1 Define Polymorphism

(More than one answer is correct)

it s a characteristic when methods from different classes react differently to the same interface it s a characteristic when objects from different classes react differently to the same method call the same method is implemented in different ways by redefining the method in subclasses it s one of the main strengths of inheritance it s a characteristic when methods of the same class react differently to the same method call

Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

receive their own copy of the static attribute for each subclass exist once per roll area cannot be shared does not allow for methods to be redefined in subclasses

3 The syntax for static method specification

Call class-method
Call Method-> class name
Call method class name =>method
Call method class name->method

4 Where would the components of a class be defined

Implementation part of a class Logic component of a program Definition part of Class Data Component of a program

5 In the context of relationship between Super and Sub classes, identify the statements which apply

(More than one answer is correct)

A change in a superclass does not automatically get realized in the subclass Superclass does not know its subclasses A superclass is a specialization of a subclass Subclass does not know it s superclass A subclass is a specialization of a superclass

6 Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

refvar->method(p1) refvar->method(p1) refvar->method(im = p1) refvar->method receiving()

7 Class A provides friendship to Class B. Class B provides friendship to Class C. Identify the valid friend relationship.

(More than one answer is correct)

B and C are friends of A
A is friend of B and C
B is friend of A
C is friend of B
C is friend of A

8 What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Objects can change their class Class is a template for an object Classes are an instance of an object Objects are an instance of a class

9 Identify the one addition that is not part of the interface of a method

Exception Result Returning Importing

In the following method, what other parameters are allowed

```
CLASS lcl_course DEFINITION.

PUBLIC SECTION.

METHODS: get_course_name

IMPORTING im_name type string

Returning value(student_count) type I.

ENDCLASS.
```

Exceptions Receiving Exporting Changing

What items are true about Inheritance

(More than one answer is correct)

Superclass private components are visible only within the subclasses
Superclass public components are visible to all classes

Superclass protected components are visible to all subclasses

Superclass private components are visible to all subclasses

Refer to the following code and identify the statements that are TRUE

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.
CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.
   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.
Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.
Start-of-selection.
Create object course1.
Course2 = course1.
```

(More than one answer is correct)

Only one instance of method get_course_name exists

Memory is reserved for 2 instances of lcl_course Only one instance of method list_prices_and_discounts exists list_prices_and_discounts is a instance method Method list_prices_and_discounts can only be called once method list_prices_and_discounts is a static method

Initializing an object in a subclass requires that the constructor of the superclas is first called. Identify the correct syntax.

Call Method Constructor
Call Method Constructor-> Super
Call Method Super Constructor
Call Method Super-> Constructor

What component of a class guarantees its own consistency

functional methods private attributes public attributes static methods

15 Define Polymorphism

(More than one answer is correct)

the same method is implemented in different ways by redefining the method in subclasses it is one of the main strengths of inheritance it is a characteristic when methods from different classes react differently to the same interface it is a characteristic when methods of the same class react differently to the same method call it is a characteristic when objects from different classes react differently to the same method call

What is the only component that is implemented in the implementation part of a class

Interface Object Method Event Attribute

Mark the item that is NOT true about the handler table

Registered Methods in the handler table can only be triggered by RAISE EVENT i.e. not by CALL METHOD

Event handler methods are called in the sequence that they were registered in the handler table There is a separate handler table for every object that has defined events

A single SET Handler command can be used to register multiple handler methods in the handler table

Local Class lcl_course has been defined in a program belonging to development class ZCL. What is the key entry in the repository table TADIR

None of the answers are correct R3TR lcl_class R3TR LOCAL CLASS R3TR ZCL CLASS R3TR CLASS

When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

Signature can be changed Code can be changed Private Static methods Only Instance methods

20 Identify the line that contains the valid use of the READ-ONLY additon

class lcl_course definition. 10 public section. 20 Data: Price(3) type p decimals 2 value 100 READ-ONLY. 30 Types: type_category(15) type C READ-ONLY. Constants: write_position type I value 10 READ-ONLY. 40 50 private section. data: category(15) type C READ-ONLY, 60 70 class-data: course_count type I READ-ONLY. endclass.

> 40 60

50

20

30

21 What syntax provides access to individual components of a class within the class

(More than one answer is correct)

CALL METHOD ME->
ME->
object instance->ME->
CALL METHOD object instance->ME->

What items are true about Inheritance

(More than one answer is correct)

Superclass public components are visible to all classes

Superclass private components are visible only within the subclasses

Superclass private components are visible to all subclasses

Superclass protected components are visible to all subclasses

In the context of Triggering and Handling of Events, mark those which apply

(More than one answer is correct)

An event is defined in the Implementation of a Class

Events can be triggered with the Trigger Event command

Methods must be registered to an event in order to be called when the event is triggered

Event Triggering using Raise Event can be issued in a method

24 Choose the short form of the method call below

call method rf_car->calculate_cost importing ex_size = v_size.

rf_car->calculate_cost (importing ex_size = v_size).
 calculate_cost(importing ex_size = v_size).
 rf_car->calculate_cost(importing ex_size = v_size).
 rf_car->calculate_cost importing ex_size = v_size).

25 Identify the statement about Global Classes that is NOT true

Access to a global class is done as a reference variable using TYPE REF TO
Class Builder can be used to test global classes
Programs that are available to Global Classes
must be associated in Class Builder
A method to be transported is identified in
transport organiser as LIMU METH
Global classes are stored in TADIR with key
R3TR CLAS

26 What statement will request memory to be allocated to an object

Call Method
Call Constructor
Create Object
Create Constructor

A MOVE_CAST_ERROR runtime error just occurred. Identify the cause.

Casting a super class to a subclass when superclass does not point to an instance of the subclass type Super class and subclass both point to an instance of the same class type

Subclass reference variable correpsonds to the superclass reference variable
Super class method is called from the subclass

Identify the statements that best describe the visibility of classes

(More than one answer is correct)

Global Classes are available only from programs belonging to the same development class Global classes are centrally available to all ABAP programs

Local Classes are available only to the program where the class is defined

Local Classes are available only to programs in the same development class

29 The syntax for static method specification

Call method class name =>method Call class-method Call Method-> class name Call method class name->method

What happens when the Set Handler command is executed

An instance of the event is created The Event is triggered The Event is handled The Event Handler Method is registered

What items are true about Inheritance

(More than one answer is correct)

Superclass private components are visible only within the subclasses

Superclass public components are visible to all classes Superclass private components are visible to all subclasses Superclass protected components are visible to all subclasses

What syntax provides access to individual components of a class within the class

(More than one answer is correct)

CALL METHOD object instance->ME-> ME-> object instance->ME-> CALL METHOD ME->

What component provides the Point of Contact for outside users

Method Signature Instantiated Object Private Attributes Public Attributes

What name is always given to a static constructor?

class=>constructor static_constructor class_constructor constructor Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

A program can directly access data in the function group while access to data in an object is not possible Functions allow multiple instances of the same data objects. Objects only allow single instances of data A program can only work with a single instance of the same function group versus a program can access several instances of the same object Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is created

Identify the requirements that determine when an object gets deleted by garbage collection

(More than one answer is correct)

When none of its methods are registered as event handlers When there are no more references pointing to an object When all active objects are marked When objects can no longer be addressed from main memory

37 Identify the valid statements that will write out the Static Attributes in the following code

course_price type p,
course_category type string.

(More than one answer is correct)

write: price.
write lcl_course->price.
course_price = lcl_course=>price. Write course_price.
write lcl_course=>price.

Changing the view of an instance of a class with more details is referred to as

up cast narrowing cast dynamic referencing widening cast

39 Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.

Attributes and class methods can be redefined. The signature of the method must remain the same Constructor methods can't be redefined Only instance methods can be redefined

What is contained in a class that does not exist in an interface

attributes method implementation definition

Identify the one addition that is not part of the interface of a method

Result Returning Exception Importing

42 Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

refvar->method(im = p1) refvar->method(p1) refvar->method returning() refvar->method receiving()

In the context of Triggering and Handling of Events, mark those which apply

(More than one answer is correct)

Events can be triggered with the Trigger Event command

An event is defined in the Implementation of a Class

Methods must be registered to an event in order to be called when the event is triggered Event Triggering using Raise Event can be issued in a method

Changing the view of an instance of a class with more details is referred to as

widening cast narrowing cast

dynamic referencing up cast

What syntax provides access to individual components of a class within the class

(More than one answer is correct)

object instance->ME->
ME->
CALL METHOD object instance->ME->
CALL METHOD ME->

Refer to the following code and identify the statements that are TRUE

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.
CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.
   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.
Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.
Start-of-selection.
Create object course1.
Course2 = course1.
```

(More than one answer is correct)

Only one instance of method get_course_name exists

Method list_prices_and_discounts can only be called once
Only one instance of method

list_prices_and_discounts exists list_prices_and_discounts is a instance method method list_prices_and_discounts is a static method Memory is reserved for 2 instances of lcl course

47 Constructors have special considerations. Identify the incorrect statement below.

Generally, constructor methods can not be called The Constructor must defined in the Public section A class can have multiple constructors Only Import and Exception Parameters are allowed

In ABAP objects, which compnent is said to determine an objects behavior

class implementation signature method

49 Mark the invalid attribute definitions

```
class lcl_course definition.
 10 public section.
 20
      Data: school(20)
                       type c,
 30
            Supervisor type string value ADAMS,
 40
            Price(3) type p decimals 2 value 100 READ-ONLY.
 50
      types: type_category(15) type c,
 60
             type_name(10)
                               type c.
 70
      constants: write_position type i value 10.
 80
      class-data: course_count type i.
 90
     private section.
 100
       data: category(15) type c,
 110
             name (10)
                          type c.
 120
             courseid
                          like mara-matnr.
endclass.
```

70,80

30,120 40, 120 40,70 30,80

Identify the valid statements that will write out the Static Attributes in the following code

```
class lcl_course definition.

public section.
    data: name(15) type c value 'ABAPObjects101'.
        class-data price type p value 100.

private section.
    data: category(10) type C value 'Objects'.

endclass.

data: coursel type ref to lcl_course,
    course_name type string,
    course_price type p,
    course_category type string.
```

(More than one answer is correct)

write: price.
course_price = lcl_course=>price. Write
course_price.
write lcl_course=>price.
write lcl_course->price.

What is the number of superclasses that can exist for a given subclass

none only many only 1 1 or many

52 Define Polymorphism

(More than one answer is correct)

it s a characteristic when objects from different classes react differently to the same method call the same method is implemented in different ways by redefining the method in subclasses it s a characteristic when methods from different classes react differently to the same interface it s a characteristic when methods of the same class react differently to the same method call it s one of the main strengths of inheritance

Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

A program can directly access data in the function group while access to data in an object is not possible

Functions allow multiple instances of the same data objects. Objects only allow single instances of data

A program can only work with a single instance of the same function group versus a program can access several instances of the same object Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is

created

What name is always given to a static constructor?

constructor class_constructor class=>constructor static_constructor

Identify the valid statements that will write out the Static Attributes in the following code

```
class lcl_course definition.

public section.
    data: name(15) type c value 'ABAPObjects101'.
        class-data price type p value 100.

private section.
    data: category(10) type C value 'Objects'.

endclass.

data: course1 type ref to lcl_course,
    course_name type string,
    course_price type p,
    course_category type string.
```

(More than one answer is correct)

write lcl_course=>price. write: price. course_price = lcl_course=>price. Write course_price. write lcl_course->price.

