B) abstraction

C) specialization

D) none of these

ANSWER: C

In procedural languages, the basic building blocks of a program are \_\_\_\_\_\_\_\_.

A) procedures

B) objects

C) functions

D) procedures or functions

ANSWER: D

Information systems are composed of \_\_\_\_\_\_\_\_.

A) virtual objects

B) real objects

C) any object

D) computer objects

ANSWER: A

Object-oriented analysis and design, coupled with \_\_\_\_\_\_\_\_ is used as the most effective technique to build software and information systems.

A) object-oriented technology

B) implementation

C) requirement

D) maintenance

ANSWER: A

Object-Oriented analysis relies on the \_\_\_\_\_\_\_\_ of information systems.

A) logical modeling

B) physical modeling

C) abstract modeling

D) concrete modeling

ANSWER: A

Objects interact through \_\_\_\_\_\_\_\_ when offering services or operation to the public.

A) interface

B) business classes

C) public services

D) public operations

ANSWER: A

The employee name is Richard Smith and he checks the inventory periodically. In this phrase, Richard Smith is the \_\_\_\_\_\_\_\_ of attribute "name"

A) class

B) object

C) value

D) operation

ANSWER: C

The identity of an object is identified by its:

A) name

B) presence

C) value

D) none of these

ANSWER: A

The phrase "Object as Black Box" refers to \_\_\_\_\_\_\_\_.

A) encapsulation

B) information hiding

C) generalization

D) both encapsulation & information hiding

ANSWER: D

The relationship among superclasses and subclasses is called \_\_\_\_\_\_\_\_.

A) generalization

B) class hierarchy

C) specializing

D) none of these

ANSWER: B

Together, encapsulation and information hiding turn an object into a black box dividing the space in which the object lives into \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_.

A) indoor, outdoor

B) private, public

C) upside, downside

D) general, specific

ANSWER: B

UML is a modeling language for \_\_\_\_\_\_\_\_ analysis and design

A) object-oriented system

B) unified modeling system

C) real world system

D) world wide web system

ANSWER: A

When using an object-oriented approach to software development we create models using \_\_\_\_\_\_\_\_ their relationships, and their interactions.

A) programs

B) system analysts

C) objects

D) project mangers

ANSWER: C

When you use an ATM, encapsulation ensures that:

A) you are not burdened with the complexity of how the machine works

B) only operations that you are allowed is performed.

C) the way the machine operates is not changed.

D) all of these

ANSWER: D

Which of the following is NOT a type of class for virtual objects?

A) computer class

B) business class

C) utility classes

D) control class

ANSWER: A

The techniques of Feasibility study is (are)---------

A) Economic feasibility

B)  Technical feasibility

C)  Organizational feasibility

D) All answers are correct

ANSWER: D

Project work-plan means: ------------------

A) Specify requirements

B)  List all the project tasks in a table

C)  Develop the use case

D) All answers are correct

ANSWER: B

A horizontal bar chart that graphically shows the work broken down structure  is called ----------

A) Gantt charts

B) Use case

C) Sequence diagram

D) No answer is correct

ANSWER: A

Stakeholder analysis is one way to ------

A) Assess organizational feasibility

B)   Assess Technical feasibility

C)  Understand if the developed achieved its goal

D) No answer is correct

ANSWER: A

Approving or declining online banking system project is based on-------------

A) Value added Vs. Risks

B) No answer is correct

C) Risks only

D) Value added (benefits) only

ANSWER: A

 WBS is a hierarchy of tasks that indicates-------------------

A) All answers

B) The current status of each task

C) Task dependencies

D) Duration of each task

ANSWER: A

 So many tasks on a Gantt chart is confusing.

A) True

B) False

ANSWER: A

 In the project work-plan of hospital systems, new patients should register, then appointment with the doctor are specified.  The ------------ task is dependent on ----------task

A) Appointment, registration

B) No answer is correct

C) No, No

D)  Registration , appointment

ANSWER: A

If an organization wants to make automatic accounting  system,  Technical feasibility study should be done to -----------------

A)  Check if the system could be designed, implemented and installed properly

B) Check if  changing to automatic accounting system should be done

C) Check if the employee accepts the changes to automatic system

D) All answers

ANSWER: A

Work Breakdown Structure (WBS) is a hierarchy of tasks that indicates------------------

A)  All answers

B) The current status of each task

C)  Task dependencies

D) Duration of each task

ANSWER: A

 In online-Banking system, the need for fingerprint recognition a authentication technique is considered --------------

A) Special issues of  constraints

B)  Business requirement

C)  All answers are correct

D) Business value

ANSWER: A

  In E-shop system, increasing profits 10% is considered ------------

A) Business value

B) Business need

C) Business requirement

D)  All answers are correct

ANSWER: A

Stakeholder analysis is one way to ------

A) Assess organizational feasibility

B) Assess Technical feasibility

C) Understand if the developed achieved its goal

D) All answers are correct

ANSWER: A

 The person or organization who pay for the project is (are) a  ----------

A) Project sponsors

B) Project Managers

C) Project developers

D)  NO answer is correct

ANSWER: A

 -------------- means how will the organization benefit from the project

A) Business value

B) Business need

C) Business requirement

D) All answers are correct

ANSWER: A

  -------------- indicates the reason prompting the project

A) Business value

B) Business need

C) Business requirement

D) All answers are correct

ANSWER: B

-------------- indicates what the system will do

A) Business value

B) Business need

C) Business requirement

D) All answers are correct

ANSWER: C

If an organization wants to make automatic accounting  system,  Technical feasibility study should be done to --------------------------------------

A)  Check if the system could be designed, implemented and installed properly.

B) Check if the employee accepts the changes to automatic system

C)  Check if  changing to automatic accounting system should be done

D) All answers are correct

ANSWER: A

\_\_\_\_\_\_\_\_ activity helps the transfer from conceptual modeling to physical modeling.

A) Design

B) Analysis

C) Planning

D) Architecture

ANSWER: A

\_\_\_\_\_\_\_\_ helps participants in the development understand, communicate, and verify the features of the product.

A) Analysis

B) Modeling

C) Design

D) Review

ANSWER: B

\_\_\_\_\_\_\_\_ is the primary source behind the emergence of methodology.

A) Innovation

B) System development

C) Complexity

D) Object-orientation

ANSWER: C

A project is a collection of \_\_\_\_\_\_\_\_ that must be completed in a particular order and within a certain timeframe to achieve a specific goal.

A) related tasks

B) business concepts

C) business ideas

D) none of these

ANSWER: A

Assembly line was the \_\_\_\_\_\_\_\_ that took shape in the military to cope with the exigencies of funding and the battlefield.

A) methodology

B) Henry Ford's vision

C) system

D) military vision

ANSWER: A

Characteristics for a good manager are all , but \_\_\_\_\_\_\_\_.

A) business awareness

B) commitment to quality

C) analytical thinking

D) blind ambition

ANSWER: D

CRC cards to represent object (CRC stands for Class, Responsibilities and Collaboration) are used in the \_\_\_\_\_\_\_\_ phase of XP.

A) analysis

B) prototype

C) design

D) implementation

ANSWER: C

Discovering the meaning of requirements within the context is the job of \_\_\_\_\_\_\_\_ activity.

A) domain analysis

B) feasibility study

C) design activity

D) implementation activity

ANSWER: A

Factors constituting effective software development include:

A) understanding the business world

B) understanding how the software will be used

C) understanding who will use the software

D) all of these

ANSWER: D

Identifying project activities is part of developing the \_\_\_\_\_\_\_\_.

A) scope of the project

B) goal of the project

C) essence of the project

D) plan of the project

ANSWER: D

In developing software, programming is preceded by a set of activities called analysis that results in a \_\_\_\_\_\_\_\_ of the product.

A) design

B) conceptual model

C) planning

D) review

ANSWER: B

Learning from patterns is an important part of \_\_\_\_\_\_\_\_ software development.

A) waterfall

B) RAD

C) object-oriented

D) spiral

ANSWER: C

Methodologies cover a set of activities of software development. Which of the following is not one of those activities?

A) gathering requirements

B) choosing programmers

C) feasibility study

D) domain analysis

ANSWER: B

Methodology is a variable blend of two sources:

A) methods and models

B) generalization and abstraction

C) problems and solutions

D) techniques and resources

ANSWER: B

Most of the tools and techniques for project management are concerned with \_\_\_\_\_\_\_\_.

A) scheduling

B) identifying tasks

C) finding critical tasks

D) all of these

ANSWER: D

Not only we need methodology for solving problems, but also for:

A) assuring quality

B) understanding the problem

C) managing the consequences of the solution

D) all of these

ANSWER: D

Object-oriented software development is \_\_\_\_\_\_\_\_.

A) iterative

B) descriptive

C) easy

D) expensive

ANSWER: A

One of the challenges of project scheduling is how to prevent the \_\_\_\_\_\_\_\_ of resources as a result of task slack times.

A) purchase

B) use

C) idleness

D) usefulness

ANSWER: C

One of the most difficult issues in development projects is \_\_\_\_\_\_\_\_.

A) cost estimation

B) time estimation

C) scheduling

D) training

ANSWER: A

Prototyping may seem to be an ideal way to overcome the shortcomings of "traditional" SDLC methods, but it may create its own serious problems, such as:

A) inflexibility

B) balanced Architecture

C) the illusion of completeness

D) none of these

ANSWER: C

The \_\_\_\_\_\_\_\_ defines the boundaries of the project and its goal.

