- 1 What happens when the Set Handler command is executed
 - An instance of the event is created

 The Event Handler Method is registered
 The Event is triggered
 The Event is handled
- 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
- 3 Mark the operators used to widen cast of a class

(More than one answer is correct)

- ✓ ?TO ✓ ?= => -> = =?
- 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

TAW12_1-3 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 What is true about classes and objects in Object Oriented ABAP (More than one answer is correct) Objects are an instance of a class Class is a template for an object Classes are an instance of an object Objects can change their class What statement will request memory to be allocated to an object Create Object Call Method Create Constructor Call Constructor The syntax for instance method specification is (More than one answer is correct)

5

6

7

✓ Call method Objref->method

Call method (from within another instance)

method)

Call Method->Objref

Call method Objref=>method

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

Importing
Returning
Exception
Result

9 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).

rf_car->calculate_cost (importing ex_size = v_size).

calculate_cost(importing ex_size = v_size).
```

What name is always given to a static constructor?

class_constructor
static_constructor
class=>constructor
constructor

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 component provides the Point of Contact for outside users
 - Private Attributes
 Public Attributes
 Instantiated Object
 Method Signature
- 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.

Mark the items that characterize the Methods of a Class

(More than one answer is correct)

Can be defined with a parameter interface

✓ Can access all attributes in their class

Can access only public attributes in their class Only pass return codes to the calling program

✓ Can change the state of an object

Where is the visibility of class components defined

Class Definition
Class Implementation
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)

✓ 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

ALV grid control

cl_grid points to the object that communicates with the

container control

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

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
- What is the only component that is implemented in the implementation part of a class
 - Method
 Event
 Interface
 Attribute
 Object
- Identify the one addition that is not part of the interface of a method
 - Result
 Importing
 Exception
 Returning

21 An inherited class:

(More than one answer is correct)

can remove superclasss components

can redefine the public methods of the superclass

can not access the protected components

can add components over and above the superclass

can access the inherited private components

- Finish the sentence. Propogating exceptions requires
 - the Raising cx_class parameter as part of the method signature where the exception is raised the Raising cx_class parameter as part of the method signature of the calling method

a Cleanup Statement a handler for the exception

Where is the visibility of class components defined

Class Methods

Class Implementation

Class Definition

Object Instance

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

 implementation
 attributes
 method

_	an object in a subclass requires that the constructor of the s first called. Identify the correct syntax.
✓	Call Method Super-> Constructor Call Method Super Constructor Call Method Constructor Call Method Constructor-> Super
Mark the o	perators used to widen cast of a class
(More than	n one answer is correct)
✓	= ?TO =>
✓	-> ?= =?
	ou call the method in a superclass that has the same name as a nethod in the subclass ?
✓	Call Method Super-> mymethod. You can't . Only the redefined method can be called Call Method Superclass-> mymethod. Call Method mymethod.
Constructor below.	rs have special considerations. Identify the incorrect statement
✓	Generally, constructor methods can not be called The Constructor must defined in the Public section Only Import and Exception Parameters are allowed A class can have multiple constructors

Choose the correct redefinition of the superclass method in class

29

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.
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 C
               SubClass Definition D
               SubClass Definition A
```

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
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

Only one instance of method list_prices_and_discounts exists

TAW12_1-3

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
                     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
              40
              60
              20
```

32 Mark the invalid attribute definitions

30,120