Choose the correct redefinition of the superclass method in class lcl_super_course

```
*Super Class Definition
CLASS lcl_super_course DEFINITION.
PUBLIC SECTION.
METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
```

```
*Sub Class Method ReDefinition
CLASS 1cl sub course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
С
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM 1cl super course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

SubClass Definition A SubClass Definition D SubClass Definition C SubClass Definition B

57 Identify the behaviors of Abstract Classes.

(More than one answer is correct)

Can only be implemented through an Interface

Cannot be instantiated Methods can not be implemented in the subclass Methods can only be implemented in the subclass

How can a program access private attributes of an object

Only by methods of the specific object itself By methods of a different object within the same Program From outside the class By methods of a different instance of the same object

What is the only component that is implemented in the implementation part of a class

Event Object Method Interface Attribute

Which of the following answers characterize ABAP OO events

(More than one answer is correct)

Classes subscribe to events Methods subscribe to classes Classes trigger events Start-of-selection is an OO event Events subscribe to classes

Identify the ABAP OO Event signature protocols

(More than one answer is correct)

Exporting parameters can only be passed by reference

Exporting parameters can only be passed by value Events can only have exporting Parameters Events can only have importing Parameters

Where would the components of a class be defined

Logic component of a program Data Component of a program Definition part of Class Implementation part of a class

Identify the characteristics of the self reference ME

None of the answers are correct Self references allow an object to give other objects a reference to it.

All answers are correct

The reference ME can be used to determine the dynamic type of the reference variable in the debugger

The self-reference ME can be used to access individual components

What can be said about the lifetime of an object

An object exists for as long as it is being used in the program

All answers are correct

An object exists as long as at least one method of the object is registered as an event handler. An object exists as long as at least one reference points to it

Mark the items that characterize the Methods of a Class

(More than one answer is correct)

Only pass return codes to the calling program Can access all attributes in their class Can be defined with a parameter interface Can access only public attributes in their class Can change the state of an object

In the context of polymorphism and interfaces, mark the item that is NOT true

interfaces describe the point of contact of a class a class can implement any number of interfaces interfaces contain their own implementation part the user is protected from the actual implementations

What component of a class guarantees its own consistency

private attributes static methods functional methods public attributes

Identify the line that contains the valid use of the READ-ONLY additon

- 40 Constants: write_position type I value 10 READ-ONLY.
- 50 private section.
- 60 data: category (15) type C READ-ONLY,
- 70 class-data: course_count type I READ-ONLY.

endclass.

50

20

30

40

60

How can a program access private attributes of an object

Only by methods of the specific object itself From outside the class

By methods of a different instance of the same object

By methods of a different object within the same Program

What items are true about Inheritance

(More than one answer is correct)

Superclass private components are visible only within the subclasses

Superclass public components are visible to all classes

Superclass private components are visible to all subclasses

Superclass protected components are visible to all subclasses

71 Identify the statements that best describe the visibility of classes

(More than one answer is correct)

Global classes are centrally available to all ABAP programs

Global Classes are available only from programs belonging to the same development class

Local Classes are available only to programs in the same development class

Local Classes are available only to the program where the class is defined

72 An inherited class:

(More than one answer is correct)

can not access the protected components can remove superclasss components can access the inherited private components can redefine the public methods of the superclass can add components over and above the superclass

Mark the items that characterize the Methods of a Class

(More than one answer is correct)

Can access all attributes in their class
Can be defined with a parameter interface
Only pass return codes to the calling program
Can change the state of an object
Can access only public attributes in their class

Initializing an object in a subclass requires that the constructor of the superclas is first called. Identify the correct syntax.

Call Method Super Constructor Call Method Super-> Constructor Call Method Constructor Call Method Constructor-> Super

Using the UML modeling language for ABAP OO design, refer to the following and indicate the visibility of the components

(More than one answer is correct)

city is a public attribute display_address is a private method address is protected attribute get_city is a public attribute display_address is a static public method display_address is a public method

Constructors have special considerations. Identify the incorrect statement below.

Only Import and Exception Parameters are allowed A class can have multiple constructors The Constructor must defined in the Public section Generally, constructor methods can not be called

What is contained in a class that does not exist in an interface

method definition

attributes implementation

78 Method

lif_material~display display lcl_basepart~display lcl_basepart~display lcl_basepart=>display lcl_basepart->display

What items are true about Inheritance

(More than one answer is correct)

Superclass public components are visible to all classes Superclass protected components are visible to all subclasses Superclass private components are visible to all subclasses Superclass private components are visible only within the subclasses

80 Using example code below, choose the correct syntax for the redefined method

Class lcl_car definition.
Public Section.
method calc_speed importing im_distance type ty_dist.
End Class.

Method calc_speed Redefinition.

Method calc_speed importing im_distance
Redefinition

Method calc_speed Redefinition importing
im_distance type ty_dist.

Method calc_speed importing im_distance.

81 Mark the operators used to widen cast of a class

(More than one answer is correct)

->

?=

=>

=

=? ?TO

What name is always given to a static constructor?

class_constructor
static_constructor
constructor
class=>constructor

83 Identify the one addition that is not part of the interface of a method

Importing

Result

Exception

Returning

UML provides various diagram types. Mark the valid UML diagrams

(More than one answer is correct)

Behavior

Component

Aggregation

Composition

Class

85 A program needs to gain access to the public attributes of class lcl course. Identify the statements that are valid.

```
class lcl_course definition.
   public section.
  data:
             name (15) type c value 'ABAPObjects101'.
      class-data price type p value 100.
   private section.
   data: category (10) type C value 'Objects'.
endclass.
data: course1
                      type ref to lcl_course,
      course_name
                      type string,
      course_price
                      type p,
      course_category type string.
Create Object course1.
(More than one answer is correct)
```

```
course_name = course1->name.
course_price = lcl_course=>price.
course_name = name
course_price = lcl_course->price.
course_name = course1=>name.
```

Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

86

```
refvar->method(im = p1)
refvar->method receiving()
refvar->method returning()
refvar->method(p1)
```

87 Class A provides friendship to Class B. Class B provides friendship to Class C. Identify the valid friend relationship.

(More than one answer is correct)

C is friend of B
C is friend of A
A is friend of B and C
B and C are friends of A
B is friend of A

Identify the valid rule when calling public methods from within the class

When calling an instance method, the => operator is still required

Private methods can not call public methods When calling a static method, the class name is required

When calling a static method, the class name can be omitted

What is contained in a class that does not exist in an interface

attributes implementation method definition

What statement will request memory to be allocated to an object

Create Constructor Create Object Call Method Call Constructor

91 Identify the requirements that determine when an object gets deleted by garbage collection

(More than one answer is correct)

When none of its methods are registered as event handlers

When there are no more references pointing to an object

When objects can no longer be addressed from main memory

When all active objects are marked

92 Select the answers that apply to static methods and instance methods

(More than one answer is correct)

Static methods MUST be addressed by object reference after instantiation

Instance methods MUST be addressed by class name Instance methods MUST be addressed by object ref after instantiation

Static methods MUST be addressed by class_name even when object is instantiated

93 Identify the ABAP OO Event signature protocols

(More than one answer is correct)

Events can only have exporting Parameters
Events can only have importing Parameters
Exporting parameters can only be passed by value
Exporting parameters can only be passed by reference

94 Using example code below, choose the correct syntax for the redefined method

Class lcl_car definition.
Public Section.
method calc_speed importing im_distance type ty_dist.
End Class.

Method calc_speed Redefinition.

Method calc_speed importing im_distance.

Method calc_speed Redefinition importing im_distance type ty_dist.

Method calc_speed importing im_distance

Redefinition

95 UML provides various diagram types. Mark the valid UML diagrams

(More than one answer is correct)

Composition Behavior Aggregation Component Class

What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Class is a template for an object Classes are an instance of an object Objects can change their class Objects are an instance of a class

97 Using the UML modeling language for ABAP OO design, refer to the following and indicate the visibility of the components

```
| cl_myclass |
-----|
| +city |
| #address |
|-----|
| + get_city() |
| - display_addr()|
```

|----|

(More than one answer is correct)

display_address is a private method city is a public attribute get_city is a public attribute display_address is a static public method address is protected attribute display_address is a public method

What items are true about Inheritance

(More than one answer is correct)

Superclass private components are visible to all subclasses

Superclass private components are visible only within the subclasses

Superclass protected components are visible to all subclasses

Superclass public components are visible to all classes

What is the number of superclasses that can exist for a given subclass

none
only 1
only many
1 or many

What can be said about the visibility of attributes in the following code

```
CLASS lcl_course DEFINITION.

PUBLIC SECTION.

Data: name type string.

PRIVATE SECTION.

Data: price type course-price.

ENDCLASS.
```

(More than one answer is correct)

price is protected from outside access price is available to methods inside the class name is protected from outside access name is available to methods only inside the class

The concept of restricting direct access to data via hidden internal processes is best represented by which term

Inheritance Instantiation Encapsulation Polymorphism

What can be said about the lifetime of an object

An object exists as long as at least one method of the object is registered as an event handler.

An object exists for as long as it is being used in the

An object exists for as long as it is being used in the program

All answers are correct

An object exists as long as at least one reference points to it

In the following method, what other parameters are allowed

```
CLASS lcl_course DEFINITION.

PUBLIC SECTION.

METHODS: get_course_name

IMPORTING im_name type string

Returning value(student_count) type I.

ENDCLASS.
```

Changing Exporting Receiving Exceptions

Identify the valid rule when calling public methods from within the class

When calling an instance method, the => operator is still required

When calling a static method, the class name can be omitted

When calling a static method, the class name is required

Private methods can not call public methods

105 An inherited class:

(More than one answer is correct)

can redefine the public methods of the superclass can not access the protected components can remove superclasss components can access the inherited private components can add components over and above the superclass

When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

Only Instance methods Signature can be changed Code can be changed Private Static methods

Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

receive their own copy of the static attribute for each subclass exist once per roll area cannot be shared does not allow for methods to be redefined in subclasses

What component provides the Point of Contact for outside users

Public Attributes Instantiated Object Private Attributes Method Signature

A program needs to gain access to the public attributes of class lcl_course. Identify the statements that are valid.

(More than one answer is correct)

```
course_name = name
course_name = course1=>name.
course_price = lcl_course=>price.
name can not be accessed unless course1 is
instantiated
course_name = course1->name.
```

In object orientation, the term USER includes

Attributes
Events
Methods
None of the answers are correct
All of the answers are correct

What statement will request memory to be allocated to an object

Call Constructor Create Constructor Create Object Call Method

Identify the behaviors of Abstract Classes.

(More than one answer is correct)

Methods can only be implemented in the subclass Can only be implemented through an Interface Cannot be instantiated Methods can not be implemented in the subclass

What component provides the Point of Contact for outside users

Instantiated Object Public Attributes Method Signature Private Attributes

The syntax for instance method specification is

(More than one answer is correct)

Call method Objref->method
Call Method->Objref
Call method (from within another instance method)
Call method Objref=>method

115 What happens when the Set Handler command is executed

The Event Handler Method is registered An instance of the event is created The Event is triggered The Event is handled

Finish the sentence. Propagating exceptions requires

the Raising cx_class parameter as part of the method signature where the exception is raised a handler for the exception a Cleanup Statement the Raising cx_class parameter as part of the method signature of the calling method

Select the term used for Classes that can implement the same method differently

instantiation polymorphism inheritance encapsulation casting

How can a program access private attributes of an object

By methods of a different instance of the same object From outside the class By methods of a different object within the same Program Only by methods of the specific object itself

Define Polymorphism

(More than one answer is correct)

it s a characteristic when methods from different classes react differently to the same interface it s a characteristic when methods of the same class react differently to the same method call it s a characteristic when objects from different classes react differently to the same method call it s one of the main strengths of inheritance the same method is implemented in different ways by redefining the method in subclasses

What is the only component that is implemented in the implementation part of a class

Attribute Method Event Object Interface

121 Identify the statement about Global Classes that is NOT true

A method to be transported is identified in transport organiser as LIMU METH

Global classes are stored in TADIR with key R3TR CLAS

Class Builder can be used to test global classes Access to a global class is done as a reference variable

using TYPE REF TO Programs that are available to Global Classes must be associated in Class Builder

122 Identify the behaviors of Abstract Classes.

(More than one answer is correct)

Cannot be instantiated Can only be implemented through an Interface Methods can not be implemented in the subclass

Methods can only be implemented in the subclass

Using example code below, choose the correct syntax for the redefined method

Class lcl_car definition.
Public Section.
method calc_speed importing im_distance type ty_dist.
End Class.

Method calc_speed Redefinition importing im_distance type ty_dist.

Method calc_speed importing im_distance Redefinition

Method calc_speed Redefinition.

Method calc_speed importing im_distance.

Which of the following answers characterize ABAP OO events

(More than one answer is correct)

Events subscribe to classes Classes subscribe to events Classes trigger events Start-of-selection is an OO event Methods subscribe to classes

125 Changing the view of an instance of a class with more details is referred to as

up cast dynamic referencing narrowing cast widening cast

Mark the item that is NOT true about the handler table

Registered Methods in the handler table can only be triggered by RAISE EVENT i.e. not by CALL METHOD

A single SET Handler command can be used to register multiple handler methods in the handler table There is a separate handler table for every object that has defined events

Event handler methods are called in the sequence that they were registered in the handler table

127 Identify the ABAP OO Event signature protocols

(More than one answer is correct)

Exporting parameters can only be passed by value Exporting parameters can only be passed by reference Events can only have importing Parameters Events can only have exporting Parameters

128 Choose the item that is not characteristic of redefinition in the context

Constructor methods can't be redefined Only instance methods can be redefined Attributes and class methods can be redefined. The signature of the method must remain the same

Using the UML modeling language for ABAP OO design, refer to the following and indicate the visibility of the components

```
| cl_myclass | cl_
```

(More than one answer is correct)

display_address is a public method display_address is a static public method display_address is a private method address is protected attribute city is a public attribute get_city is a public attribute

130 Method

```
lcl_basepart->display
lcl_basepart~display
display
lcl_basepart~display
lif_material~display
lcl_basepart=>display
```

Identify the characteristics of the self reference ME

All answers are correct
The self-reference ME can be used to access individual components
None of the answers are correct
The reference ME can be used to determine the dynamic type of the reference variable in the debugger
Self references allow an object to give other objects a reference to it.

What implications exist when private components of a class are changed

Programs are insulated from change None of the answers are correct Users of the private components must change their interface Any programs accessing the class must also change

What is the number of superclasses that can exist for a given subclass

only 1 1 or many none only many

Where are the methods of a class implemented

Definition part of Class Object instantiation part of a program Implementation part of a class Call method of the class A program needs to gain access to the public attributes of class lcl course. Identify the statements that are valid.