A) scope the project

B) planning of the project

C) launching the plan

D) monitor progress

ANSWER: A

The \_\_\_\_\_\_\_\_ of the methodologies is what makes project management a field independent from a particular industry.

A) abstractness

B) uniqueness

C) thoroughness

D) wideness

ANSWER: A

The longest path in a project is the \_\_\_\_\_\_\_\_ that determines the \_shortest\_ time required to complete the project.

A) critical path

B) shortest rout

C) shortcut

D) road map

ANSWER: A

The most popular and easiest tools for both scheduling and tracking the project flow is:

A) Microsoft project

B) critical path method (CPM)

C) Gantt chart

D) PERT

ANSWER: C

The spiral model starts as a small projects that spawns other small projects as it moves forward through a \_spiral\_ iteration. Which of the following is NOT one of the iteration steps?

A) determine objectives, alternatives, and constraints

B) identify and resolve risks

C) evaluate alternatives

D) estimate additional costs

ANSWER: D

The underlying concepts of the incremental prototyping include(s):

A) the initialization step

B) the control list

C) the iteration step

D) all of these

ANSWER: D

The Waterfall Method views development activities as predefined stage (s) of software development such as:

A) Feasibility study

B) System investigation

C) system analysis and design

D) all of these

ANSWER: D

The Waterfall Model has been widely criticized for its inflexible approach to an undertaking that is extremely \_\_\_\_\_\_\_\_.

A) iterative

B) too expensive

C) difficult to learn

D) none of these

ANSWER: A

To succeed, the ad hoc approach must rely overwhelmingly on:

A) the ingenuity of participants to improvise solutions for unforeseen problems.

B) the ability of the participants to coordinate and communicate with each other.

C) "luck", meaning that the right people hit the right targets under the right circumstances.

D) all of these

ANSWER: D

Which of the following does NOT guide us in consciously doing something?

A) innovation

B) Trial & Error

C) Experience

D) Methodology

ANSWER: A

Which of the following is NOT a factor for the effectiveness of any model?

A) technology

B) Level of abstraction

C) understanding and satisfying various viewpoints

D) level of specificity

ANSWER: A

Which of the following is NOT one of the shortcoming of waterfall method?

A) training of staff

B) detachment from the profession

C) inflexibility

D) over-reliance on documentation

ANSWER: A

Which of the following is one of the reasons for using methodology for software production?

A) standardizing the development process

B) minimizing the development process

C) expediting the development process

D) none of these

ANSWER: A

Work Breakdown Structure (WBS) decomposes the project into \_\_\_\_\_\_\_\_ with different levels for activities.

A) segments

B) steps

C) a hierarchy

D) parts

ANSWER: C

\_\_\_\_\_\_\_\_ are deployed to model requirement gathering.

A) Use cases

B) UML

C) SDLC

D) Functional requirements

ANSWER: A

\_\_\_\_\_\_\_\_ are those who are the most knowledgeable about the areas of business activity within the project scope.

A) Stakeholders

B) Sponsors

C) Domain experts

D) Clients

ANSWER: C

\_\_\_\_\_\_\_\_ are those who directly interact with the system.

A) Users

B) Sponsors

C) Domain experts

D) Stakeholders

ANSWER: A

\_\_\_\_\_\_\_\_ are those who launch the project and decide its fate.

A) Sponsors

B) Domain experts

C) Users

D) Clients

ANSWER: A

\_\_\_\_\_\_\_\_ are those whose interests are affected by the operation of the system.

A) Stakeholders

B) Sponsors

C) Domain experts

D) Users

ANSWER: A

\_\_\_\_\_\_\_\_ is the most traceable tool for the verification of requirements.

A) Questionnaire

B) Interview

C) Observation

D) Document analysis

ANSWER: A

\_\_\_\_\_\_\_\_ specifies how the behavior of the system must be tailored to the level of its users' expertise.

A) Reliability

B) Testability

C) Usability

D) Maintainability

ANSWER: C

\_\_\_\_\_\_\_\_ with stakeholder of the system is an indispensable tool not only for its verbal responses but also because it allows one to observe and learn from non-verbal reactions.

A) Observation

B) Questionnaire

C) Interview

D) Document analysis

ANSWER: C

A reliable system is both \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_.

A) cheap, easy to use

B) dependable, available

C) expensive, difficult to use

D) possible, probable

ANSWER: B

A source of information for reverse engineering is:

A) the new system

B) the legacy system

C) the stakeholders

D) the users

ANSWER: B

Activity diagram models \_\_\_\_\_\_\_\_.

A) owners view

B) business stakeholders view

C) either owners view or business stakeholders view

D) programers view

ANSWER: C

All requirements derived from reverse engineering must be verified by consulting:

A) stakeholder

B) users

C) experts

D) all of these

ANSWER: D

An owner's view is a drawing or a word-chart that is primarily aimed at \_\_\_\_\_\_\_\_.

A) programmers

B) banks

C) analysts

D) business stakeholders

ANSWER: D

As accurate as a requirement may be, we must be able to trace the sources to:

A) verify the requirements

B) resolve inconsistencies

C) both verify the requirements & resolve inconsistencies

D) appease the stakeholder

ANSWER: C

Dispute settlement is one the advantages of \_\_\_\_\_\_\_\_.

A) requirement workshop

B) observation

C) interview

D) questionnaire

ANSWER: A

Each requirement must be written in a way that a simple \_\_\_\_\_\_\_\_ can verify the essence of it.

A) up or down

B) yes or no

C) description

D) true or false

ANSWER: D

Gathering requirements is an ongoing process that provides system development with \_\_\_\_\_\_\_\_ that it must implement to satisfy its objectives.

A) tools

B) needed technology

C) features and rules.

D) right people

ANSWER: C

How many employees use the current system? is an example of \_\_\_\_\_\_\_\_ in an interview?

A) closed question

B) open question

C) qualitative question

D) quantitative question

ANSWER: A

If a piece of software can be updated and enhanced with relative ease then the software is:

A) maintainable

B) user friendly

C) fast

D) reliable

ANSWER: A

In an object-oriented approach to software development, we use \_\_\_\_\_\_\_\_ to capture, define and represent requirements.

A) models

B) UML

C) common sense

D) ERP

ANSWER: A

In gathering requirements, questionnaires can play two roles:

A) elicitation and quantification

B) elicitation and verification

C) elicitation and qualification

D) elicitation and maintenance

ANSWER: B

Like any other product, an information system must have \_\_\_\_\_\_\_\_ that its customer wants in order to achieve specific objectives.

A) a name

B) features

C) the quality

D) the size

ANSWER: B

New information system development is often expected to upgrade, replace, or collaborate with \_\_\_\_\_\_\_\_.

A) the existing system

B) the new equipment

C) the old equipment

D) the government laws and regulations

ANSWER: A

Performance of the system must be \_\_\_\_\_\_\_\_.

A) proven

B) fast

C) measurable

D) inexpensive

ANSWER: C

Questionnaires have disadvantages such as:

A) they do not happen in real time

B) lack direct interaction

C) they are inflexible

D) all of these

ANSWER: D

Requirements identify the \_\_\_\_\_\_\_\_ that the information system users want to achieve.

A) objectives

B) verifications

C) quality

D) reliability

ANSWER: A

The mission of an ATM system is to allow customers to perform many banking transactions through automated teller machines. Which of the following would NOT be considered as an objective for ATM system?

A) get cash

B) deposit check

C) transfer money

D) buy mutual bonds

ANSWER: D

The most expensive requirement elicitation is \_\_\_\_\_\_\_\_.

A) requirement workshop

B) either requirement workshop or Joint application development

C) Joint application development

D) interview

ANSWER: B

The observation is wasted if the observer is \_\_\_\_\_\_\_\_.

A) unqualified

B) too quick

C) too lazy

D) too excited

ANSWER: A

The reliability and the correctness of requirements is dependent on:

A) their sources

B) the techniques that we employ to elicit and verify them

C) effective management

D) all of these

ANSWER: D

The right of access to the services of the system is related to \_\_\_\_\_\_\_\_ none-functional requirement.

A) reliability

B) maintenance

C) performance

D) security

ANSWER: D

The value of observing a workflow depends on the \_\_\_\_\_\_\_\_ of the observation.

A) value

B) purpose

C) content

D) observer

ANSWER: B

To accomplish each tactical goal, the system and its users must interact in a set of clearly defined steps-called \_\_\_\_\_\_\_\_.

A) none functional requirements

B) functional requirements

C) operational requirements

D) daily and non-daily requirements

ANSWER: B

To avoid missing or conflicting requirements, we need:

A) to document and update requirements

B) to store information

C) to draw conclusion

D) to make decisions quickly

ANSWER: A

Usually missing or conflicting requirements are discovered during:

A) design

B) implementation

C) both design & implementation

D) requirement gathering

ANSWER: C

Which of the following is (are) the advantage(s) of open questions for an interview?

A) provide leads

B) produce desired results

C) provide the interview with a second chance

D) both provide leads & provide the interview with a second chance

ANSWER: D

Which of the following is a source for requirement gathering?

A) domain expert

B) programmer

C) designer

D) analyst

ANSWER: A

Which of the following is an example of non-functional requirements?

A) features of the system

B) reliability

C) business rules

D) business objectives

ANSWER: B

Which of the following is NOT one of the elicitation techniques for gathering requirements?

A) quality assurance

B) interview

C) modeling

D) document analysis

ANSWER: A

Which of the following requirement gathering techniques is the most flexible?