```
class lcl_course definition.
  public section.
             name(15) type c value 'ABAPObjects101'.
  data:
      class-data price type p value 100.
  private section.
  data: category(10) type C value 'Objects'.
endclass.
data: coursel
                      type ref to lcl_course,
     course_name
                      type string,
     course_price
                      type p,
      course_category type string.
Create Object course1.
```

(More than one answer is correct)

```
course_price = lcl_course=>price.
course_name = name
course_price = lcl_course->price.
course_name = course1=>name.
course_name = course1->name.
```

Mark the invalid attribute definitions

```
class lcl_course definition.
 10 public section.
      Data: school(20) type c,
 20
 30
            Supervisor type string value ADAMS,
 40
            Price(3) type p decimals 2 value 100 READ-ONLY.
 50
      types: type_category(15) type c,
 60
             type_name(10)
                              type c.
 70
      constants: write_position type i value 10.
 80
      class-data: course_count type i.
 90 private section.
      data: category (15) type c,
 100
```

110 120	name(10) courseid	type c. like mara-matnr.
endclass.		
	20.120	

30,120 40, 120 70,80 40,70 30,80

Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

A program can directly access data in the function group while access to data in an object is not possible

Functions allow multiple instances of the same data objects. Objects only allow single instances of data

Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is created

A program can only work with a single instance of the same function group versus a program can access several instances of the same object

138 Identify the Characteristics of a Final Class

methods cannot be explicitly designated as FINAL all answers are correct contains final methods implicitly No answers are correct cannot have subclasses

Which of the following answers characterize ABAP OO events

(More than one answer is correct)

Classes subscribe to events Events subscribe to classes Start-of-selection is an OO event Methods subscribe to classes Classes trigger events

Identify the valid rule when calling public methods from within the class

When calling a static method, the class name can be omitted When calling an instance method, the => operator is still required

Private methods can not call public methods When calling a static method, the class name is required

What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Class is a template for an object Objects are an instance of a class Objects can change their class Classes are an instance of an object

Select the term used for Classes that can implement the same method differently

polymorphism inheritance encapsulation casting instantiation

Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

cannot be shared
receive their own copy of the static attribute for
each subclass
exist once per roll area
does not allow for methods to be redefined in
subclasses

Where is the visibility of class components defined

Class Definition Class Methods Object Instance

Class Implementation

Mark the invalid attribute definitions

```
class lcl_course definition.
 10 public section.
 20
      Data: school(20) type c,
 30
            Supervisor type string value ADAMS,
 40
            Price(3) type p decimals 2 value 100 READ-ONLY.
 50
      types: type_category(15) type c,
             type_name(10)
 60
                               type c.
 70
      constants: write_position type i value 10.
      class-data: course_count type i.
 80
 90
     private section.
       data: category(15) type c,
 100
 110
             name(10)
                          type c.
 120
             courseid
                         like mara-matnr.
endclass.
             30,120
             40, 120
             30,80
             70,80
             40,70
```

Mark the operators used to widen cast of a class

(More than one answer is correct)

= =? ?= ?TO -> =>

Refer to the following code and Select the VALID method call

```
Class lcl_course definition.

Public section.

data: course_name(12) type c.
```

```
methods: display_price
               importing im_course_name type string.
  Private section.
              price
                                   type P value 100.
    Data:
    constants: c_objects101(10) type c value 'OBJECTS101'.
endclass.
class lcl_course implementation.
  method display_price.
    course_name = im_course_name.
    If course_name = c_objects101.
      Write: price.
    Endif.
  endmethod.
endclass.
Data obj_course type ref to lcl_course.
start-of-selection.
  create object obj_course.
               Call method obj_course->display_price exporting
               im course name = c objects 101.
               Call method obj_course->display_price importing
               im course name = 'OBJECTS101'.
               Call method obj course->display price exporting
               im course name = 'OBJECTS101'.
               Call method obj_course->display_price exporting
               course name = 'OBJECTS101'.
A program needs to gain access to the public attributes of class
lcl_course. Identify the statements that are valid.
class lcl_course definition.
   public section.
               name(15) type c value 'ABAPObjects101'.
       class-data price type p value 100.
```

148

private section.

(More than one answer is correct)

```
course_name = course1->name.
course_name = course1=>name.
course_price = lcl_course->price.
course_name = name
course_price = lcl_course=>price.
```

In the context of polymorphism and interfaces, mark the item that is NOT true

interfaces describe the point of contact of a class the user is protected from the actual implementations a class can implement any number of interfaces interfaces contain their own implementation part

Where are the methods of a class implemented

Implementation part of a class Object instantiation part of a program Call method of the class Definition part of Class

151 What statement will request memory to be allocated to an object

Create Object Create Constructor Call Method Call Constructor

How can a program access private attributes of an object

By methods of a different object within the same Program

By methods of a different instance of the same object

From outside the class

Only by methods of the specific object itself

What are the rules for Event parameters

(More than one answer is correct)

Events also allow RETURNING parameters EXPORTING Parameters for events can only be passed by reference

EXPORTING Parameters for events can only be passed by value

Events can only have EXPORTING parameters

Identify the requirements that determine when an object gets deleted by garbage collection

(More than one answer is correct)

When there are no more references pointing to an object

When all active objects are marked

When objects can no longer be addressed from main memory

When none of its methods are registered as event handlers

155 UML provides various diagram types. Mark the valid UML diagrams

(More than one answer is correct)

Component

Composition

Class

Aggregation

Behavior

156 Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.

Constructor methods can't be redefined Attributes and class methods can be redefined. The signature of the method must remain the same Only instance methods can be redefined

Mark the items that characterize the Methods of a Class

(More than one answer is correct)

Can change the state of an object Only pass return codes to the calling program Can be defined with a parameter interface Can access only public attributes in their class Can access all attributes in their class

Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

cannot be shared
receive their own copy of the static attribute for
each subclass
exist once per roll area
does not allow for methods to be redefined in
subclasses

Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

A program can only work with a single instance of the same function group versus a program can access several instances of the same object Functions allow multiple instances of the same data objects. Objects only allow single instances of data

Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is created

A program can directly access data in the function group while access to data in an object is not possible

Identify the line that contains the valid use of the READ-ONLY addition

```
class lcl_course definition.
 10 public section.
 20
      Data: Price(3) type p decimals 2
                     value 100 READ-ONLY.
 30
      Types: type_category(15) type C READ-ONLY.
      Constants: write_position type I value 10 READ-ONLY.
 40
 50
    private section.
 60
      data: category (15)
                                type C READ-ONLY,
 70
      class-data: course_count type I READ-ONLY.
endclass.
```

50

161 Identify the behaviors of Abstract Classes.

(More than one answer is correct)

Methods can only be implemented in the subclass

Can only be implemented through an Interface Cannot be instantiated Methods can not be implemented in the subclass

Local Class lcl_course has been defined in a program belonging to development class ZCL. What is the key entry in the repository table TADIR

R3TR CLASS R3TR ZCL CLASS None of the answers are correct R3TR LOCAL CLASS R3TR lcl_class

How can a program access private attributes of an object

From outside the class
By methods of a different object within the same
Program
Only by methods of the specific object itself
By methods of a different instance of the same
object

Refer to the following code and indicate which statements are true

```
Data: cl_container type ref to cl_gui_custom_container, cl_grid type ref to cl_gui_alv_grid.
```

(More than one answer is correct)

cl_grid points to the object that communicates with the container control cl_container points to the object that communicates with the container control cl_grid points to the object that communicates with the ALV grid control cl_container points to the object that communicates with the ALV grid control

165 Class A provides friendship to Class B. Class B provides friendship to Class C. Identify the valid friend relationship.

(More than one answer is correct)

B is friend of A
C is friend of A
C is friend of B
B and C are friends of A
A is friend of B and C

166 Choose the correct redefinition of the superclass method in class lcl_super_course

```
*Super Class Definition
CLASS lcl_super_course DEFINITION.
  PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
*Sub Class Method ReDefinition
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
  PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
С
CLASS lcl_sub_course DEFINITION INHERITING
```

```
FROM lcl_super_course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                       FROM lcl_super_course.
   PUBLIC SECTION.
       METHODS: get_course_name REDEFINITION.
ENDCLASS.
               SubClass Definition A
               SubClass Definition D
               SubClass Definition C
               SubClass Definition B
Identify the one addition that is not part of the interface of a method
               Returning
               Result
               Exception
               Importing
Refer to the following code and identify the statements that are TRUE
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.
CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.
   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.
Data: course1 type ref to lcl_course,
```

course2 type ref to lcl_course.

Start-of-selection.

167

```
Create object course1.
Course2 = course1.
```

(More than one answer is correct)

list_prices_and_discounts is a instance method Memory is reserved for 2 instances of lcl_course method list_prices_and_discounts is a static method Only one instance of method list_prices_and_discounts exists Only one instance of method get_course_name exists

Method list_prices_and_discounts can only be called once

A program needs to gain access to the public attributes of class lcl_course. Identify the statements that are valid.

(More than one answer is correct)

```
course_name = name
course_name = course1=>name.
name can not be accessed unless course1 is
instantiated
course_name = course1->name.
course_price = lcl_course=>price.
```

Which statement will create an instance of a class

Class my_class Implementation Create Object my_object Class my_class Definition. Data: my_object TYPE REF TO my_class

171 Finish the sentence. Propagating exceptions requires

the Raising cx_class parameter as part of the method signature of the calling method the Raising cx_class parameter as part of the method signature where the exception is raised a handler for the exception a Cleanup Statement

Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

A program can directly access data in the function group while access to data in an object is not possible
A program can only work with a single instance of the same function group versus a program can access several instances of the same object
Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is created
Functions allow multiple instances of the same data objects. Objects only allow single instances of data

173 Method

lcl_basepart=>display
lif_material~display
lcl_basepart~display
lcl_basepart~display
display
lcl_basepart~display

Where would the components of a class be defined

Data Component of a program Logic component of a program Definition part of Class Implementation part of a class

When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

Code can be changed Signature can be changed Private Static methods Only Instance methods

What would happen if the public components of a class were changed

Inheritance becomes invalidated Nothing. The class maintains it's own status private components will also need to be changed Outside Users may have to make changes to to their components to reflect the changes

How can a program access private attributes of an object

Only by methods of the specific object itself By methods of a different object within the same Program By methods of a different instance of the same object From outside the class

Mark the items that characterize the Methods of a Class

(More than one answer is correct)

Only pass return codes to the calling program Can be defined with a parameter interface

Can change the state of an object Can access only public attributes in their class Can access all attributes in their class

179 Identify the Characteristics of a Final Class

contains final methods implicitly No answers are correct methods cannot be explicitly designated as FINAL all answers are correct cannot have subclasses

What items are true about Inheritance

(More than one answer is correct)

Superclass private components are visible to all subclasses
Superclass protected components are visible to all subclasses

Superclass public components are visible to all classes Superclass private components are visible only within the subclasses

What items are true about Inheritance

(More than one answer is correct)

Superclass private components are visible to all subclasses

Superclass public components are visible to all classes

Superclass private components are visible only within the subclasses

Superclass protected components are visible to all subclasses

182 Define Polymorphism

(More than one answer is correct)

the same method is implemented in different ways by redefining the method in subclasses it s a characteristic when objects from different classes react differently to the same method call it s a characteristic when methods of the same class react differently to the same method call it s a characteristic when methods from different classes react differently to the same interface it s one of the main strengths of inheritance

183 Refer to the following code and Select the VALID method call

```
Class lcl_course definition.

Public section.

data: course_name(12) type c.

methods: display_price
 importing im_course_name type string.

Private section.

Data: price type P value 100.

constants: c_objects101(10) type c value 'OBJECTS101'.
```

endclass.

```
class lcl_course implementation.

method display_price.
   course_name = im_course_name.
   If course_name = c_objects101.
      Write: price.
   Endif.
   endmethod.

endclass.

Data obj_course type ref to lcl_course.

start-of-selection.
   create object obj_course.
```

Call method obj_course->display_price exporting course_name = 'OBJECTS101'.
Call method obj_course->display_price exporting im_course_name = 'OBJECTS101'.
Call method obj_course->display_price exporting im_course_name = c_objects101.
Call method obj_course->display_price importing im course_name = 'OBJECTS101'.

Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

184

Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is created

A program can directly access data in the function group while access to data in an object is not possible

Functions allow multiple instances of the same data objects. Objects only allow single instances of data

A program can only work with a single instance of the same function group versus a program can access several instances of the same object A MOVE_CAST_ERROR runtime error just occurred. Identify the cause.

Super class and subclass both point to an instance of the same class type
Super class method is called from the subclass
Subclass reference variable correpsonds to the superclass reference variable
Casting a super class to a subclass when superclass does not point to an instance of the subclass type

What name is always given to a static constructor?

static_constructor constructor class=>constructor class_constructor

What is the only component that is implemented in the implementation part of a class

Interface Object Attribute Method Event

Identify the one addition that is not part of the interface of a method

Result Returning Exception Importing

Mark the invalid attribute definitions

class lcl_course definition.

```
10 public section.
20
    Data: school(20) type c,
30
          Supervisor type string value ADAMS,
40
          Price(3) type p decimals 2 value 100 READ-ONLY.
50
    types: type_category(15) type c,
           type_name(10)
60
                             type c.
70
    constants: write_position type i value 10.
    class-data: course_count type i.
80
90 private section.
100
     data: category(15) type c,
110
           name(10)
                      type c.
120
           courseid
                       like mara-matnr.
```

endclass.

30,80 40,70 40, 120 30,120 70,80

190 What implications exist when private components of a class are changed

> Users of the private components must change their interface Any programs accessing the class must also change

None of the answers are correct Programs are insulated from change

A public attribute 'color' is added to a superclass. A subclass already has the same attribute 'color'. What is the outcome?

(More than one answer is correct)

A runtime error will occur A syntax message will occur The subclass is invalidated The superclass is invalidated

192 Changing the view of an instance of a class with more details is referred to as

up cast narrowing cast widening cast dynamic referencing

What statement will request memory to be allocated to an object

Create Constructor Create Object Call Method Call Constructor

What items are true about Inheritance

(More than one answer is correct)

Superclass public components are visible to all classes Superclass protected components are visible to all subclasses Superclass private components are visible to all subclasses

Superclass private components are visible only within the subclasses

195 Constructors have special considerations. Identify the incorrect statement below.

Only Import and Exception Parameters are allowed A class can have multiple constructors
Generally, constructor methods can not be called
The Constructor must defined in the Public section

196 A MOVE_CAST_ERROR runtime error just occurred. Identify the cause.

Super class and subclass both point to an instance of the same class type

Super class method is called from the subclass
Casting a super class to a subclass when superclass does
not point to an instance of the subclass type
Subclass reference variable correpsonds to the superclass
reference variable

Select the answers that apply to static methods and instance methods

(More than one answer is correct)

Static methods MUST be addressed by object reference after instantiation

Instance methods MUST be addressed by class name Static methods MUST be addressed by class_name even when object is instantiated

Instance methods MUST be addressed by object ref after instantiation

What component provides the Point of Contact for outside users

Private Attributes Method Signature

Public Attributes Instantiated Object

In the context of relationship between Super and Sub classes, identify the statements which apply

(More than one answer is correct)

Superclass does not know its subclasses
Subclass does not know it superclass
A superclass is a specialization of a subclass
A change in a superclass does not automatically get realized in the subclass
A subclass is a specialization of a superclass

In object orientation, the term USER includes

All of the answers are correct Events Methods Attributes None of the answers are correct

What statement will request memory to be allocated to an object

Create Object
Call Constructor
Call Method
Create Constructor

202 Mark the item that is NOT true about the handler table

There is a separate handler table for every object that has defined events

Registered Methods in the handler table can only be triggered by RAISE EVENT i.e. not by CALL METHOD

A single SET Handler command can be used to register multiple handler methods in the handler table

Event handler methods are called in the sequence that they were registered in the handler table

203 Changing the view of an instance of a class with more details is referred to as

up cast narrowing cast dynamic referencing widening cast

What is the only component that is implemented in the implementation part of a class

Interface Attribute Method Object

Event

A MOVE_CAST_ERROR runtime error just occurred. Identify the cause.

Super class method is called from the subclass Super class and subclass both point to an instance of the same class type Subclass reference variable correpsonds to the superclass reference variable Casting a super class to a subclass when superclass does not point to an instance of the subclass type

What component of a class guarantees its own consistency

private attributes static methods functional methods public attributes

Your program has registered several handler methods. How does the program know what methods are available for execution when an event is triggered

It is determined by the RAISE Event command the system looks for registered handler methods In the registry table and processes those that are registered for the event the system looks for registered handler methods In the event handler internal table and processes those that are registered for the event The methods defined in the Class Definition listen for raised events and respond when an event is triggered

Identify the requirements that determine when an object gets deleted by garbage collection

208

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(More than one answer is correct)

When objects can no longer be addressed from main memory

When all active objects are marked

When none of its methods are registered as event handlers

When there are no more references pointing to an object

Refer to the following code and identify the statements that are TRUE

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.
CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.
   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.
Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.
Start-of-selection.
Create object course1.
Course2 = course1.
```

(More than one answer is correct)

list_prices_and_discounts is a instance method
Only one instance of method get_course_name
exists
method list_prices_and_discounts is a static
method
Memory is reserved for 2 instances of lcl_course
Only one instance of method
list_prices_and_discounts exists
Method list_prices_and_discounts can only be
called once

210 Mark the operators used to widen cast of a class

(More than one answer is correct)

=>

=?

?TO

=

->

?=

What is the only component that is implemented in the implementation part of a class

Attribute

Event

Method

Interface

Object

Refer to the following code and indicate which statements are true

Data: cl_container type ref to cl_gui_custom_container, cl_grid type ref to cl_gui_alv_grid.

(More than one answer is correct)

cl_container points to the object that communicates with the container control cl_container points to the object that communicates with the ALV grid control cl_grid points to the object that communicates with the container control cl_grid points to the object that communicates with the ALV grid control

213 What are the rules for Event parameters

(More than one answer is correct)

Events can only have EXPORTING parameters Events also allow RETURNING parameters EXPORTING Parameters for events can only be passed by value EXPORTING Parameters for events can only be passed by reference

Which of the following answers characterize ABAP OO events

(More than one answer is correct)

Classes subscribe to events Events subscribe to classes Classes trigger events Start-of-selection is an OO event Methods subscribe to classes

Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

exist once per roll area cannot be shared does not allow for methods to be redefined in subclasses receive their own copy of the static attribute for each subclass

Identify the requirements that determine when an object gets deleted by garbage collection

(More than one answer is correct)

When there are no more references pointing to an object

When none of its methods are registered as event handlers

When all active objects are marked

When objects can no longer be addressed from main memory

217 What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Classes are an instance of an object Objects can change their class

Class is a template for an object Objects are an instance of a class

The concept of restricting direct access to data via hidden internal processes is best represented by which term

Polymorphism Inheritance Encapsulation Instantiation

219 Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.

The signature of the method must remain the same Constructor methods can't be redefined Attributes and class methods can be redefined. Only instance methods can be redefined

When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

Private Static methods Code can be changed Signature can be changed Only Instance methods

What is the only component that is implemented in the implementation part of a class

Object

Event

Interface

Attribute

Method

The syntax for static method specification

Call class-method
Call method class name =>method
Call method class name->method
Call Method-> class name

An inherited class:

(More than one answer is correct)

can add components over and above the superclass can access the inherited private components can redefine the public methods of the superclass can not access the protected components can remove superclasss components

Mark the items that characterize the Methods of a Class

(More than one answer is correct)

Only pass return codes to the calling program Can access all attributes in their class Can be defined with a parameter interface Can access only public attributes in their class Can change the state of an object Global Class cl_course has been defined using the class builder. The development class is ZCL. What is the key entry in the repository table TADIR

R3TR GLOB CLASS R3TR cl_course R3TR CLAS cl_course R3TR ZCL CLASS None of the answers are correct

What implications exist when private components of a class are changed

Any programs accessing the class must also change
Programs are insulated from change
Users of the private components must change their interface
None of the answers are correct

Mark the invalid attribute definitions

```
class lcl_course definition.
10 public section.
     Data: school(20) type c,
20
30
           Supervisor type string value ADAMS,
           Price(3) type p decimals 2 value 100 READ-ONLY.
40
50
     types: type_category(15) type c,
 60
            type_name(10)
                              type c.
70
     constants: write_position type i value 10.
80
     class-data: course_count type i.
90
    private section.
100
      data: category(15) type c,
110
            name(10)
                       type c.
120
            courseid
                         like mara-matnr.
endclass.
```

70,80

40,70 40, 120 30,120 30,80

How can a program access private attributes of an object

From outside the class
By methods of a different object within the same
Program
By methods of a different instance of the same
object

Only by methods of the specific object itself

A public attribute 'color' is added to a superclass. A subclass already has the same attribute 'color'. What is the outcome?

(More than one answer is correct)

The superclass is invalidated A syntax message will occur The subclass is invalidated A runtime error will occur

Refer to the following code and Select the VALID method call

```
Class lcl_course definition.

Public section.

data: course_name(12) type c.

methods: display_price
 importing im_course_name type string.

Private section.

Data: price type P value 100.

constants: c_objects101(10) type c value 'OBJECTS101'.

endclass.

class lcl_course implementation.

method display_price.
```

```
course_name = im_course_name.
   If course_name = c_objects101.
      Write: price.
   Endif.
   endmethod.

endclass.

Data obj_course type ref to lcl_course.
start-of-selection.
   create object obj_course.
```

Call method obj_course->display_price exporting im_course_name = 'OBJECTS101'.
Call method obj_course->display_price exporting course_name = 'OBJECTS101'.
Call method obj_course->display_price exporting im_course_name = c_objects101.
Call method obj_course->display_price importing im_course_name = 'OBJECTS101'.

Choose the correct redefinition of the superclass method in class lcl_super_course

```
*Super Class Definition
CLASS lcl_super_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
*Sub Class Method ReDefinition
Α
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS 1cl sub course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
D
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

SubClass Definition A SubClass Definition B SubClass Definition D SubClass Definition C

An inherited class:

(More than one answer is correct)

can access the inherited private components can not access the protected components can add components over and above the superclass can redefine the public methods of the superclass can remove superclasss components

Initializing an object in a subclass requires that the constructor of the superclas is first called. Identify the correct syntax.

Call Method Constructor-> Super Call Method Super Constructor Call Method Constructor Call Method Super-> Constructor

In the context of relationship between Super and Sub classes, identify the statements which apply

(More than one answer is correct)

Superclass does not know its subclasses
A change in a superclass does not automatically get realized in the subclass
A superclass is a specialization of a subclass
A subclass is a specialization of a superclass
Subclass does not know it s superclass

When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

Private Static methods Signature can be changed Code can be changed

Only Instance methods

What are the rules for Event parameters

(More than one answer is correct)

Events also allow RETURNING parameters Events can only have EXPORTING parameters EXPORTING Parameters for events can only be passed by reference EXPORTING Parameters for events can only be passed by value

237 How can a program access private attributes of an object

By methods of a different object within the same Program From outside the class Only by methods of the specific object itself By methods of a different instance of the same object

What mechanism is used to define common components of different classes in one place

Interface Class Definition Create Object Raise Event

Finish the sentence. Propagating exceptions requires

the Raising cx_class parameter as part of the method signature of the calling method the Raising cx_class parameter as part of the method signature where the exception is raised a Cleanup Statement

a handler for the exception

Identify the line that contains the valid use of the READ-ONLY additon

```
class lcl_course definition.
 10 public section.
 20
     Data: Price(3) type p decimals 2
                    value 100 READ-ONLY.
 30
     Types: type_category(15) type C READ-ONLY.
 40
     Constants: write_position type I value 10 READ-ONLY.
 50 private section.
 60
     data: category(15)
                         type C READ-ONLY,
 70
     class-data: course_count type I READ-ONLY.
endclass.
```

30

50

60

20

40

Select the answers that apply to static methods and instance methods

(More than one answer is correct)

Static methods MUST be addressed by object reference after instantiation
Static methods MUST be addressed by class_name even when object is instantiated
Instance methods MUST be addressed by class name
Instance methods MUST be addressed by object ref after instantiation

Identify the line that contains the valid use of the READ-ONLY additon

```
class lcl_course definition.
10 public section.
 20
     Data: Price(3) type p decimals 2
                     value 100 READ-ONLY.
 30
      Types: type_category(15) type C READ-ONLY.
      Constants: write_position type I value 10 READ-ONLY.
 40
 50
    private section.
      data: category (15)
 60
                                type C READ-ONLY,
 70
      class-data: course_count type I READ-ONLY.
endclass.
             30
             60
```

Identify the one addition that is not part of the interface of a method

Importing

20 40 50

Exception Result Returning

What implications exist when private components of a class are changed

Any programs accessing the class must also change Programs are insulated from change None of the answers are correct Users of the private components must change their interface

Select the term used for Classes that can implement the same method differently

encapsulation casting polymorphism inheritance instantiation

246 What component of a class guarantees its own consistency

static methods private attributes public attributes functional methods

247 Changing the view of an instance of a class with more details is referred to as

up cast narrowing cast widening cast dynamic referencing A program needs to gain access to the public attributes of class lcl_course. Identify the statements that are valid.