A) observation

B) questionnaire

C) document analysis

D) interview

ANSWER: D

\_\_\_\_\_\_\_\_ are technology-independent business policies that the system must observe above and beyond other analysis and design issues.

A) Technology rules

B) System rules

C) Vendor rules

D) Business rules

ANSWER: D

\_\_\_\_\_\_\_\_ organize domain concepts,explain them, and categorize them for further analysis and modeling.

A) Programmers

B) Owners

C) Analysts

D) Domain dictionaries

ANSWER: D

\_\_\_\_\_\_\_\_ reflect business rules that state how things actually are.

A) Facts

B) Inferences

C) Action enablers

D) Constraints

ANSWER: A

A \_\_\_\_\_\_\_\_ is a directory of supporting domain documents.

A) domain catalog

B) domain dictionary

C) domain analysis

D) domain boundaries

ANSWER: A

A \_\_\_\_\_\_\_\_ is an area of related activities that operate on a set of shared rules and concepts.

A) problem domain

B) solution domain

C) business domain

D) solution space

ANSWER: C

A critical purpose of organizing business rules is \_\_\_\_\_\_\_\_ by business stakeholders

A) verification

B) supervision

C) neglect

D) none of these

ANSWER: A

An information system that ignores \_\_\_\_\_\_\_\_ will fail even if all other requirements are satisfied.

A) common sense

B) innovation

C) business rules

D) regulations

ANSWER: C

Business domains can change as a result of human decision that results in \_\_\_\_\_\_\_\_.

A) improving profit

B) streamlining

C) restructuring organization

D) high competition

ANSWER: A

Business Process Re-Engineering (BPR) aims to \_\_\_\_\_\_\_\_ the entire business or large portions of it to increase efficiency.

A) define

B) repeat

C) build

D) restructure

ANSWER: D

Business rules are:

A) technology-independent guidelines

B) technology-dependent directories

C) include domain dictionary

D) help us understand the context of business

ANSWER: A

Business rules must be organized, maintained and verified \_\_\_\_\_\_\_\_.

A) for the life of a business

B) for the duration of application

C) for the first couple years

D) at the end of fiscal year

ANSWER: A

Business rules overshadows other issues such as:

A) design issues

B) analyses issues

C) vendor issues

D) all of these

ANSWER: D

Derived domains are new business domains derived from \_\_\_\_\_\_\_\_.

A) large domains

B) complex domains

C) existing domains

D) interesting domains

ANSWER: C

Domain concepts could be \_\_\_\_\_\_\_\_ that constitute the goals, the behavior and the structure of a domain.

A) objects

B) processes

C) people and rules

D) all of these

ANSWER: D

Domain definition sets the \_\_\_\_\_\_\_\_ of domain analysis.

A) goal

B) objectives

C) boundaries

D) conclusion

ANSWER: C

Domain dictionary is the link between \_\_\_\_\_\_\_\_ who must verify the concepts and the \_\_\_\_\_\_\_\_ who would use them as the foundation for building a conceptual model of the system

A) analysts and programmers

B) stakeholders and analysts

C) analysts and designers

D) designers and programmers

ANSWER: B

Domain dictionary organizes domain \_\_\_\_\_\_\_\_.

A) concepts

B) boundaries

C) analysis

D) models

ANSWER: A

Domain scope defines the \_\_\_\_\_\_\_\_ of domain.

A) problem

B) boundaries

C) dictionary

D) catalog

ANSWER: B

How to keep track of medical expenses when a medical service is rendered is an example for \_\_\_\_\_\_\_\_.

A) problem domain

B) solution domain

C) medical domain

D) all of these

ANSWER: B

In \_\_\_\_\_\_\_\_ we do not question the requirements or discover them, but try to realize them.

A) solution space

B) problem space

C) requirement space

D) method space

ANSWER: A

In the "M" model domain analysis applies to

A) business domain

B) information system

C) both business domain & information system

D) neither business domain or information system

ANSWER: C

In the "M" model which of the following is a concept that applies only to information system?

A) design

B) conceptual modeling

C) domain definition

D) domain analysis

ANSWER: A

In the example "telephone systems enable people to talk to others across vast distances in real time," the phrase "enable people to talk to others across vast distances in real time" is \_\_\_\_\_\_\_\_.

A) the requirement

B) the product

C) problem domain

D) problem space

ANSWER: A

In the example "Telephone Systems enable people to talk to others across vast distances in real time." telephone system is \_\_\_\_\_\_\_\_.

A) requirement

B) the product

C) problem domain

D) problem space

ANSWER: B

Laundry belongs to \_\_\_\_\_\_\_\_ domain.

A) patient

B) technology

C) house services

D) medical

ANSWER: C

Medical service in the phrase "the scheduled date and time for providing a medical service to a patient" is an \_\_\_\_\_\_\_\_.

A) role

B) process

C) function

D) object

ANSWER: D

Solving problems involves three components; problem, solution, and \_\_\_\_\_\_\_\_.

A) context

B) method

C) money

D) requirement

ANSWER: B

The product "to carry people into space" is \_\_\_\_\_\_\_\_.

A) a dream

B) airplane

C) a problem

D) a rocket

ANSWER: D

The task of domain analysis is to help us understand the \_\_\_\_\_\_\_\_ of requirements.

A) context

B) goal

C) objectives

D) owner

ANSWER: A

To discover the right concepts for domain analysis , we must gather information from \_\_\_\_\_\_\_\_.

A) interviews

B) legacy systems

C) documentation

D) all of these

ANSWER: D

To solve a problem, we must understand \_\_\_\_\_\_\_\_ is required to solve the problem before we can decide \_\_\_\_\_\_\_\_ to solve it.

A) who, when

B) what , how

C) what, who

D) how, when

ANSWER: B

Type should reflect how the business domain perceives the concept. Which of the following is NOT an example of type.

A) patient

B) role

C) function

D) process

ANSWER: A

We have to put the problem in the right \_\_\_\_\_\_\_\_to work out the right the solution.

A) context

B) side

C) and the left

D) none of these

ANSWER: A

When building an information system we first create a \_\_\_\_\_\_\_\_ model of the system, from which we will design the product

A) physical

B) conceptual

C) visionary

D) stable

ANSWER: B

Which of the following does not belong to the "Patient domain"

A) hiring nurses

B) patient registration

C) patient medical history

D) patient admission

ANSWER: A

Which of the following is NOT a field for domain dictionary?

A) role

B) name

C) type

D) description

ANSWER: A

Which of the following is NOT one of the business domain's properties?

A) business domains never change

B) business domains are organized domains

C) business domains are goal-oriented

D) business domains can change

ANSWER: A

\_\_\_\_\_\_\_\_ are those entities whose interests are affected by the success or the failure of the use case.

A) Viewers

B) Stakeholders

C) Programmers

D) Clients

ANSWER: B

\_\_\_\_\_\_\_\_ are those events that prevent certain steps, or the entire use case, from completing successfully.

A) Exception flow

B) Normal flow

C) Sub-flow

D) Alternate flow

ANSWER: A

\_\_\_\_\_\_\_\_ detail steps in the normal flow that consist of discrete sub-steps.

A) Alternate flow

B) Exception flow

C) Normal flow

D) Sub-flows

ANSWER: D

\_\_\_\_\_\_\_\_ is composed of steps that are conditional.

A) Alternate flow

B) Sub-flow

C) Normal flow

D) Exception flow

ANSWER: A

\_\_\_\_\_\_\_\_ is the best-case scenario for a use case.

A) Alternate flow

B) Normal flow

C) Sub-flow

D) Exception flow goal

ANSWER: B

\_\_\_\_\_\_\_\_ represents the interaction of outside entities with a system as a whole.

A) Context diagram

B) Scenario

C) Goal

D) Use case

ANSWER: A

"Register student" is an appropriate \_\_\_\_\_\_\_\_ for a use case.

A) goal

B) name

C) scenario

D) both goal & name

ANSWER: D

A \_\_\_\_\_\_\_\_ is an ordered sequence of interactions between the actor(s) and the system to accomplish a goal.

A) goal

B) system

C) scenario

D) system boundary

ANSWER: C

A \_\_\_\_\_\_\_\_ is what the successful completion of a use case achieves.

A) system objective

B) behavior

C) goal

D) scenario

ANSWER: C

A use case describes the interaction of entities \_\_\_\_\_\_\_\_ a system with the system.

A) inside

B) outside

C) both inside & outside

D) neither inside or outside

ANSWER: B

A use case describes \_what\_ a system does as viewed from \_\_\_\_\_\_\_\_ the system.

A) outside

B) inside

C) within

D) bottom

ANSWER: A

A use case details the interaction of an actor with a system to accomplish a goal of value to the \_\_\_\_\_\_\_\_.

A) system

B) actor

C) analyst

D) programmer

ANSWER: B

A use case is a \_\_\_\_\_\_\_\_ that formalizes the interaction between stakeholders and the system.

A) contract

B) procedure

C) programming language

D) system policy

ANSWER: A

A use case's \_\_\_\_\_\_\_\_ is its goal. it must be active, concise and decisive.

A) location

B) address

C) name

D) internal

ANSWER: C

Administrative staff could be a generalization of:

A) billing clerk

B) registration clerk

C) appointment clerk

D) all of these

ANSWER: D

Business concepts are discovered during \_\_\_\_\_\_\_\_.