```
class lcl_course definition.
   public section.
     data: name(15)
                      type c value 'ABAPObjects101'.
     class-data price type p value 100.
  private section.
     data: category(10) type C value 'Objects'.
endclass.
data: course1
                      type ref to lcl_course,
      course_name
                      type string,
      course_price
                      type p,
      course_category type string.
**INSTANTIATION OMITTED **
```

(More than one answer is correct)

```
course_name = course1=>name.
course_price = lcl_course=>price.
course_name = course1->name.
name can not be accessed unless course1 is
instantiated
course_name = name
```

What component provides the Point of Contact for outside users

Instantiated Object Private Attributes Method Signature Public Attributes

250 When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

Code can be changed

Signature can be changed Private Static methods Only Instance methods

A public attribute 'color' is added to a superclass. A subclass already has the same attribute 'color'. What is the outcome?

(More than one answer is correct)

A runtime error will occur A syntax message will occur The superclass is invalidated The subclass is invalidated

In the context of Triggering and Handling of Events, mark those which apply

(More than one answer is correct)

An event is defined in the Implementation of a Class Events can be triggered with the Trigger Event command

Methods must be registered to an event in order to be called when the event is triggered

Event Triggering using Raise Event can be issued in a method

253 Where is the visibility of class components defined

Class Implementation Class Definition Class Methods Object Instance

Refer to the following code and indicate which statements are true

```
Data: cl_container type ref to cl_gui_custom_container, cl_grid type ref to cl_gui_alv_grid.
```

(More than one answer is correct)

TAW10 2-2

cl_grid points to the object that communicates with the container control

cl_container points to the object that communicates with the ALV grid control

cl_grid points to the object that communicates with the ALV grid control

cl_container points to the object that communicates with the container control

255 Constructors have special considerations. Identify the incorrect statement below.

Only Import and Exception Parameters are allowed A class can have multiple constructors

The Constructor must defined in the Public section Generally, constructor methods can not be called

256 Method

lcl_basepart->display
lcl_basepart~display
display
lcl_basepart~display
lcl_basepart=>display
lif_material~display

257 Identify the requirements that determine when an object gets deleted by garbage collection

(More than one answer is correct)

When none of its methods are registered as event handlers

When objects can no longer be addressed from main memory

When there are no more references pointing to an object

When all active objects are marked

258 What are the rules for Event parameters

(More than one answer is correct)

EXPORTING Parameters for events can only be passed by value
Events also allow RETURNING parameters
Events can only have EXPORTING parameters
EXPORTING Parameters for events can only be passed by reference

Identify the characteristics of the self reference ME

Self references allow an object to give other objects a reference to it.

All answers are correct

None of the answers are correct

The reference ME can be used to determine the dynamic type of the reference variable in the debugger

The self-reference ME can be used to access individual components

260 The syntax for instance method specification is

(More than one answer is correct)

Call Method->Objref
Call method Objref=>method
Call method Objref->method

Call method (from within another instance method)

What mechanism is used to define common components of different classes in one place

Raise Event Create Object Class Definition Interface

Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

receive their own copy of the static attribute for each subclass cannot be shared does not allow for methods to be redefined in subclasses exist once per roll area

263 What is the number of superclasses that can exist for a given subclass

only many 1 or many none only 1

264 What would happen if the public components of a class were changed

Inheritance becomes invalidated
Outside Users may have to make changes to to
their components to reflect the changes
Nothing. The class maintains it's own status
private components will also need to be changed

Identify the statements that best describe the visibility of classes

(More than one answer is correct)

Local Classes are available only to programs in the same development class Global classes are centrally available to all ABAP programs Local Classes are available only to the program where the class is defined Global Classes are available only from programs belonging to the same development class

266 Choose the short form of the method call below

```
call method rf_car->calculate_cost importing ex_size = v_size.

rf_car->calculate_cost(importing ex_size =
    v_size).
    calculate_cost(importing ex_size = v_size).
    rf_car->calculate_cost (importing ex_size =
    v_size).
    rf_car->calculate_cost importing ex_size =
    v_size.
```

A public attribute 'color' is added to a superclass. A subclass already has the same attribute 'color'. What is the outcome?

(More than one answer is correct)

A runtime error will occur The superclass is invalidated A syntax message will occur The subclass is invalidated

Identify the valid statements that will write out the Static Attributes in the following code

```
class lcl_course definition.

public section.
   data: name(15) type c value 'ABAPObjects101'.
```

TAW10 2-2

```
class-data price type p value 100.

private section.
  data: category(10) type C value 'Objects'.

endclass.

data: course1 type ref to lcl_course,
  course_name type string,
  course_price type p,
  course_category type string.
```

(More than one answer is correct)

write lcl_course=>price.
course_price = lcl_course=>price. Write
course_price.
write lcl_course->price.
write: price.

Which statement will create an instance of a class

Class my_class Definition.
Create Object my_object
Data: my_object TYPE REF TO my_class
Class my_class Implementation

270 Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

refvar->method returning()
refvar->method(im = p1)
refvar->method(p1)
refvar->method receiving()

Initializing an object in a subclass requires that the constructor of the superclas is first called. Identify the correct syntax.

Call Method Constructor
Call Method Super Constructor
Call Method Constructor-> Super
Call Method Super-> Constructor

Select the answers that apply to static methods and instance methods

(More than one answer is correct)

Instance methods MUST be addressed by object ref after instantiation

Static methods MUST be addressed by class_name even when object is instantiated

Instance methods MUST be addressed by class name Static methods MUST be addressed by object reference after instantiation

Global Class cl_course has been defined using the class builder. The development class is ZCL. What is the key entry in the repository table TADIR

None of the answers are correct R3TR CLAS cl_course R3TR GLOB CLASS R3TR ZCL CLASS R3TR cl_course

274 Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

refvar->method receiving()

```
refvar->method(p1)
refvar->method(im = p1)
refvar->method returning()
```

275 Mark the operators used to widen cast of a class

(More than one answer is correct)

-> =>

=?

?TO

= ?=

What is the only component that is implemented in the implementation part of a class

Event

Interface

Attribute

Method

Object

Using the UML modeling language for ABAP OO design, refer to the following and indicate the visibility of the components

(More than one answer is correct)

display_address is a static public method address is protected attribute

TAW10 2-2

get_city is a public attribute display_address is a public method city is a public attribute display_address is a private method

Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

receive their own copy of the static attribute for each subclass cannot be shared does not allow for methods to be redefined in subclasses exist once per roll area

279 Identify the ABAP OO Event signature protocols

(More than one answer is correct)

Exporting parameters can only be passed by reference Exporting parameters can only be passed by value Events can only have importing Parameters Events can only have exporting Parameters

When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

Private Static methods Code can be changed Signature can be changed Only Instance methods

In the context of Triggering and Handling of Events, mark those which apply

(More than one answer is correct)

Methods must be registered to an event in order to be called when the event is triggered
An event is defined in the Implementation of a Class
Events can be triggered with the Trigger Event command

Event Triggering using Raise Event can be issued in a method

Which of the following answers characterize ABAP OO events

(More than one answer is correct)

Start-of-selection is an OO event Classes subscribe to events Events subscribe to classes Classes trigger events Methods subscribe to classes

283 What can be said about the lifetime of an object

All answers are correct

An object exists for as long as it is being used in the program

An object exists as long as at least one method of the object is registered as an event handler.

An object exists as long as at least one reference points to it

Where is the visibility of class components defined

TAW10 2-2

Object Instance Class Methods Class Implementation Class Definition

285 Changing the view of an instance of a class with more details is referred to as

narrowing cast dynamic referencing up cast widening cast

The syntax for instance method specification is

(More than one answer is correct)

Call Method->Objref
Call method (from within another instance method)
Call method Objref=>method
Call method Objref->method

287 Identify the statements that best describe the visibility of classes

(More than one answer is correct)

Global classes are centrally available to all ABAP programs

Local Classes are available only to the program where the class is defined

Local Classes are available only to programs in the same development class

Global Classes are available only from programs belonging to the same development class

288 What statement will request memory to be allocated to an object

Create Object

Call Constructor Create Constructor Call Method

289 What name is always given to a static constructor?

static_constructor class=>constructor constructor class_constructor

290 Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

A program can directly access data in the function group while access to data in an object is not possible Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is created A program can only work with a single instance of the same function group versus a program can access several instances of the same object Functions allow multiple instances of the same data objects. Objects only allow single instances of data

291 Choose the correct redefinition of the superclass method in class lcl_super_course

```
*Super Class Definition
CLASS lcl_super_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
*Sub Class Method ReDefinition
Α
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
D
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

SubClass Definition A SubClass Definition C SubClass Definition B SubClass Definition D In ABAP objects, which compnent is said to determine an objects behavior

class method implementation signature

What implications exist when private components of a class are changed

Any programs accessing the class must also change

Users of the private components must change their interface

Programs are insulated from change None of the answers are correct

Mark the operators used to widen cast of a class

(More than one answer is correct)

?TO

=>

=

=?

?=

->

What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Class is a template for an object Objects can change their class Objects are an instance of a class Classes are an instance of an object

Identify the statements that best describe the visibility of classes

(More than one answer is correct)

Local Classes are available only to programs in the same development class Global Classes are available only from programs belonging to the same development class Local Classes are available only to the program where the class is defined Global classes are centrally available to all ABAP programs

In the following method, what other parameters are allowed

```
CLASS lcl_course DEFINITION.

PUBLIC SECTION.

METHODS: get_course_name

IMPORTING im_name type string

Returning value(student_count) type I.

ENDCLASS.
```

Changing Exceptions Receiving Exporting

Identify the characteristics of the self reference ME

The reference ME can be used to determine the dynamic type of the reference variable in the debugger
The self-reference ME can be used to access individual components
Self references allow an object to give other objects a reference to it.
All answers are correct
None of the answers are correct

A public attribute 'color' is added to a superclass. A subclass already has the same attribute 'color'. What is the outcome?

(More than one answer is correct)

A runtime error will occur The superclass is invalidated A syntax message will occur The subclass is invalidated

What can be said about the lifetime of an object

An object exists for as long as it is being used in the program

An object exists as long as at least one reference points to it

An object exists as long as at least one method of the object is registered as an event handler.

All answers are correct

What component provides the Point of Contact for outside users

Method Signature Private Attributes Instantiated Object Public Attributes

302 An inherited class:

(More than one answer is correct)

can access the inherited private components can add components over and above the superclass can redefine the public methods of the superclass can not access the protected components can remove superclasss components

303 In object orientation, the term USER includes

Events
Attributes
None of the answers are correct
All of the answers are correct
Methods

A program needs to gain access to the public attributes of class lcl_course. Identify the statements that are valid.

```
class lcl_course definition.
  public section.

data:    name(15) type c value 'ABAPObjects101'.
    class-data price    type p value 100.

private section.
```

(More than one answer is correct)

```
course_name = course1->name.
course_price = lcl_course->price.
course_name = name
course_name = course1=>name.
course_price = lcl_course=>price.
```

Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

305

```
refvar->method(p1)
refvar->method(im = p1)
refvar->method receiving()
refvar->method returning()
```

Identify the line that contains the valid use of the READ-ONLY additon

60

30

20

40

50

307 Select the answers that apply to static methods and instance methods

(More than one answer is correct)

Static methods MUST be addressed by object reference after instantiation
Static methods MUST be addressed by class_name even when object is instantiated
Instance methods MUST be addressed by class name
Instance methods MUST be addressed by object

ref after instantiation

What syntax provides access to individual components of a class within the class

(More than one answer is correct)

CALL METHOD ME->
ME->
object instance->ME->
CALL METHOD object instance->ME->

How can a program access private attributes of an object

Only by methods of the specific object itself By methods of a different object within the same Program From outside the class By methods of a different instance of the same object

What are the rules for Event parameters

309

(More than one answer is correct)

EXPORTING Parameters for events can only be passed by reference EXPORTING Parameters for events can only be passed by value Events also allow RETURNING parameters Events can only have EXPORTING parameters

Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.

Only instance methods can be redefined Constructor methods can't be redefined The signature of the method must remain the same Attributes and class methods can be redefined.

312 Identify the line that contains the valid use of the READ-ONLY additon

```
class lcl_course definition.
 10 public section.
      Data: Price(3) type p decimals 2
 20
                     value 100 READ-ONLY.
      Types: type_category(15) type C READ-ONLY.
 30
      Constants: write_position type I value 10 READ-ONLY.
 40
 50
    private section.
      data: category(15)
 60
                                type C READ-ONLY,
 70
      class-data: course_count type I READ-ONLY.
endclass.
            20
            30
            60
            40
            50
```

313 What triggers an event

Raise Event Inside the Method None of the answers are correct Call Method All answers are correct Raise Event

Identify the behaviors of Abstract Classes.

(More than one answer is correct)

Methods can not be implemented in the subclass Can only be implemented through an Interface Methods can only be implemented in the subclass Cannot be instantiated

315 Method

lcl_basepart~display
lcl_basepart=>display
lcl_basepart=>display
lcl_basepart~display
display
lif_material~display

316 Select the term used for Classes that can implement the same method differently

instantiation casting polymorphism encapsulation inheritance

In the context of relationship between Super and Sub classes, identify the statements which apply

(More than one answer is correct)

A superclass is a specialization of a subclass Superclass does not know its subclasses A subclass is a specialization of a superclass A change in a superclass does not automatically get realized in the subclass

Subclass does not know it s superclass

Local Class lcl_course has been defined in a program belonging to development class ZCL. What is the key entry in the repository table TADIR

R3TR LOCAL CLASS None of the answers are correct R3TR lcl_class R3TR ZCL CLASS R3TR CLASS

What component provides the Point of Contact for outside users

Instantiated Object Method Signature Private Attributes Public Attributes

Refer to the following code and Select the VALID method call

```
Class lcl course definition.
  Public section.
    data: course_name(12) type c.
    methods: display_price
             importing im_course_name type string.
  Private section.
            price
                              type P value 100.
    constants: c_objects101(10) type c value 'OBJECTS101'.
endclass.
class lcl_course implementation.
 method display_price.
    course_name = im_course_name.
    If course_name = c_objects101.
      Write: price.
    Endif.
  endmethod.
```

endclass.

Data obj_course type ref to lcl_course.

start-of-selection.

create object obj_course.

Call method obj_course->display_price importing im_course_name = 'OBJECTS101'.
Call method obj_course->display_price exporting im_course_name = c_objects101.
Call method obj_course->display_price exporting course_name = 'OBJECTS101'.
Call method obj_course->display_price exporting im_course_name = 'OBJECTS101'.

What is contained in a class that does not exist in an interface

attributes implementation method definition

When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

Signature can be changed Code can be changed Only Instance methods Private Static methods

323 Identify the Characteristics of a Final Class

cannot have subclasses
contains final methods implicitly
No answers are correct
all answers are correct
methods cannot be explicitly designated as FINAL

The syntax for static method specification

Call Method-> class name
Call method class name =>method
Call method class name->method
Call class-method

What triggers an event

Raise Event Inside the Method Call Method Raise Event All answers are correct None of the answers are correct

Your program has registered several handler methods. How does the program know what methods are available for execution when an event is triggered

The methods defined in the Class Definition listen for raised events and respond when an event is triggered the system looks for registered handler methods In the event handler internal table and processes those that are registered for the event

It is determined by the RAISE Event command.

It is determined by the RAISE Event command the system looks for registered handler methods In the registry table and processes those that are registered for the event

A MOVE_CAST_ERROR runtime error just occurred. Identify the cause.

Subclass reference variable correpsonds to the superclass reference variable
Super class and subclass both point to an instance of the same class type

Casting a super class to a subclass when superclass does not point to an instance of the subclass type Super class method is called from the subclass

328 Identify the requirements that determine when an object gets deleted by garbage collection

(More than one answer is correct)

When objects can no longer be addressed from main memory

When there are no more references pointing to an object

When all active objects are marked

When none of its methods are registered as event handlers

In the context of polymorphism and interfaces, mark the item that is NOT true

a class can implement any number of interfaces interfaces describe the point of contact of a class interfaces contain their own implementation part the user is protected from the actual implementations

A program needs to gain access to the public attributes of class lcl_course. Identify the statements that are valid.

```
class lcl_course definition.
  public section.
 data:
             name(15) type c value 'ABAPObjects101'.
      class-data price type p value 100.
  private section.
  data: category(10) type C value 'Objects'.
endclass.
data: coursel
                     type ref to lcl_course,
     course_name
                     type string,
      course_price
                    type p,
      course_category type string.
Create Object course1.
```

(More than one answer is correct)

```
course_price = lcl_course->price.
course_name = course1->name.
course_name = name
course_name = course1=>name.
course_price = lcl_course=>price.
```

What can be said about the lifetime of an object

An object exists as long as at least one method of the object is registered as an event handler.

All answers are correct

An object exists for as long as it is being used in the program

An object exists as long as at least one reference points to it

What syntax provides access to individual components of a class within the class

(More than one answer is correct)

object instance->ME->
ME->
CALL METHOD object instance->ME->
CALL METHOD ME->

What statement will request memory to be allocated to an object

Create Object
Call Constructor
Call Method
Create Constructor

A public attribute 'color' is added to a superclass. A subclass already has the same attribute 'color'. What is the outcome?

(More than one answer is correct)

A runtime error will occur A syntax message will occur The subclass is invalidated

The superclass is invalidated

Choose the short form of the method call below

```
call method rf_car->calculate_cost importing ex_size = v_size.

calculate_cost(importing ex_size = v_size).

rf_car->calculate_cost(importing ex_size = v_size).

rf_car->calculate_cost(importing ex_size = v_size).

rf_car->calculate_cost importing ex_size = v_size).

rf_car->calculate_cost importing ex_size = v_size.
```

In the context of polymorphism and interfaces, mark the item that is NOT true

the user is protected from the actual implementations interfaces contain their own implementation part interfaces describe the point of contact of a class a class can implement any number of interfaces

337 The syntax for instance method specification is

(More than one answer is correct)

Call method Objref->method
Call Method->Objref
Call method (from within another instance method)
Call method Objref=>method

Initializing an object in a subclass requires that the constructor of the superclas is first called. Identify the correct syntax.

Call Method Super Constructor Call Method Constructor Call Method Super-> Constructor Call Method Constructor-> Super

339 Identify the behaviors of Abstract Classes.

(More than one answer is correct)

Cannot be instantiated Methods can not be implemented in the subclass Can only be implemented through an Interface Methods can only be implemented in the subclass

Where is the visibility of class components defined

Class Implementation Object Instance Class Methods Class Definition

What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Classes are an instance of an object Objects are an instance of a class Objects can change their class Class is a template for an object

In object orientation, the term USER includes

Events None of the answers are correct All of the answers are correct Methods Attributes

Constructors have special considerations. Identify the incorrect statement below.

The Constructor must defined in the Public section
Only Import and Exception Parameters are allowed
Generally, constructor methods can not be called A class can have multiple constructors

A program needs to gain access to the public attributes of class lcl_course. Identify the statements that are valid.

```
class lcl_course definition.
  public section.
  data: name(15)    type c value 'ABAPObjects101'.
    class-data price type p value 100.

private section.
  data: category(10)    type C value 'Objects'.
```

endclass.

(More than one answer is correct)

```
course_name = course1->name.
course_name = course1=>name.
name can not be accessed unless course1 is
instantiated
course_name = name
course_price = lcl_course=>price.
```

345 Identify the Characteristics of a Final Class

cannot have subclasses
all answers are correct
No answers are correct
methods cannot be explicitly designated as
FINAL
contains final methods implicitly

346 Define Polymorphism

(More than one answer is correct)

it s a characteristic when objects from different classes react differently to the same method call it s a characteristic when methods of the same class react differently to the same method call it s one of the main strengths of inheritance it s a characteristic when methods from different classes react differently to the same interface the same method is implemented in different ways by redefining the method in subclasses

Choose the correct redefinition of the superclass method in class lcl_super_course

```
*Super Class Definition
CLASS lcl_super_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
*Sub Class Method ReDefinition
CLASS 1cl sub course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
C
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

SubClass Definition D SubClass Definition A SubClass Definition C SubClass Definition B

348 An inherited class:

(More than one answer is correct)

can redefine the public methods of the superclass can remove superclasss components can access the inherited private components can add components over and above the superclass can not access the protected components

349 Identify the one addition that is not part of the interface of a method

Returning Importing Exception Result

350 Identify the statement about Global Classes that is NOT true

Access to a global class is done as a reference variable using TYPE REF TO
Class Builder can be used to test global classes
Programs that are available to Global Classes
must be associated in Class Builder
A method to be transported is identified in
transport organiser as LIMU METH
Global classes are stored in TADIR with key
R3TR CLAS

351 Identify the behaviors of Abstract Classes.

(More than one answer is correct)

Methods can not be implemented in the subclass Cannot be instantiated Can only be implemented through an Interface

Methods can only be implemented in the subclass

Mark the operators used to widen cast of a class

(More than one answer is correct)

?TO

=?

->

?=

_

=>

What component provides the Point of Contact for outside users

Public Attributes Private Attributes Instantiated Object Method Signature

What would happen if the public components of a class were changed

Nothing. The class maintains it's own status Outside Users may have to make changes to to their components to reflect the changes private components will also need to be changed

Inheritance becomes invalidated

355 Select the answers that apply to static methods and instance methods

(More than one answer is correct)

Instance methods MUST be addressed by class name Static methods MUST be addressed by object reference after instantiation

Static methods MUST be addressed by class_name even when object is instantiated

Instance methods MUST be addressed by object ref after instantiation

Identify the valid statements that will write out the Static Attributes in the following code

```
class lcl_course definition.

public section.
    data: name(15) type c value 'ABAPObjects101'.
        class-data price type p value 100.

private section.
    data: category(10) type C value 'Objects'.

endclass.

data: course1 type ref to lcl_course,
    course_name type string,
    course_price type p,
    course_category type string.
```

(More than one answer is correct)

```
course_price = lcl_course=>price. Write course_price.
write: price.
write lcl_course=>price.
write lcl_course->price.
```

357 Identify the characteristics of the self reference ME

All answers are correct

Self references allow an object to give other objects a reference to it.

The reference ME can be used to determine the dynamic type of the reference variable in the debugger None of the answers are correct

The self-reference ME can be used to access individual components

Where are the methods of a class implemented

Implementation part of a class
Definition part of Class
Call method of the class
Object instantiation part of a program

Finish the sentence. Propogating exceptions requires

a Cleanup Statement
the Raising cx_class parameter as part of the method
signature of the calling method
the Raising cx_class parameter as part of the method
signature where the exception is raised
a handler for the exception

Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

exist once per roll area receive their own copy of the static attribute for each subclass does not allow for methods to be redefined in subclasses cannot be shared

In the context of relationship between Super and Sub classes, identify the statements which apply

(More than one answer is correct)

A change in a superclass does not automatically get realized in the subclass
A superclass is a specialization of a subclass
A subclass is a specialization of a superclass
Subclass does not know it superclass
Superclass does not know its subclasses

Your program has registered several handler methods. How does the program know what methods are available for execution when an event is triggered

the system looks for registered handler methods In the registry table and processes those that are registered for the event the system looks for registered handler methods In the event handler internal table and processes those that are registered for the event The methods defined in the Class Definition listen for raised events and respond when an event is triggered It is determined by the RAISE Event command

Choose the short form of the method call below

```
call method rf_car->calculate_cost importing ex_size = v_size.

rf_car->calculate_cost importing ex_size =
    v_size.

rf_car->calculate_cost( importing ex_size =
    v_size ).
    calculate_cost( importing ex_size = v_size ).
    rf_car->calculate_cost (importing ex_size =
    v_size).
```

How can a program access private attributes of an object

From outside the class

Only by methods of the specific object itself By methods of a different instance of the same object

By methods of a different object within the same Program

What component of a class guarantees its own consistency

private attributes functional methods public attributes static methods

Mark the operators used to widen cast of a class

(More than one answer is correct)

=

=?

?TO

=>

->

?=

367 Identify the statement about Global Classes that is NOT true

Access to a global class is done as a reference variable using TYPE REF TO
A method to be transported is identified in transport organiser as LIMU METH
Class Builder can be used to test global classes
Global classes are stored in TADIR with key
R3TR CLAS

Programs that are available to Global Classes must be associated in Class Builder

What items are true about Inheritance

(More than one answer is correct)

Superclass public components are visible to all classes

Superclass private components are visible to all subclasses

Superclass private components are visible only within the subclasses

Superclass protected components are visible to all subclasses

Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

A program can only work with a single instance of the same function group versus a program can access several instances of the same object Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is created

A program can directly access data in the function group while access to data in an object is not possible

Functions allow multiple instances of the same data objects. Objects only allow single instances of data

Which statement will create an instance of a class

Class my_class Implementation
Data: my_object TYPE REF TO my_class
Class my_class Definition.
Create Object my_object

Where would the components of a class be defined

Implementation part of a class Data Component of a program Definition part of Class Logic component of a program

372 Identify the line that contains the valid use of the READ-ONLY addition

```
class lcl_course definition.
 10 public section.
      Data: Price(3) type p decimals 2
 20
                     value 100 READ-ONLY.
 30
      Types: type_category(15) type C READ-ONLY.
 40
      Constants: write_position type I value 10 READ-ONLY.
    private section.
 50
 60
      data: category(15)
                                type C READ-ONLY,
 70
      class-data: course_count type I READ-ONLY.
endclass.
             60
             40
             30
             20
```

What can be said about the visibility of attributes in the following code

50

```
CLASS lcl_course DEFINITION.

PUBLIC SECTION.

Data: name type string.

PRIVATE SECTION.

Data: price type course-price.

ENDCLASS.
```

(More than one answer is correct)

price is available to methods inside the class name is available to methods only inside the class name is protected from outside access price is protected from outside access

374 The syntax for static method specification

Call class-method
Call method class name->method
Call method class name =>method
Call Method-> class name

In the context of relationship between Super and Sub classes, identify the statements which apply

(More than one answer is correct)

A subclass is a specialization of a superclass A change in a superclass does not automatically get realized in the subclass Superclass does not know its subclasses A superclass is a specialization of a subclass Subclass does not know it superclass

376 How can a program access private attributes of an object

Only by methods of the specific object itself By methods of a different object within the same Program From outside the class By methods of a different instance of the same object

What would happen if the public components of a class were changed

Nothing. The class maintains it's own status Outside Users may have to make changes to to their components to reflect the changes private components will also need to be changed Inheritance becomes invalidated

What component provides the Point of Contact for outside users

Method Signature Private Attributes Public Attributes Instantiated Object

Refer to the following code and indicate which statements are true

Data: cl_container type ref to cl_gui_custom_container, cl_grid type ref to cl_gui_alv_grid.

(More than one answer is correct)

cl_container points to the object that communicates with the container control cl_container points to the object that communicates with the ALV grid control cl_grid points to the object that communicates with the container control cl_grid points to the object that communicates with the ALV grid control

The concept of restricting direct access to data via hidden internal processes is best represented by which term

Inheritance Polymorphism Instantiation Encapsulation

381 Method

lif_material~display lcl_basepart~display display lcl_basepart->display lcl_basepart=>display lcl_basepart~display

Identify the valid rule when calling public methods from within the class

When calling a static method, the class name is required
Private methods can not call public methods
When calling a static method, the class name can be omitted
When calling an instance method, the => operator is still required

Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

exist once per roll area cannot be shared does not allow for methods to be redefined in subclasses receive their own copy of the static attribute for each subclass

Refer to the following code and indicate which statements are true

```
Data: cl_container type ref to cl_gui_custom_container, cl_grid type ref to cl_gui_alv_grid.
```

(More than one answer is correct)

cl_grid points to the object that communicates with the container control cl_container points to the object that communicates with the ALV grid control cl_container points to the object that communicates with the container control cl_grid points to the object that communicates with the ALV grid control

Choose the correct redefinition of the superclass method in class lcl super course

```
*Super Class Definition
CLASS lcl_super_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
*Sub Class Method ReDefinition
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
R
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
\Box
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get course name REDEFINITION.
ENDCLASS.
```

SubClass Definition C SubClass Definition B SubClass Definition D SubClass Definition A

In the context of polymorphism and interfaces, mark the item that is NOT true

the user is protected from the actual implementations interfaces describe the point of contact of a class interfaces contain their own implementation part a class can implement any number of interfaces

387 Choose the short form of the method call below

How do you call the method in a superclass that has the same name as a redefined method in the subclass?

Call Method Super-> mymethod.
Call Method Superclass-> mymethod.
You can't . Only the redefined method can be called
Call Method mymethod.

Using the UML modeling language for ABAP OO design, refer to the following and indicate the visibility of the components

```
| cl_myclass |
```

(More than one answer is correct)

display_address is a private method display_address is a public method address is protected attribute get_city is a public attribute display_address is a static public method city is a public attribute

What are the rules for Event parameters

(More than one answer is correct)

EXPORTING Parameters for events can only be passed by value
Events can only have EXPORTING parameters
EXPORTING Parameters for events can only be passed by reference
Events also allow RETURNING parameters

What items are true about Inheritance

(More than one answer is correct)

Superclass public components are visible to all classes

Superclass private components are visible to all subclasses

Superclass protected components are visible to all subclasses

Superclass private components are visible only within the subclasses

What component of a class guarantees its own consistency

functional methods private attributes static methods public attributes

What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Objects can change their class Classes are an instance of an object Class is a template for an object Objects are an instance of a class

How can a program access private attributes of an object

From outside the class
By methods of a different object within the same
Program
Only by methods of the specific object itself

By methods of a different instance of the same object

395 Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

```
refvar->method(im = p1)
refvar->method receiving()
refvar->method(p1)
refvar->method returning()
```

A program needs to gain access to the public attributes of class lcl_course. Identify the statements that are valid.