A) behavioral modeling

B) decision making

C) domain analysis

D) requirement gathering

ANSWER: C

Domain definition helps define \_\_\_\_\_\_\_\_.

A) subsystems

B) business concepts

C) behavioral modeling

D) requirement gathering

ANSWER: A

Goal of a Use Case must be:

A) a logically complete function

B) short

C) good

D) doable

ANSWER: A

When drawing an activity diagram, you should limit the diagram to single  ............... node that starts the process being modeled.

A) Initial

B) Decision

C) Fork

D) Join

ANSWER: A

Major use cases are identified by analyzing business \_\_\_\_\_\_\_\_.

A) processes

B) functions

C) activities

D) all of these

ANSWER: D

The goal of the primary actor is specified by the \_\_\_\_\_\_\_\_ of the use case.

A) scenario

B) system

C) length

D) name

ANSWER: D

The primary candidates for becoming actors are domain concepts classified as \_\_\_\_\_\_\_\_.

A) role

B) business rules

C) client

D) people

ANSWER: A

To create initial use cases you start with:

A) counting actors

B) domain analysis

C) looking into problem space

D) looking into solution space

ANSWER: B

Use case modeling is limited to a system's \_\_\_\_\_\_\_\_ behavior.

A) internal

B) future

C) past

D) external

ANSWER: D

Use case modeling is the gateway between domain analysis and the modeling of:

A) requirement

B) outside the system

C) the internal affair of the system

D) the information system.

ANSWER: D

Use cases describe \_\_\_\_\_\_\_\_ a system accomplishes\_.\_

A) what

B) how

C) when

D) where

ANSWER: A

What use case name is most appropriate for "produce a bill for the patient, reconcile the patient's account, and accept payments?"

A) patient billing

B) patient's bills

C) process patient billing

D) none of these

ANSWER: C

Which of the following is a feature of use case scenario?

A) a step is a transaction

B) steps can be repeated

C) a step can call on another use case

D) all of these

ANSWER: D

Which of the following is an appropriate name for a use case?

A) manage patient

B) refer patient

C) patient management

D) all of these

ANSWER: B

Which of the following is NOT one of the components of a use case:

A) a goal

B) actors

C) scenario

D) behavior

ANSWER: D

Which role is best suited to track medical services and keep medical record?

A) medical staff

B) billing clerk

C) registration clerk

D) appointment clerk

ANSWER: A

A business actor is one who \_\_\_\_\_\_\_\_ the business.

A) defines

B) interacts with

C) knows

D) is derived from

ANSWER: B

A flow is an ordered set of \_\_\_\_\_\_\_\_ that occur as the actors and the system attempt to reach a goal.

A) activities

B) use cases

C) interactions

D) business rules

ANSWER: A

Alternate steps identify \_\_\_\_\_\_\_\_ when normal flows don't take us to a successful completion.

A) remedies

B) failure

C) either remedies or failure

D) neither remedies or failure

ANSWER: A

Alternate steps specify what steps are to be taken if a step in \_\_\_\_\_\_\_\_ does not go according to plan.

A) the sub-flow

B) the exception flow

C) the normal flow

D) the scenario

ANSWER: C

Analyzing and re-organization of use cases may lead to:

A) streamlining our use case model

B) expanding our use case model

C) both streamlining our use case model & expanding our use case model

D) neither streamlining our use case model or expanding our use case model

ANSWER: C

Exception steps signify \_\_\_\_\_\_\_\_.

A) remedies

B) failure

C) either remedies or failure

D) neither remedies or failure

ANSWER: B

Health Insurance Provider is the \_\_\_\_\_\_\_\_ for Verify Insurance Plan. use case.

A) supporting actor

B) primary actor

C) goal

D) scenario

ANSWER: A

If there are too many steps in the normal flow then we should:

A) divide the use case into different use cases

B) create sub-flows

C) create extend or include use cases

D) any of these

ANSWER: D

In a hospital usually register patient is a precondition for:

A) admit patient

B) refer patient

C) make an appointment

D) none of these

ANSWER: A

In Checkout Groceries, If the customer cannot pay at all then:

A) exception steps are required

B) alternate steps are required

C) normal flow applies

D) subflows to be created

ANSWER: A

In Checkout Groceries, if the customer pays by cash, then:

A) execution steps are required

B) alternate steps are required

C) normal flow applies

D) subflows to be created

ANSWER: C

Initial use cases give us the a (an) \_\_\_\_\_\_\_\_ picture of the system behavior.

A) complete

B) incomplete

C) both complete or incomplete can be true

D) neither complete or incomplete are true

ANSWER: B

Open issues are questions raised by the \_\_\_\_\_\_\_\_.

A) system analyst

B) system client

C) system designer

D) system architect

ANSWER: A

Priority of a use case is decided by \_\_\_\_\_\_\_\_.

A) the requirements of the project

B) its scope

C) its ID

D) system or sub-system

ANSWER: A

Refer Patient is a \_\_\_\_\_\_\_\_ for Make Appointment.

A) precondition

B) postcondition

C) trigger

D) none of these

ANSWER: C

Steps in the normal flow are numbered consecutively and completion of one step is the \_\_\_\_\_\_\_\_ for the next step.

A) postcondition

B) complement

C) precondition

D) none of these

ANSWER: C

Summary is a \_\_\_\_\_\_\_\_ version of the use case name and a \_\_\_\_\_\_\_\_ version of the scenario.

A) short, long

B) complete, incomplete

C) long, short

D) none of these

ANSWER: C

Supplemental documents for use cases extend the \_\_\_\_\_\_\_\_ of use cases into details that are required for the later phases of development.

A) logical thread

B) physical thread

C) streamlining

D) generalizing

ANSWER: A

Supporting actor assists the primary actor in achieving \_\_\_\_\_\_\_\_.

A) the goal of the use case

B) its own goal

C) the goal of the primary actor

D) both the goal of the use case or the goal of the primary actor

ANSWER: D

The base use case is \_\_\_\_\_\_\_\_ of an extending use case.

A) independent

B) dependent

C) part

D) the owner

ANSWER: A

The base use case is \_\_\_\_\_\_\_\_ on an including use case.

A) dependent

B) independent

C) part

D) the owner

ANSWER: A

The primary actor of an extending use case must be the same as the primary actor of the:

A) include use case

B) base use case

C) exception use case

D) subflows

ANSWER: B

The scope of a use case is defined by the \_\_\_\_\_\_\_\_ to which it belongs.

A) system or sub-system

B) name

C) ID

D) scenario

ANSWER: A

To discover use cases, we must first examine domain analysis to discover business \_\_\_\_\_\_\_\_.

A) goals

B) activities

C) objectives

D) boundaries

ANSWER: B

"A car class embodies properties common to suv, sedan, and compact classes" is an example for \_\_\_\_\_\_\_\_.

A) specialization

B) generalization

C) either specialization or generalization

D) neither specialization or generalization

ANSWER: B

"Addresses" is a name for:

A) a composite class

B) an abstract class

C) a collection class

D) a sub-class

ANSWER: C

"dateOfBirth" is a correct name for:

A) an attribute

B) a operation

C) an object

D) a class

ANSWER: A

A \_\_\_\_\_\_\_\_ carries out the responsibilities of another class.

A) collaborator class

B) concrete class

C) sub-class

D) none of these

ANSWER: A

A class is:

A) An abstraction of objects

B) A template for creating objects

C) A building block of modeling

D) all of these

ANSWER: D

A flexible and reliable information system needs \_\_\_\_\_\_\_\_ that satisfy the specific requirements of the structural modeling.

A) programmers

B) analysts

C) building blocks

D) resources

ANSWER: C

An object's interface is a \_\_\_\_\_\_\_\_ between the object and the entities that use it.

A) bridge

B) class

C) contract

D) gap

ANSWER: C

Class name must be a \_\_\_\_\_\_\_\_.

A) noun

B) noun phrase

C) either noun or noun phrase

D) neither noun or noun phrase

ANSWER: C

Collection objects are a special kind of:

A) aggregation

B) composition

C) either aggregation or composition

D) classification

ANSWER: C

Encapsulation results in two spaces \_\_\_\_\_\_\_\_.

A) inside and outside

B) public and private

C) upside and downside

D) both inside and outside & public and private

ANSWER: D

Generalization and specialization are often dictated by \_\_\_\_\_\_\_\_.

A) the goal of the system

B) the programmer

C) business needs

D) the analyst

ANSWER: C

Generalization is abstracting common elements shared by a set of classes into a \_\_\_\_\_\_\_\_.

A) subclass

B) superclass

C) aggregation

D) composition

ANSWER: B

If an aggregate relationship is very strong, it is called:

A) collaboration

B) composition

C) collection

D) condition

ANSWER: B

In design and implementation, aggregation is called \_\_\_\_\_\_\_\_.

A) tight coupling

B) loose coupling

C) binding

D) composition

ANSWER: B

In design and implementation, composition is called \_\_\_\_\_\_\_\_.

A) tight coupling

B) loose coupling

C) aggregation

D) special case

ANSWER: A

In the virtual world of software, a class is \_\_\_\_\_\_\_\_ of an object.

A) representative

B) template

C) an abstraction

D) none of these

ANSWER: C

In the virtual world of software, a class is \_\_\_\_\_\_\_\_ to create an object

A) a template

B) an excuse

C) the reason

D) conceptualized

ANSWER: A

Monolithic structures are:

A) difficult to build

B) expensive to maintain

C) inflexible

D) all of these

ANSWER: D

Specialization is creating a \_\_\_\_\_\_\_\_\_ from\_ an existing class by defining elements that are too specific for the parent class.

A) subclass

B) superclass

C) either subclass or superclass

D) neither subclass or superclass

ANSWER: A

Structural modeling helps finding the \_\_\_\_\_\_\_\_ of an object-oriented information system.

A) basic building blocks

B) boundaries

C) scope

D) requirements

ANSWER: A

Structural modeling needed to support systems' \_\_\_\_\_\_\_\_.

A) structure

B) behavior

C) expansion

D) boundary

ANSWER: B

The "\_\_\_\_\_\_\_\_" analogy holds true for classes as well as objects.

A) black box

B) white box

C) either black box or white box

D) neither black box or white box

ANSWER: A

The attributes of an object represents \_\_\_\_\_\_\_\_.

A) what an object knows

B) what an object does

C) either what an object knows of what an object does

D) both what an object knows & what an object does

ANSWER: A

The interface of an object is defined by two factors: \_\_\_\_\_\_\_\_ it offers and \_\_\_\_\_\_\_\_ the offerings are presented to other entities.

A) what, how

B) when, where

C) what, where

D) when, how

ANSWER: A

The interface of an object is the \_\_\_\_\_\_\_\_ that it offers to the outside world.

A) attributes

B) services

C) classes

D) none of these

ANSWER: B

The operation of an object represents \_\_\_\_\_\_\_\_.

A) what the object does

B) what an object knows

C) neither what the object does or what an object knows

D) either what the object does or what an object knows

ANSWER: A

To discover business objects, we must start by mining the \_\_\_\_\_\_\_\_.

A) flow of use cases

B) scope of the system

C) goal of the system

D) name of the system

ANSWER: A

Usually you need \_\_\_\_\_\_\_\_ to clarify class relationships from different,but overlapping viewpoints.

A) multiple class diagram

B) a single class diagram

C) overlapping class diagrams

D) abstract classes

ANSWER: A

Which of the following is a correct name for a class in UML notation?

A) medicalServices

B) MedicalService

C) medical service

D) AmedicalService

ANSWER: B

Which of the following may be the aim of a structural modeling?

A) understanding an existing structure

B) building an entirely new structure

C) changing an existing structure

D) any of these

ANSWER: D

\_\_\_\_\_\_\_\_ represents the interaction of the building blocks of the information system with each other and with outside world to satisfy the behavioral requirements of the system

A) Structural modeling

B) Behavioral modeling

C) Dynamic modeling

D) Use case modeling

ANSWER: C

\_\_\_\_\_\_\_\_ specify the data that must be supplied to an object to carry out a specific operation.

A) Parameters

B) Strings

C) Types

D) Visibility

ANSWER: A

"getMenu()" is an example of \_\_\_\_\_\_\_\_.

A) value

B) argument

C) data

D) object

ANSWER: B

A snapshot of an object at a certain stage in time is the \_\_\_\_\_\_\_\_ of the object

A) state

B) life

C) condition

D) event

ANSWER: A

Any goal-oriented interaction requires a \_\_\_\_\_\_\_\_.

A) goal

B) object

C) logical flow

D) road map

ANSWER: C

Dynamic modeling features:

A) classes

B) objects

C) behavior

D) structure

ANSWER: B

Dynamic modeling is all about:

A) classes

B) structure

C) information systems

D) interaction

ANSWER: D

Dynamic modeling is not only about object and their interactions, but also \_\_\_\_\_\_\_\_.

A) about classes and their interactions

B) about the quality of the interactions

C) how the objects change through interaction.

D) how the objects disappear through interactions

ANSWER: C

Dynamic modeling must show not only who interacts with whom and how, but in what \_\_\_\_\_\_\_\_.

A) order

B) location

C) area

D) setting

ANSWER: A

In the example "orderDessert(Ice Cream, 2)", orderDessert is a (an) \_\_\_\_\_\_\_\_.

A) operation

B) argument

C) parameter

D) data

ANSWER: A

In the example "Public Currency payBill(amount, paymentType", amount refers to \_\_\_\_\_\_\_\_.

A) visibility

B) parameter

C) return type

D) name

ANSWER: B

In the example "Public Currency payBill(amount, paymentType", Currency refers to \_\_\_\_\_\_\_\_.

A) return type

B) visibility

C) parameter

D) name

ANSWER: A

In the example "Public Currency payBill(amount, paymentType", Public refers to \_\_\_\_\_\_\_\_.

A) visibility

B) parameter

C) return type

D) name

ANSWER: A

Inserting your card into an ATM to get some money is an example of \_\_\_\_\_\_\_\_.

A) return type

B) parameter

C) event

D) visibility

ANSWER: C

Parameters are \_\_\_\_\_\_\_\_ that carry data of a certain type, but are not data themselves.

A) containers

B) objects

C) attributes

D) operations

ANSWER: A

Parameters are defined in terms of \_\_\_\_\_\_\_\_.

A) objects

B) variables

C) attributes

D) operations

ANSWER: B

Return value is always a \_\_\_\_\_\_\_\_ item.

A) simple

B) plural

C) single

D) parallel

ANSWER: C

Since a \_\_\_\_\_\_\_\_ diagram's level of detail or scope is not predetermined, you may choose a level or scope which suits your needs or the complexity of the scenario that the diagram represents

A) sequence

B) class

C) object

D) structural

ANSWER: A

Statechart diagram depicts those states that are deemed as \_\_\_\_\_\_\_\_ from a specific viewpoint.

A) redundant

B) milestones

C) unique

D) both redundant & milestones

ANSWER: B

The most lucid tool for modeling the \_logical\_ flow of activities is the \_\_\_\_\_\_\_\_ diagram.

A) sequence

B) state

C) activity

D) collaboration

ANSWER: C

The reply that a message may invoke from the receiving object after an operation is complete is called \_\_\_\_\_\_\_\_.

A) an answer

B) returned object

C) messenger

D) return value

ANSWER: D

Virtual objects interact by exchanging \_\_\_\_\_\_\_\_.

A) their identities

B) or changing behavior

C) messages

D) their attributes

ANSWER: C

Which of the following events has a return value?

A) order

B) times

C) signal

D) call

ANSWER: D

Which of the following is NOT a type of event?

A) order

B) call

C) signal

D) time

ANSWER: A

Which of the following is NOT a type of visibility?

A) public

B) private

C) protected

D) obvious

ANSWER: D

Which one of the following events is an asynchronous event?

A) order

B) signal

C) call

D) private

ANSWER: B

You need \_\_\_\_\_\_\_\_ only for those objects whose states affect specific behaviors of the system

A) sequence diagrams

B) statechart diagrams

C) collaborative diagrams

D) activity diagrams

ANSWER: B

\_\_\_\_\_\_\_\_ do not change the meaning of the models to which they are attached, but simply clarify them.

A) Notes

B) Tagged values

C) Adornments

D) Constraints

ANSWER: A

\_\_\_\_\_\_\_\_ extends the vocabulary of UML by allowing you to create new kinds of building blocks that are derived from existing one but are specific to your needs.

A) Control class

B) Stereotyping

C) Utility class

D) Use cases

ANSWER: B

\_\_\_\_\_\_\_\_ is all about creating something new and selecting the best possible solution.

A) Design

B) Analysis

C) Implementation

D) Requirement

ANSWER: A

\_\_\_\_\_\_\_\_ is instrumental for a good design.

A) Foresight

B) Domain analysis

C) Innovation

D) Context diagram

ANSWER: B

\_\_\_\_\_\_\_\_ maps the logical models to specific technologies.

A) Physical modeling

B) Any modeling

C) Concrete modeling

D) Class modeling

ANSWER: A

\_\_\_\_\_\_\_\_ must take into account the existing technological paradigms while steering clear from specific technologies within those paradigms.

A) Physical design

B) Logical design

C) Abstract design

D) Concrete design

ANSWER: B

\_\_\_\_\_\_\_\_ objects are those objects that are needed to build the solution.

A) Design

B) Real

C) Multiple

D) Concrete

ANSWER: A

\_\_\_\_\_\_\_\_ of an element inside a package decides what other packages can access that element.

A) Name

B) Address

C) Visibility

D) none of these

ANSWER: C

\_\_\_\_\_\_\_\_ transforms the conceptual model into a representation that shows how the components of the solution are logically related and interact.

A) Physical design

B) Abstract design

C) Logical design

D) Concrete design

ANSWER: C

A package can contain a combination of:

A) use case diagrams

B) class diagrams

C) components

D) all of these

ANSWER: D

A package is a general-purpose mechanism in modeling tools for grouping related items within a \_\_\_\_\_\_\_\_ structure.

A) flat

B) horizontal

C) hierarchical

D) complex

ANSWER: C

A paradigm is:

A) a broad theoretical or technological framework

B) a general agreement on how the world (or an aspect of it) works

C) a fundamental model or pattern

D) all of these

ANSWER: D

Conceptual model of analysis phase defines the \_\_\_\_\_\_\_\_ of the product or the service.

A) technical aspect

B) "what" and the "where"

C) source

D) recipient

ANSWER: B

Concrete modeling consists of two related and overlapping activities \_\_\_\_\_\_\_\_.

A) analysis and design

B) design and programming

C) logical and physical modeling

D) programming and testing

ANSWER: C

Final design serves as \_\_\_\_\_\_\_\_ for building the product.