```
class lcl_course definition.
  public section.
  data:
            name(15) type c value 'ABAPObjects101'.
      class-data price type p value 100.
   private section.
   data: category(10) type C value 'Objects'.
endclass.
data: coursel
                      type ref to lcl_course,
      course_name
                      type string,
     course_price
                      type p,
      course_category type string.
Create Object coursel.
```

(More than one answer is correct)

397

```
course_name = course1->name.
course_name = course1=>name.
course_price = lcl_course=>price.
course_price = lcl_course->price.
course_name = name
```

Your program has registered several handler methods. How does the

program know what methods are available for execution when an event is triggered

the system looks for registered handler methods In the registry table and processes those that are registered for the event

The methods defined in the Class Definition listen for raised events and respond when an event is triggered

It is determined by the RAISE Event command the system looks for registered handler methods In the event handler internal table and processes those that are registered for the event

Choose the correct redefinition of the superclass method in class lcl_super_course

```
*Super Class Definition
CLASS lcl_super_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
*Sub Class Method ReDefinition
Α
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
В
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
D
CLASS lcl_sub_course DEFINITION INHERITING
```

FROM lcl_super_course.

PUBLIC SECTION.

METHODS: get_course_name REDEFINITION.
ENDCLASS.

SubClass Definition B SubClass Definition D SubClass Definition A SubClass Definition C

What are the rules for Event parameters

(More than one answer is correct)

EXPORTING Parameters for events can only be passed by value
EXPORTING Parameters for events can only be passed by reference
Events can only have EXPORTING parameters
Events also allow RETURNING parameters

400 What is the number of superclasses that can exist for a given subclass

only many none only 1 1 or many

401 Refer to the following code and indicate which statements are true

Data: cl_container type ref to cl_gui_custom_container, cl_grid type ref to cl_gui_alv_grid.

(More than one answer is correct)

cl_container points to the object that communicates with the ALV grid control cl_grid points to the object that communicates with the ALV grid control cl_grid points to the object that communicates with the container control cl_container points to the object that communicates with the container control

What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Objects are an instance of a class Objects can change their class Classes are an instance of an object Class is a template for an object

403 Constructors have special considerations. Identify the incorrect statement below.

A class can have multiple constructors The Constructor must defined in the Public section Generally, constructor methods can not be called Only Import and Exception Parameters are allowed

404 Identify the characteristics of the self reference ME

None of the answers are correct All answers are correct

The reference ME can be used to determine the dynamic type of the reference variable in the debugger
The self-reference ME can be used to access individual components
Self references allow an object to give other objects

What name is always given to a static constructor?

static_constructor class_constructor constructor class=>constructor

a reference to it.

The concept of restricting direct access to data via hidden internal processes is best represented by which term

Inheritance Encapsulation Polymorphism Instantiation

407 Refer to the following code and Select the VALID method call

```
Class lcl_course definition.

Public section.

data: course_name(12) type c.

methods: display_price
 importing im_course_name type string.

Private section.

Data: price type P value 100.

constants: c_objects101(10) type c value 'OBJECTS101'.

endclass.

class lcl_course implementation.

method display_price.

course_name = im_course_name.
```

```
If course_name = c_objects101.
    Write: price.
    Endif.
    endmethod.

endclass.

Data obj_course type ref to lcl_course.
start-of-selection.
    create object obj_course.
```

Call method obj_course->display_price exporting course_name = 'OBJECTS101'.

Call method obj_course->display_price exporting im_course_name = 'OBJECTS101'.

Call method obj_course->display_price exporting im_course_name = c_objects101.

Call method obj_course->display_price importing im_course_name = 'OBJECTS101'.

408 The syntax for static method specification

Call method class name->method Call method class name =>method Call Method-> class name Call class-method

What can be said about the visibility of attributes in the following code

```
CLASS lcl_course DEFINITION.

PUBLIC SECTION.

Data: name type string.

PRIVATE SECTION.

Data: price type course-price.

ENDCLASS.
```

(More than one answer is correct)

price is available to methods inside the class name is protected from outside access

price is protected from outside access name is available to methods only inside the class

410 Using example code below, choose the correct syntax for the redefined method

Class lcl_car definition.
Public Section.
 method calc_speed importing im_distance type ty_dist.
End Class.

Method calc_speed importing im_distance. Method calc_speed importing im_distance Redefinition
Method calc_speed Redefinition.
Method calc_speed Redefinition importing im_distance type ty_dist.

In the context of relationship between Super and Sub classes, identify the statements which apply

(More than one answer is correct)

A superclass is a specialization of a subclass Subclass does not know it superclass A change in a superclass does not automatically get realized in the subclass A subclass is a specialization of a superclass Superclass does not know its subclasses

What can be said about the lifetime of an object

An object exists for as long as it is being used in the program

An object exists as long as at least one method of the object is registered as an event handler.

An object exists as long as at least one reference points to it

All answers are correct

Local Class lcl_course has been defined in a program belonging to development class ZCL. What is the key entry in the repository table TADIR

R3TR lcl_class R3TR ZCL CLASS R3TR LOCAL CLASS R3TR CLASS None of the answers are correct

Identify the valid rule when calling public methods from within the class

When calling an instance method, the => operator is still required

When calling a static method, the class name is required

When calling a static method, the class name can be omitted

Private methods can not call public methods

What can be said about the visibility of attributes in the following code

CLASS lcl_course DEFINITION.

PUBLIC SECTION.

Data: name type string.

PRIVATE SECTION.

Data: price type course-price.

ENDCLASS.

(More than one answer is correct)

name is protected from outside access price is protected from outside access price is available to methods inside the class name is available to methods only inside the class

What mechanism is used to define common components of different classes in one place

Raise Event Interface Class Definition Create Object

Changing the view of an instance of a class with more details is referred to as

widening cast up cast dynamic referencing narrowing cast

418 Mark the operators used to widen cast of a class

(More than one answer is correct)

?TO

=

->

=>

?=

=?

What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Classes are an instance of an object Objects can change their class Objects are an instance of a class Class is a template for an object

Refer to the following code and indicate which statements are true

```
Data: cl_container type ref to cl_gui_custom_container, cl_grid type ref to cl_gui_alv_grid.
```

(More than one answer is correct)

cl_container points to the object that communicates with the ALV grid control cl_grid points to the object that communicates with the container control cl_container points to the object that communicates with the container control cl_grid points to the object that communicates with the ALV grid control

A MOVE_CAST_ERROR runtime error just occurred. Identify the cause.

Casting a super class to a subclass when superclass does not point to an instance of the subclass type Subclass reference variable correpsonds to the superclass reference variable Super class method is called from the subclass Super class and subclass both point to an instance of the same class type

The syntax for static method specification

Call method class name->method
Call class-method
Call method class name =>method
Call Method-> class name

Your program has registered several handler methods. How does the program know what methods are available for execution when an event is triggered

the system looks for registered handler methods In the event handler internal table and processes those that are registered for the event

The methods defined in the Class Definition listen for raised events and respond when an event is triggered

the system looks for registered handler methods In the registry table and processes those that are registered for the event

It is determined by the RAISE Event command

In the following method, what other parameters are allowed

CLASS lcl_course DEFINITION.
PUBLIC SECTION.

ENDCLASS.

Changing
Exporting
Exceptions
Receiving

425 Identify the ABAP OO Event signature protocols

(More than one answer is correct)

Exporting parameters can only be passed by value Events can only have importing Parameters Events can only have exporting Parameters Exporting parameters can only be passed by reference

What triggers an event

428

Raise Event Inside the Method Call Method All answers are correct Raise Event None of the answers are correct

What implications exist when private components of a class are changed

None of the answers are correct Any programs accessing the class must also change Programs are insulated from change Users of the private components must change their interface

Refer to the following code and Select the VALID method call

```
Class lcl_course definition.
  Public section.
    data: course_name(12)
                                type c.
    methods: display_price
              importing im_course_name type string.
  Private section.
                                 type P value 100.
    Data:
              price
    constants: c_objects101(10) type c value 'OBJECTS101'.
endclass.
class lcl_course implementation.
  method display_price.
    course_name = im_course_name.
    If course name = c objects101.
      Write: price.
    Endif.
  endmethod.
endclass.
Data obj_course type ref to lcl_course.
start-of-selection.
  create object obj_course.
              Call method obj_course->display_price exporting
              course name = 'OBJECTS101'.
              Call method obj_course->display_price importing
              im_course_name = 'OBJECTS101'.
              Call method obj_course->display_price exporting
              im course name = 'OBJECTS101'.
              Call method obj course->display price exporting
```

What component provides the Point of Contact for outside users

429

 $im_course_name = c_objects101$.

Public Attributes Private Attributes Instantiated Object Method Signature Class A provides friendship to Class B. Class B provides friendship to Class C. Identify the valid friend relationship.

(More than one answer is correct)

A is friend of B and C
B is friend of A
C is friend of B
B and C are friends of A
C is friend of A

What is the number of superclasses that can exist for a given subclass

only 1 1 or many none only many

Refer to the following code and identify the statements that are TRUE

```
CLASS 1cl course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.
CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.
   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.
Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.
Start-of-selection.
Create object course1.
Course2 = course1.
```

(More than one answer is correct)

Only one instance of method get_course_name exists

Method list_prices_and_discounts can only be called once

Memory is reserved for 2 instances of lcl_course list_prices_and_discounts is a instance method method list_prices_and_discounts is a static method

Only one instance of method list_prices_and_discounts exists

Where would the components of a class be defined

Logic component of a program Definition part of Class Data Component of a program Implementation part of a class

The concept of restricting direct access to data via hidden internal processes is best represented by which term

Instantiation Encapsulation Inheritance Polymorphism

The syntax for instance method specification is

(More than one answer is correct)

Call method Objref=>method Call method Objref->method Call Method->Objref Call method (from within another instance method)

Finish the sentence. Propagating exceptions requires

a handler for the exception the Raising cx_class parameter as part of the method signature where the exception is raised a Cleanup Statement the Raising cx_class parameter as part of the method signature of the calling method A public attribute 'color' is added to a superclass. A subclass already has the same attribute 'color'. What is the outcome?

(More than one answer is correct)

A syntax message will occur The subclass is invalidated The superclass is invalidated A runtime error will occur

Local Class lcl_course has been defined in a program belonging to development class ZCL. What is the key entry in the repository table TADIR

None of the answers are correct R3TR ZCL CLASS R3TR LOCAL CLASS R3TR lcl_class R3TR CLASS

In the context of polymorphism and interfaces, mark the item that is NOT true

a class can implement any number of interfaces interfaces contain their own implementation part interfaces describe the point of contact of a class the user is protected from the actual implementations

440 Define Polymorphism

(More than one answer is correct)

it s one of the main strengths of inheritance it s a characteristic when objects from different classes react differently to the same method call it s a characteristic when methods of the same class react differently to the same method call

the same method is implemented in different ways by redefining the method in subclasses it s a characteristic when methods from different classes react differently to the same interface

UML provides various diagram types. Mark the valid UML diagrams

(More than one answer is correct)

Aggregation

Component

Behavior

Composition

Class

How can a program access private attributes of an object

From outside the class

By methods of a different object within the same Program

By methods of a different instance of the same object

Only by methods of the specific object itself

Local Class lcl_course has been defined in a program belonging to development class ZCL. What is the key entry in the repository table TADIR

R3TR LOCAL CLASS
R3TR lcl_class
R3TR ZCL CLASS
R3TR CLASS
None of the answers are correct

444 Identify the Characteristics of a Final Class

methods cannot be explicitly designated as FINAL No answers are correct contains final methods implicitly all answers are correct

cannot have subclasses

How do you call the method in a superclass that has the same name as a redefined method in the subclass?

Call Method mymethod.
You can't . Only the redefined method can be called
Call Method Super-> mymethod.
Call Method Superclass-> mymethod.

Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

refvar->method receiving() refvar->method returning() refvar->method(p1) refvar->method(im = p1)

447 Define Polymorphism

(More than one answer is correct)

the same method is implemented in different ways by redefining the method in subclasses it s a characteristic when methods from different classes react differently to the same interface it s a characteristic when methods of the same class react differently to the same method call it s a characteristic when objects from different classes react differently to the same method call it s one of the main strengths of inheritance

What implications exist when private components of a class are changed

None of the answers are correct

Users of the private components must change their interface
Programs are insulated from change
Any programs accessing the class must also change

Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.

Constructor methods can't be redefined Attributes and class methods can be redefined. The signature of the method must remain the same Only instance methods can be redefined

Refer to the following code and identify the statements that are TRUE

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.
CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.
   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.
Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.
Start-of-selection.
Create object course1.
Course2 = course1.
```

(More than one answer is correct)

Method list_prices_and_discounts can only be called once
Memory is reserved for 2 instances of lcl_course
Only one instance of method get_course_name

exists
Only one instance of method
list_prices_and_discounts exists
list_prices_and_discounts is a instance method
method list_prices_and_discounts is a static
method

What component provides the Point of Contact for outside users

Method Signature Public Attributes Instantiated Object Private Attributes

Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.