A) pink slip

B) white paper

C) blueprint

D) none of these

ANSWER: C

Packaging hierarchy requires that at every level the name of an item must be \_\_\_\_\_\_\_\_ within the boundaries of the package.

A) unique

B) redundant

C) secure

D) none of these

ANSWER: A

Stereotyping extends the vocabulary of UML by creating \_\_\_\_\_\_\_\_ building blocks for modeling..

A) generalized

B) abstract

C) specialized

D) common

ANSWER: C

Tagged values allow us to add new \_\_\_\_\_\_\_\_ relevant to code generation and configuration.

A) meanings

B) constraints

C) properties

D) values

ANSWER: C

Tagged values are a kind of \_\_\_\_\_\_\_\_.

A) metadata

B) specific values

C) numerical values

D) qualitative values

ANSWER: A

The elements within the package can belong to \_\_\_\_\_\_\_\_ package.

A) only one

B) many

C) only two

D) no more than three

ANSWER: A

The same logical design can translate into many or no \_\_\_\_\_\_\_\_.

A) physical design

B) logical modeling

C) abstract design

D) architecture

ANSWER: A

Utility classes are also called \_\_\_\_\_\_\_\_.

A) service

B) control classes

C) boundary classes

D) superclasses

ANSWER: A

When developing an information system, design helps the \_\_\_\_\_\_\_\_ modeling of the solution.

A) concrete

B) abstract

C) conceptual

D) behavioral

ANSWER: A

Which of the following is NOT a design class?

A) standard

B) control

C) boundary

D) utility

ANSWER: A

Which of the following is NOT a design concept?

A) use case

B) reuse

C) component

D) pattern

ANSWER: A

Which of the following is NOT a type of visibility?

A) shared

B) public

C) private

D) protected

ANSWER: A

Which of the following is NOT an activity related to analysis phase of system development?

A) requirements discovery

B) behavioral modeling

C) domain analysis

D) concrete modeling

ANSWER: D

\_\_\_\_\_\_\_\_ are the most well-known and elaborated patterns in software development.

A) Analysis pattern

B) Maintenance patterns

C) Design patterns

D) Programming patterns

ANSWER: C

\_\_\_\_\_\_\_\_ are used to model dynamic behavior of objects.

A) Strings

B) Arguments

C) Constraints

D) Inheritance

ANSWER: C

\_\_\_\_\_\_\_\_ is to break down the functionality of a system into successively smaller tasks and subtasks until we reach the most atomic functions.

A) Functional decomposition

B) Process re engineering

C) Process composition

D) Process differentiating

ANSWER: A

"Transform the many-to-many association between two classes into a trio of classes by creating an intermediary class with two one-to-many relationships" is an example of a \_\_\_\_\_\_\_\_ of a pattern.

A) problem

B) context

C) solution

D) participation

ANSWER: C

An expert will have the ability to recognize \_\_\_\_\_\_\_\_ and draw upon solutions that have worked in the past.

A) problems

B) patterns

C) solutions

D) methods

ANSWER: B

Anti-patterns cover \_\_\_\_\_\_\_\_.

A) gathering requirements

B) coding

C) design

D) all of these

ANSWER: D

Classes that result from functional decomposition usually lack \_\_\_\_\_\_\_\_ that are exposed through methods.

A) operations

B) methods

C) individual names

D) attributes

ANSWER: D

Factory Pattern method provides a way to \_\_\_\_\_\_\_\_ the creation (or instantiation) of the object from its consumption.

A) couple

B) decouple

C) mix

D) assess

ANSWER: B

If something is important to the problem domain, it should be defined during \_\_\_\_\_\_\_\_ phase.

A) design

B) SDLC

C) analysis

D) programming

ANSWER: C

In functional decomposition the possibility of \_\_\_\_\_\_\_\_ does not exist.

A) reuse

B) inheritance

C) polymorphism

D) all of these

ANSWER: D

Patterns are \_\_\_\_\_\_\_\_.

A) domain- dependent

B) domain - isolated

C) domain-independent

D) domain- analysis

ANSWER: C

Risks associated with pattern include \_\_\_\_\_\_\_\_.

A) lack of good literature on pattern

B) early application of pattern as a tool for solving problems

C) misunderstanding of consequence s of the application of a pattern

D) all of these

ANSWER: D

The constraint that specifies all children in the generalization have been specified in the model and no additional children are permitted is the \_\_\_\_\_\_\_\_ constraint.

A) incomplete

B) overlapping

C) complete

D) disjoint

ANSWER: C

The constraint that specifies the objects of the parent may have more than one of the children as a type is the \_\_\_\_\_\_\_\_ constraint.

A) incomplete

B) overlapping

C) complete

D) disjoint

ANSWER: B

Which of the following is NOt a standard constraint for advanced inheritance relationship?

A) complete

B) incomplete

C) joint

D) overlapping

ANSWER: C

Which of the the following professions requires finding a solution for repeated problems?

A) car manufacturing

B) agriculture

C) military

D) all of these

ANSWER: D

\_\_\_\_\_\_\_\_ are the providers and the consumers of data.

A) Applications

B) Database management systems

C) Interfaces

D) UML

ANSWER: A

\_\_\_\_\_\_\_\_ classes form the overwhelming majority of tables.

A) Entity

B) Control

C) Boundary

D) Utility

ANSWER: A

\_\_\_\_\_\_\_\_ exposes the services of an object.

A) Interface

B) Encapsulation

C) Polymorphism

D) Data service

ANSWER: A

\_\_\_\_\_\_\_\_ hides the services performed by the object.

A) Encapsulation

B) Interface

C) Polymorphism

D) Hidden services

ANSWER: A

\_\_\_\_\_\_\_\_ improved the performance of data operations by storing store the value of a field and the record number in a separate but smaller record in a separate but much smaller file.

A) Indexed sequential access

B) Sequential access

C) Direct access

D) Slow access

ANSWER: A

\_\_\_\_\_\_\_\_ is an attribute in one table whose value must match the value of a primary or an alternate key in a different table.

A) The first column

B) The foreign key

C) The first row

D) The best value

ANSWER: B

\_\_\_\_\_\_\_\_ is the primary language for communication with relational database management systems.

A) SQL

B) Object oriented

C) Fortran

D) DBMS

E) UML

ANSWER: A

\_\_\_\_\_\_\_\_ relationships must be converted to one-to-many relationships through intersection tables:

A) Many-to-many

B) One-to-one

C) None-to-none

D) Many-to-one

ANSWER: A

\_\_\_\_\_\_\_\_ software functions as a layer that mediates between the application and the relational database bridging the divide between the object-oriented and relational models.

A) Object-relational mapping (ORM).

B) Object oriented database

C) SQL

D) Object oriented DBMS

ANSWER: A

A \_\_\_\_\_\_\_\_ is a virtual table that represents a selected set of attributes from one or more tables.

A) view

B) row

C) column

D) tuple

ANSWER: A

A good database management system should be \_\_\_\_\_\_\_\_.

A) reliable

B) robust

C) flexible

D) all of these

ANSWER: D

A relational database management system protects data integrity at:

A) the column level

B) the row level

C) inter-table and procedural levels

D) all of these

ANSWER: D

A relational row represents an entity, similar to an object in the object-oriented model, and each entity in the table must be \_\_\_\_\_\_\_\_.

A) known

B) redundant

C) unique

D) hidden

ANSWER: C

A stored collection of data is called \_\_\_\_\_\_\_\_.

A) an entity

B) an attribute

C) a table

D) a database

ANSWER: D

A table is in the first normal form if it:

A) contains no repeating groups

B) has no foreign key

C) has a unique primary key

D) has both primary and foreign key

ANSWER: A

A table is in the second normal form if it contains no repeating groups and:

A) every non-key attribute is \_fully\_ dependent on the \_entire\_ primary key

B) and no repeating names

C) and no repeating columns

D) and no repeating rows

ANSWER: A

A table is in the third normal form if the table is in the second normal form and:

A) it contains no repeating groups

B) has two foreign keys

C) no non-key attribute is dependent on another non-key attribute

D) none of these

ANSWER: C

A trigger is executed automatically in response to \_\_\_\_\_\_\_\_.

A) insert

B) delete

C) update

D) all of these

ANSWER: D

Another name for a procedure, a named sequence of programming statements is \_\_\_\_\_\_\_\_.

A) a function

B) a method

C) a routine

D) any of these

ANSWER: D

Applications must manage the interaction between:

A) object space and data space

B) inside the system and outside the system

C) solution domain and solution space

D) users of the system

ANSWER: A

Changes in data management systems brings about \_\_\_\_\_\_\_\_ adjustments in system development.

A) revolutionary

B) small

C) incremental

D) no

ANSWER: A

Data has meaning only within the context of a \_\_\_\_\_\_\_\_.

A) object

B) use case

C) variable

D) structure

ANSWER: C

Data management belongs to the:

A) problem space

B) outer space

C) data space

D) solution space

ANSWER: D

Data management is storing and organizing data in a manner that can satisfy the needs of:

A) the information system

B) the users

C) the applications

D) all of these

ANSWER: D

Data normalization is a set of guidelines, techniques and concepts that allow us to:

A) identify logical relationships among attributes

B) combine these attributes to form relations (or tables)

C) combine tables in a schema to form a database

D) all of these

ANSWER: D

Denormalization might become necessary due to:

A) logical considerations,

B) performance degradation

C) technological constraints

D) all of these

ANSWER: D

Distributeddatabase is a collection of database that \_\_\_\_\_\_\_\_.

A) serves different applications

B) serves different users

C) resides on separate physical devices

D) has different entities

ANSWER: C

From an object-oriented viewpoint, variables:

A) are attributes of objects

B) belong to the messages that the objects exchange with each other

C) belong to the messages that the objects exchange with the outside world

D) any of these

ANSWER: D

Mapping to a relational database is the application of relational and normalization rules to \_\_\_\_\_\_\_\_ and their relationships

A) classes

B) data

C) variables

D) attributes

ANSWER: A

The \_\_\_\_\_\_\_\_ is the carrier of messages and data between the application and the database.

A) interface

B) driver

C) data language

D) application

ANSWER: B

The design of the database must satisfy:

A) only present requirements

B) present and past requirements

C) the requirements of the entire information system; present and possibly future.

D) only future requirements

ANSWER: C

The most important function of persistence object is to \_\_\_\_\_\_\_\_ into a language that is understandable to the data management system

A) manage compiler

B) install interpreter

C) translate application requests

D) work with interface

ANSWER: C

The persistence layeris a collection of \_\_\_\_\_\_\_\_\_\_objects, instances of classes that mediate between an application or the entire information.

A) entity

B) control

C) flow

D) boundary

ANSWER: D

The relational model presents a \_\_\_\_\_\_\_\_ of the database organization and provides the basis for using a high-level language for database management.

A) physical view

B) logical view

C) open view

D) closed view

ANSWER: B

The two important objectives of data management, are:

A) safe storage and easy retrial of data

B) screen data and calculate data

C) minimize the storage capacity and maximize the usage of database

D) match data and application with the user requirement

ANSWER: A

When a collection of databases share one physical space, we have a \_\_\_\_\_\_\_\_.

A) DBMS

B) data base server

C) data space

D) network

ANSWER: B

When data is grouped in records that are stored and retrieved serially from beginning to end, we call it \_\_\_\_\_\_\_\_.

A) direct access

B) listing access

C) sequential access

D) data access

ANSWER: C

When we find an employee by the Social Security Number and do not need to read the entire employee file but, instead, can process the records in the index file, find the entry with the right number, take the "key" to the full record and retrieve it fast, we are using \_\_\_\_\_\_\_\_.

A) direct access

B) fast access

C) indexed sequential access

D) DBMS

ANSWER: C

Which of the following is NOT a type of data?

A) quantitative

B) dependent

C) qualitative

D) composite

ANSWER: D

Which of the following is NOT a type of early database models?

A) digital

B) flat

C) hierarchical

D) network

ANSWER: A

Which of the following is NOt an operation of a database?

A) create data

B) delete data

C) retrieve data

D) updatedata

E) analyse data

ANSWER: E

\_\_\_\_\_\_\_\_ approach enabled users to interact with the computer through real-world metaphors.

A) User friendly

B) Graphical User Interface (GUI)

C) Real-time

D) Applet programming

ANSWER: B

\_\_\_\_\_\_\_\_ are an example of manipulators.

A) Icons

B) Scroll bars

C) Menu

D) Buttons

ANSWER: B

\_\_\_\_\_\_\_\_ in the user interface is achieved when the user can predict what kinds of actions produce what kinds of results.

A) Multifunction

B) Consistency

C) Credibility

D) Navigation

ANSWER: B

\_\_\_\_\_\_\_\_ is the creation of a working model for testing and verification of requirements.

A) Prototyping

B) Simulation

C) Logical storyboard

D) Physical storyboard

ANSWER: A

\_\_\_\_\_\_\_\_ must be adapted to the problem at hand.

A) Patterns

B) Consistency

C) Manipulation

D) Buttons

ANSWER: A

\_\_\_\_\_\_\_\_ represent objects, their properties and/or their methods.

A) Object signifiers

B) Navigators

C) Displayer

D) Container

ANSWER: A

A form is an example of a[No]\_\_\_\_\_\_\_\_.

A) container

B) executor

C) displayer

D) editor

ANSWER: A

A set of frames, connected by navigation lines, tells a story or scenes from a story constitutes:

A) story telling

B) storyboarding

C) story writing

D) story making

ANSWER: B

A UML modeling tool that can be more successfully adapted to navigation is the \_\_\_\_\_\_\_\_ diagram.

A) context diagram

B) collaboration

C) sequence

D) statechart

ANSWER: D

Containers organize and present visual controls for \_\_\_\_\_\_\_\_\_\_ purpose.

A) a specific

B) general purpose

C) a future

D) visual

ANSWER: A

Displayers provide \_\_\_\_\_\_\_\_ information.

A) textual

B) Textual and pictorial

C) Pictorial

D) input and output

ANSWER: B

Each metaphor in the user interface can signify multiple \_\_\_\_\_\_\_\_.

A) names

B) colors

C) directions

D) roles

ANSWER: D

Each metaphor in the vocabulary of user interface can signify \_\_\_\_\_\_\_\_ role(s).

A) multiple

B) a single

C) two or less

D) metaphors have nothing to do with roles

ANSWER: A

Find button is an example of \_\_\_\_\_\_\_\_.

A) executor

B) editor

C) displayer

D) selector

ANSWER: A

Hyperlinks are widely used as \_\_\_\_\_\_\_\_.

A) selectors

B) navigators

C) containers

D) editors

ANSWER: B

In developing user interface we need \_\_\_\_\_\_\_\_ to identify the units of the user interface and the services that the units must perform.

A) class diagrams

B) use cases

C) activity diagrams

D) context diagrams

ANSWER: A

In developing User Interface, organizing the sequence of containers that the user must traverse to accomplish a task.visual controls on containers is called:

A) layout

B) aesthetics

C) navigation

D) path

ANSWER: C

In developing User Interface, presenting and organizing visual controls on containers is called:

A) aesthetics

B) displayer

C) the layout of the interface

D) visual

ANSWER: C

In movies industry, directors often resort to \_\_\_\_\_\_\_\_ to communicate their vision to producers, set designers, photographers and actors.

A) scenarios

B) storyboarding

C) playwright

D) animations

ANSWER: B

It is the responsibility of the \_\_\_\_\_\_\_\_ for the translating the computer language to metaphors that human understands.

A) UI designer

B) system analyst

C) system programmer

D) system user

ANSWER: A

Labels, graphs and pictures are examples of \_\_\_\_\_\_\_\_.

A) containers

B) selectors

C) displayers

D) editors

ANSWER: C

Object signifiers point towards anything that can be represented as a distinct entity such as:

A) a document

B) a web site

C) an application

D) all of these

ANSWER: D

Sliders that control the sound level and the balance of various devices connected to the sound card is an example of:

A) editor

B) displayer

C) container

D) selectors

ANSWER: D

Storyboards can be used:

A) to elicit response from domain experts

B) to gather requirements

C) to verify the narrative of use cases

D) all of these

ANSWER: D

Text boxes are examples of \_\_\_\_\_\_\_\_.

A) container

B) executor

C) displayer

D) editor

ANSWER: D

The \_\_\_\_\_\_\_\_ interface is the type of interface where the user types instructions to the computer in a special language.

A) interactive

B) real-time

C) user friendly

D) command-line

ANSWER: D

The \_\_\_\_\_\_\_\_ is where the interaction between the user and the application takes place.

A) requirement phase

B) user interface

C) system level

D) application

ANSWER: B

The flow of the application and the contents of forms and Web pages can be presented by \_\_\_\_\_\_\_\_ storyboards.

A) logical

B) physical

C) visual

D) vertical

ANSWER: A

The graphical user interface translates the binary language of the computer into \_\_\_\_\_\_\_\_ of the real world.

A) symbolic language

B) java language

C) the metaphors

D) xml

ANSWER: C

The main window of a word-processing application is an example of \_\_\_\_\_\_\_\_.

A) displayer

B) visual control

C) an editor

D) container

ANSWER: C

The manner in which the user interface guides the users through the flow of the application is called \_\_\_\_\_\_\_\_.

A) navigation

B) layout

C) workflow

D) guideline

ANSWER: A

The messages sent from application to the use are classified as \_\_\_\_\_\_\_\_.

A) output

B) input

C) GUI

D) DOS

ANSWER: A

The messages that are received by the user interface layer and transmitted to the application are classified as \_\_\_\_\_\_\_\_.

A) GUI

B) output

C) input

D) DOS

ANSWER: C

User interface is a layer of \_\_\_\_\_\_\_\_ objects that manage interaction with the user.

A) control

B) boundary

C) utility

D) virtual

ANSWER: B

User interface is primarily \_\_\_\_\_\_\_\_ that makes the interaction between two different worlds of human and machine possible.

A) an interpreter

B) a device

C) a use case

D) an information system

ANSWER: A

When working on the aesthetics of an user interface, the developer must consider \_\_\_\_\_\_\_\_ of whoever pays the development expenses?

A) the taste

B) the position

C) the responsibility

D) the authority

ANSWER: A

Which of the following is an example for interface containers?

A) Web pages

B) forms

C) frames

D) all of these

ANSWER: D

Which of the following is one of the UI responsibilities?

A) accepting and editing user input

B) producing human-intelligible output

C) guiding users to accomplish tasks

D) all of these

ANSWER: D

\_\_\_\_\_\_\_\_ are the transmission mechanism of software applications.

A) Objects

B) Attributes

C) Persistence

D) Messages

ANSWER: D

\_\_\_\_\_\_\_\_ determine the flow of an application.