Constructor methods can't be redefined
The signature of the method must remain the same
Only instance methods can be redefined
Attributes and class methods can be redefined.

Finish the sentence. Propogating exceptions requires

the Raising cx_class parameter as part of the method signature of the calling method the Raising cx_class parameter as part of the method signature where the exception is raised a handler for the exception a Cleanup Statement

Identify the statements that best describe the visibility of classes

(More than one answer is correct)

Local Classes are available only to programs in the same development class
Global Classes are available only from programs belonging to the same development class
Global classes are centrally available to all ABAP programs

Local Classes are available only to the program where the class is defined

The concept of restricting direct access to data via hidden internal processes is best represented by which term

Instantiation Inheritance Encapsulation Polymorphism

456 Mark the invalid attribute definitions

```
class lcl_course definition.
10 public section.
20
     Data: school(20) type c,
30
            Supervisor type string value ADAMS,
40
           Price(3) type p decimals 2 value 100 READ-ONLY.
 50
     types: type_category(15) type c,
 60
            type_name(10)
                            type c.
70
     constants: write_position type i value 10.
     class-data: course_count type i.
80
 90 private section.
100 data: category(15) type c,
110
            name (10) type c.
            courseid like mara-matnr.
120
endclass.
             40,70
             30,80
             70,80
             30,120
             40, 120
```

Using the UML modeling language for ABAP OO design, refer to the following and indicate the visibility of the components

```
| cl_myclass |
-----|
| +city |
```

(More than one answer is correct)

city is a public attribute display_address is a static public method display_address is a private method display_address is a public method get_city is a public attribute address is protected attribute

Refer to the following code and identify the statements that are TRUE

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.
CLASS lcl_course IMPLEMENTATION.
   METHOD get course name.
   ENDMETHOD.
   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.
Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.
Start-of-selection.
Create object course1.
Course2 = course1.
```

(More than one answer is correct)

method list_prices_and_discounts is a static method
Memory is reserved for 2 instances of lcl_course
Method list_prices_and_discounts can only be called once

Only one instance of method list_prices_and_discounts exists list_prices_and_discounts is a instance method Only one instance of method get_course_name exists

Identify the statement about Global Classes that is NOT true

Access to a global class is done as a reference variable using TYPE REF TO
Class Builder can be used to test global classes
Programs that are available to Global Classes must be associated in Class Builder
Global classes are stored in TADIR with key
R3TR CLAS
A method to be transported is identified in transport organiser as LIMU METH

460 Identify the ABAP OO Event signature protocols

(More than one answer is correct)

Events can only have importing Parameters Exporting parameters can only be passed by value Events can only have exporting Parameters Exporting parameters can only be passed by reference

Identify the valid statements that will write out the Static Attributes in the following code

```
class lcl_course definition.

public section.
    data: name(15) type c value 'ABAPObjects101'.
        class-data price type p value 100.

private section.
    data: category(10) type C value 'Objects'.

endclass.

data: coursel type ref to lcl_course,
    course_name type string,
    course_price type p,
    course_category type string.

(More than one answer is correct)
```

```
write: price.
course_price = lcl_course=>price. Write
course_price.
write lcl_course=>price.
write lcl_course->price.
```

462 Define Polymorphism

(More than one answer is correct)

the same method is implemented in different ways by redefining the method in subclasses it is one of the main strengths of inheritance it is a characteristic when methods from different classes react differently to the same interface it is a characteristic when objects from different classes react differently to the same method call it is a characteristic when methods of the same class react differently to the same method call

What mechanism is used to define common components of different classes in one place

Raise Event Class Definition Create Object Interface

464 UML provides various diagram types. Mark the valid UML diagrams

(More than one answer is correct)

Aggregation Behavior Class Composition Component

Refer to the following code and indicate which statements are true

```
Data: cl_container type ref to cl_gui_custom_container, cl_grid type ref to cl_gui_alv_grid.
```

(More than one answer is correct)

cl_grid points to the object that communicates with the ALV grid control cl_container points to the object that communicates with the container control cl_grid points to the object that communicates with the container control cl_container points to the object that communicates with the ALV grid control

Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.

The signature of the method must remain the same Only instance methods can be redefined Attributes and class methods can be redefined.

Constructor methods can't be redefined

Where are the methods of a class implemented

Call method of the class Implementation part of a class Definition part of Class Object instantiation part of a program

What component of a class guarantees its own consistency

public attributes static methods functional methods private attributes

What component provides the Point of Contact for outside users

Instantiated Object Public Attributes Private Attributes Method Signature

What is the only component that is implemented in the implementation part of a class

Object Interface Method Event Attribute

471 Identify the line that contains the valid use of the READ-ONLY additon

```
class lcl_course definition.
10 public section.
     Data: Price(3) type p decimals 2
                     value 100 READ-ONLY.
 30
      Types: type_category(15) type C READ-ONLY.
 40
     Constants: write_position type I value 10 READ-ONLY.
 50
   private section.
     data: category(15)
 60
                                type C READ-ONLY,
70
     class-data: course_count type I READ-ONLY.
endclass.
             30
```

40 60

50 20

Local Class lcl_course has been defined in a program belonging to development class ZCL. What is the key entry in the repository table TADIR

None of the answers are correct R3TR ZCL CLASS R3TR lcl_class R3TR LOCAL CLASS R3TR CLASS

What syntax provides access to individual components of a class within the class

(More than one answer is correct)

CALL METHOD object instance->ME->

ME-> CALL METHOD ME-> object instance->ME->

Your program has registered several handler methods. How does the program know what methods are available for execution when an event is triggered

the system looks for registered handler methods In the registry table and processes those that are registered for the event
It is determined by the RAISE Event command the system looks for registered handler methods In the event handler internal table and processes those that are registered for the event
The methods defined in the Class Definition listen for raised events and respond when an event is triggered

Refer to the following code and identify the statements that are TRUE

```
CLASS lcl_course DEFINITION.
  PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.
CLASS lcl_course IMPLEMENTATION.
  METHOD get_course_name.
  ENDMETHOD.
  METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.
Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.
Start-of-selection.
Create object course1.
Course2 = course1.
```

(More than one answer is correct)

method list_prices_and_discounts is a static method
Method list_prices_and_discounts can only be called once
Memory is reserved for 2 instances of lcl_course
Only one instance of method get_course_name exists
Only one instance of method
list_prices_and_discounts exists
list_prices_and_discounts is a instance method

476 Mark the invalid attribute definitions

```
class lcl_course definition.
10 public section.
      Data: school(20) type c,
20
30
            Supervisor type string value ADAMS,
            Price(3) type p decimals 2 value 100 READ-ONLY.
40
 50
      types: type_category(15) type c,
 60
             type name (10)
                               type c.
70
      constants: write_position type i value 10.
      class-data: course_count type i.
 80
 90 private section.
      data: category (15) type c,
100
             name(10)
110
                          type c.
120
             courseid
                          like mara-matnr.
endclass.
             40,70
             30,80
             70,80
             30,120
             40, 120
```

Identify the statements that best describe the visibility of classes

(More than one answer is correct)

Global Classes are available only from programs belonging to the same development class Local Classes are available only to the program

where the class is defined

Global classes are centrally available to all ABAP programs

Local Classes are available only to programs in the same development class

Identify the requirements that determine when an object gets deleted by garbage collection

(More than one answer is correct)

When all active objects are marked

When there are no more references pointing to an object

When objects can no longer be addressed from main memory

When none of its methods are registered as event handlers

479 Method

lcl_basepart~display
lif_material~display
lcl_basepart~display
lcl_basepart->display
lcl_basepart=>display
display

480 Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

Functions allow multiple instances of the same data objects. Objects only allow single instances of data

A program can directly access data in the function group while access to data in an object is not possible

A program can only work with a single instance of the same function group versus a program can

access several instances of the same object Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is created

Class A provides friendship to Class B. Class B provides friendship to Class C. Identify the valid friend relationship.

(More than one answer is correct)

C is friend of B

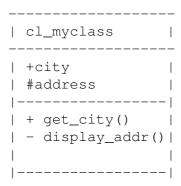
A is friend of B and C
B and C are friends of A
C is friend of A
B is friend of A

What are the rules for Event parameters

(More than one answer is correct)

Events can only have EXPORTING parameters
EXPORTING Parameters for events can only be passed
by value
EXPORTING Parameters for events can only be passed
by reference
Events also allow RETURNING parameters

Using the UML modeling language for ABAP OO design, refer to the following and indicate the visibility of the components



(More than one answer is correct)

display_address is a static public method

get_city is a public attribute display_address is a public method display_address is a private method city is a public attribute address is protected attribute

Which of the following answers characterize ABAP OO events

(More than one answer is correct)

Events subscribe to classes Classes trigger events Classes subscribe to events Methods subscribe to classes Start-of-selection is an OO event

Where would the components of a class be defined

Logic component of a program Implementation part of a class Data Component of a program Definition part of Class

What syntax provides access to individual components of a class within the class

(More than one answer is correct)

ME->
object instance->ME->
CALL METHOD ME->
CALL METHOD object instance->ME->

Where are the methods of a class implemented

Implementation part of a class Object instantiation part of a program Call method of the class

Definition part of Class

Initializing an object in a subclass requires that the constructor of the superclas is first called. Identify the correct syntax.

Call Method Super-> Constructor Call Method Constructor-> Super Call Method Constructor Call Method Super Constructor

Finish the sentence. Propagating exceptions requires

the Raising cx_class parameter as part of the method signature where the exception is raised a handler for the exception the Raising cx_class parameter as part of the method signature of the calling method a Cleanup Statement

How can a program access private attributes of an object

From outside the class
By methods of a different instance of the same object
Only by methods of the specific object itself
By methods of a different object within the same
Program

491 Constructors have special considerations. Identify the incorrect statement below.

A class can have multiple constructors Generally, constructor methods can not be called The Constructor must defined in the Public section Only Import and Exception Parameters are allowed

Local Class lcl_course has been defined in a program belonging to development class ZCL. What is the key entry in the repository table TADIR

R3TR lcl_class R3TR LOCAL CLASS None of the answers are correct R3TR CLASS R3TR ZCL CLASS

Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.

Attributes and class methods can be redefined. Only instance methods can be redefined The signature of the method must remain the same

Constructor methods can't be redefined

Choose the correct redefinition of the superclass method in class lcl_super_course

```
*Super Class Definition
CLASS lcl_super_course DEFINITION.
PUBLIC SECTION.
METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
```

```
*Sub Class Method ReDefinition
CLASS 1cl sub course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.
CLASS 1cl sub course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
     METHODS: get course name IMPORTING im name type string.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM 1cl super course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

SubClass Definition B SubClass Definition C SubClass Definition D SubClass Definition A

495 Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

496

refvar->method receiving() refvar->method(im = p1) refvar->method returning() refvar->method(p1)

Initializing an object in a subclass requires that the constructor of the

Call Method Constructor-> Super Call Method Constructor Call Method Super-> Constructor Call Method Super Constructor

Changing the view of an instance of a class with more details is referred to as

narrowing cast up cast dynamic referencing widening cast

What is the number of superclasses that can exist for a given subclass

only 1 none only many 1 or many

Identify the requirements that determine when an object gets deleted by garbage collection

(More than one answer is correct)

When objects can no longer be addressed from main memory

When none of its methods are registered as event handlers

When there are no more references pointing to an object

When all active objects are marked

Identify the line that contains the valid use of the READ-ONLY additon

class lcl_course definition.

- 10 public section.
- 20 Data: Price(3) type p decimals 2 value 100 READ-ONLY.
- 30 Types: type_category(15) type C READ-ONLY.
- 40 Constants: write_position type I value 10 READ-ONLY.
- 50 private section.
- 60 data: category(15) type C READ-ONLY,
- 70 class-data: course_count type I READ-ONLY.

endclass.

30

50

20

40

60