A) Control objects

B) Utility objects

C) Boundary objects

D) Real objects

ANSWER: A

\_\_\_\_\_\_\_\_ is about the "nuts and bolts" of the solution.

A) Structural modeling

B) Concrete modeling

C) Composition modeling

D) Conductor modeling

ANSWER: B

\_\_\_\_\_\_\_\_ objects are responsible for managing a set of other objects.

A) Interface

B) Utility

C) Lifecycle

D) none of these

ANSWER: C

\_\_\_\_\_\_\_\_ presents an idea of the solution in which only the most basic functions of the solution are conceived.

A) Concrete modeling

B) Application

C) Control object

D) Conceptual modeling

ANSWER: D

A \_\_\_\_\_\_\_\_ creates, organizes, tracks and destroys other objects, often instances of an entity class.

A) interface object

B) lifecycle object

C) utility object

D) flow object

ANSWER: B

A data set is a general-purpose \_\_\_\_\_\_\_\_ that carries data between objects within an application.

A) entity object

B) control object

C) boundary object

D) utility object

ANSWER: D

A method's name, its parameters, the type and the relative position of each parameter, as well as the type of its return value are known collectively as the method's \_\_\_\_\_\_\_\_.

A) services

B) interface

C) signature

D) operations

ANSWER: C

A software application is a \_\_\_\_\_\_\_\_ entity.

A) static

B) progressive

C) dynamic

D) controlled

ANSWER: C

An application can be seen as \_\_\_\_\_\_\_\_ of objects and \_\_\_\_\_\_\_\_ among those objects to fulfill the requirements of the application.

A) a composition, the collaboration

B) owner, residing

C) an integration, rivalry

D) none of these

ANSWER: A

Attributes and operations of an object are \_\_\_\_\_\_\_\_.

A) unique

B) encapsulated within one package

C) public

D) in fact the same thing

ANSWER: B

Dataset is a \_\_\_\_\_\_\_\_ \_\_of rows and columns that cannot retain their identity outside the dataset.

A) aggregate

B) composition

C) collector

D) collective

ANSWER: B

Datasets are extensively used by \_\_\_\_\_\_\_\_ to transmit query results from the database to other objects within the application.

A) persistence objects

B) flow objects

C) control objects

D) index objects

ANSWER: A

Each cell within the dataset exposes \_\_\_\_\_\_\_\_ of a certain type.

A) a set of data

B) a collection of objects

C) a single piece of data

D) a composite of data

ANSWER: C

Each column in the dataset represents one \_\_\_\_\_\_\_\_.

A) object

B) method

C) operation

D) attribute

ANSWER: D

In \_\_\_\_\_\_\_\_ we discover objects in the problem space and abstract them into entity classes.

A) analysis

B) design

C) programming

D) real life

ANSWER: A

Objects expose \_\_\_\_\_\_\_\_ to provide services requested by messages.

A) operations

B) attributes

C) methods

D) interface

ANSWER: C

The \_\_\_\_\_\_\_\_ bundles the complex series of requests to the entity objects into a common workflow that is easily accessed by the boundary objects.

A) persistence object

B) control object

C) utility object

D) encapsulate object

ANSWER: B

The \_\_\_\_\_\_\_\_ version adds new classes and fine-tunes the structure of the application until it arrives at detailed objects and detailed messages exchanged between these objects.

A) design

B) analysis

C) programming

D) maintenance

ANSWER: A

The application flow must fulfill \_\_\_\_\_\_\_\_ that go beyond individual use cases.

A) non-functional requirements

B) design rules

C) design objects

D) business rules

ANSWER: A

The control of an application is:

A) the composite of use cases

B) the composite of objects that direct the application-level flow

C) aggregate of use cases

D) none of these

ANSWER: B

The difference between the flow of the application and the flow of its individual use cases is a difference in \_\_\_\_\_\_\_\_.

A) quality

B) scope

C) objective

D) quantity

ANSWER: B

The flow of the application and how it controls and drives its components must be placed \_\_\_\_\_\_\_\_ on a designer's agenda.

A) somewhere

B) nowhere

C) low

D) high

ANSWER: D

The need for lifecycle objects arises from:

A) the idea of divide and conquer

B) arrange the objects according to their importance

C) destroy unused objects

D) the fact that objects and classes are the same

ANSWER: A

The only visible component of an application software is \_\_\_\_\_\_\_\_.

A) user interface

B) persistence

C) business rule

D) utility

ANSWER: A

The task of \_\_\_\_\_\_\_\_ is to provide solutions to the users of an information system.

A) utility program

B) operating system

C) an application software

D) an interface

ANSWER: C

To move among objects within the collection, lifecycle classes provide a set of \_\_\_\_\_\_\_\_ operations.

A) sensitive

B) disorderly

C) navigational

D) none of these

ANSWER: C

To plot the flow of an application, we must revisit \_\_\_\_\_\_\_\_ and re-examine them from the viewpoint of design.

A) use cases

B) utility classes

C) activity diagram

D) interface objects

ANSWER: A

Which of the of the following is NOT a major component of an application software?

A) operation system

B) user interface

C) persistence

D) entity objects

ANSWER: A

\_\_\_\_\_\_\_\_ represents the interaction of the building blocks of the information system with each other and with outside world to satisfy the behavioral requirements of the system

A) Structural modeling

B) Behavioral modeling

C) Dynamic modeling

D) Use case modeling

ANSWER: C

\_\_\_\_\_\_\_\_ specify the data that must be supplied to an object to carry out a specific operation.

A) Parameters

B) Strings

C) Types

D) Visibility

ANSWER: A

"getMenu()" is an example of \_\_\_\_\_\_\_\_.

A) value

B) argument

C) data

D) object

ANSWER: B

A snapshot of an object at a certain stage in time is the \_\_\_\_\_\_\_\_ of the object

A) state

B) life

C) condition

D) event

ANSWER: A

Any goal-oriented interaction requires a \_\_\_\_\_\_\_\_.

A) goal

B) object

C) logical flow

D) road map

ANSWER: C

Dynamic modeling features:

A) classes

B) objects

C) behavior

D) structure

ANSWER: B

Dynamic modeling is all about:

A) classes

B) structure

C) information systems

D) interaction

ANSWER: D

Dynamic modeling is not only about object and their interactions, but also \_\_\_\_\_\_\_\_.

A) about classes and their interactions

B) about the quality of the interactions

C) how the objects change through interaction.

D) how the objects disappear through interactions

ANSWER: C

Dynamic modeling must show not only who interacts with whom and how, but in what \_\_\_\_\_\_\_\_.

A) order

B) location

C) area

D) setting

ANSWER: A

In the example "orderDessert(Ice Cream, 2)", orderDessert is a (an) \_\_\_\_\_\_\_\_.

A) operation

B) argument

C) parameter

D) data

ANSWER: A

In the example "Public Currency payBill(amount, paymentType", amount refers to \_\_\_\_\_\_\_\_.

A) visibility

B) parameter

C) return type

D) name

ANSWER: B

In the example "Public Currency payBill(amount, paymentType", Currency refers to \_\_\_\_\_\_\_\_.

A) return type

B) visibility

C) parameter

D) name

ANSWER: A

In the example "Public Currency payBill(amount, paymentType", Public refers to \_\_\_\_\_\_\_\_.

A) visibility

B) parameter

C) return type

D) name

ANSWER: A

Inserting your card into an ATM to get some money is an example of \_\_\_\_\_\_\_\_.

A) return type

B) parameter

C) event

D) visibility

ANSWER: C

Parameters are \_\_\_\_\_\_\_\_ that carry data of a certain type, but are not data themselves.

A) containers

B) objects

C) attributes

D) operations

ANSWER: A

Parameters are defined in terms of \_\_\_\_\_\_\_\_.

A) objects

B) variables

C) attributes

D) operations

ANSWER: B

Return value is always a \_\_\_\_\_\_\_\_ item.

A) simple

B) plural

C) single

D) parallel

ANSWER: C

Since a \_\_\_\_\_\_\_\_ diagram's level of detail or scope is not predetermined, you may choose a level or scope which suits your needs or the complexity of the scenario that the diagram represents

A) sequence

B) class

C) object

D) structural

ANSWER: A

Statechart diagram depicts those states that are deemed as \_\_\_\_\_\_\_\_ from a specific viewpoint.

A) redundant

B) milestones

C) unique

D) both redundant & milestones

ANSWER: B

The most lucid tool for modeling the \_logical\_ flow of activities is the \_\_\_\_\_\_\_\_ diagram.

A) sequence

B) state

C) activity

D) collaboration

ANSWER: C

The reply that a message may invoke from the receiving object after an operation is complete is called \_\_\_\_\_\_\_\_.

A) an answer

B) returned object

C) messenger

D) return value

ANSWER: D

Virtual objects interact by exchanging \_\_\_\_\_\_\_\_.

A) their identities

B) or changing behavior

C) messages

D) their attributes

ANSWER: C

Which of the following events has a return value?

A) order

B) times

C) signal

D) call

ANSWER: D

Which of the following is NOT a type of event?

A) order

B) call

C) signal

D) time

ANSWER: A

Which of the following is NOT a type of visibility?

A) public

B) private

C) protected

D) obvious

ANSWER: D

Which one of the following events is an asynchronous event?

A) order

B) signal

C) call

D) private

ANSWER: B

You need \_\_\_\_\_\_\_\_ only for those objects whose states affect specific behaviors of the system

A) sequence diagrams

B) statechart diagrams

C) collaborative diagrams

D) activity diagrams

ANSWER: B