```
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.
    private section.
 90
100
      data: category(15) type c,
 110
            name(10)
                        type c.
120
            courseid like mara-matnr.
endclass.
```

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

- Which statement will create an instance of a class
 - Create Object my_object
 Class my_class Implementation
 Data: my_object TYPE REF TO my_class
 Class my_class Definition.
- In ABAP objects, which compnent is said to determine an objects behavior
 - signature
 method
 implementation
 class
- 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 receive their own copy of the static attribute for each subclass

does not allow for methods to be redefined in

subclasses

36 Identify the statement about Global Classes that is NOT true

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

Access to a global class is done as a reference variable using TYPE REF TO

Identify the statements that best describe the visibility of classes

(More than one answer is correct)

37

✓ 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

Global Classes are available only from programs

belonging to the same development class

Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

✓ refvar->method(p1)

refvar->method receiving()

 \checkmark refvar->method(im = p1)

refvar->method returning()

In object orientation, the term USER includes

Events

✓ All of the answers are correct

None of the answers are correct

Methods Attributes

40 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

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

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 syntax for static method specification

✓ Call method class name =>method

Call Method-> class name

Call method class name->method

Call class-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

A runtime error will occur The subclass is invalidated The superclass is invalidated 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 CLASS** R3TR ZCL CLASS R3TR lcl_class 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

45

46

passed by value

EXPORTING Parameters for events can only be

passed by reference

- 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
- Where are the methods of a class implemented
 - ✓ Implementation part of a class
 Call method of the class
 Definition part of Class

Object instantiation part of a program

When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

- Code can be changed
 Signature can be changed
 Only Instance methods
 Private Static methods
- 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
 Only one instance of method get_course_name

exists
list_prices_and_discounts is a instance method

Which statement will create an instance of a class

Class my_class Definition.
Class my_class Implementation

Data: my_object TYPE REF TO my_class

Create Object my_object

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

Identify the ABAP OO Event signature protocols

(More than one answer is correct)

53

Events can only have exporting Parameters

Exporting parameters can only be passed by value

Exporting parameters can only be passed by

reference

Events can only have importing Parameters

Mark the items that characterize the Methods of a Class

(More than one answer is correct)

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

Can access only public attributes in their class

Only pass return codes to the calling program

Can be defined with a parameter interface

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
C is friend of A
C is friend of B
B is friend of A
A is friend of B and C

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
list_prices_and_discounts exists
list_prices_and_discounts is a instance method
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

57 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 the program where the class is defined
Local Classes are available only to programs in the same development class

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.
C
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
```

ENDCLASS.

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

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

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

60 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).

rf_car->calculate_cost importing ex_size = v_size.

calculate_cost(importing ex_size = v_size).

In object orientation, the term USER includes

Attributes

All of the answers are correct

None of the answers are correct

Events

Methods

62 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

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

64 Identify the behaviors of Abstract Classes.

(More than one answer is correct)

- ✓ Cannot be instantiated
 - Methods can not be implemented in the subclass
- Methods can only be implemented in the subclass
 Can only be implemented through an Interface
- Where are the methods of a class implemented

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

✓ Implementation part of a class

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

Where is the visibility of class components defined

Object Instance
Class Methods
Class Implementation
Class Definition

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 CLASS
R3TR ZCL CLASS
R3TR LOCAL CLASS
R3TR LOCAL CLASS

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

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.
```

✓ 30,120

What is possible with a subclass in an inheritance relationship to the superclass

(More than one answer is correct)

Components defined in the superclass are not present in the subclass unless they are explicitly defined in the definition of the subclass The subclass can remove components of the superclass can provide inherited methods with new implementations (redefinition)

can add new components to the subclass

inherits all the characteristics of the superclass

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

Only instance methods can be redefined

Attributes and class methods can be redefined.

Constructor methods can't be redefined

The signature of the method must remain the same

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
 price is protected from outside access
 name is available to methods only inside the class
 name is protected from outside access
- 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
                im_course_name = c_objects101.
                Call method obj course->display price importing
                im_course_name = 'OBJECTS101'.
                Call method obj_course->display_price exporting
                course_name = 'OBJECTS101'.
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.

75 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)

74

C is friend of B

B is friend of A

B and C are friends of A

A is friend of B and C C is friend of A

✓	the Raising cx_class parameter as part of the me signature where the exception is raised
	a handler for the exception the Raising cx_class parameter as part of the me signature of the calling method a Cleanup Statement
What items	s are true about Inheritance
(More tha	n 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 a subclasses
What state	ment will request memory to be allocated to an object
	Call Constructor Create Constructor

A class can have multiple constructors

Only Import and Exception Parameters are allowed

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

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

✓ does not allow for methods to be redefined in

subclasses

receive their own copy of the static attribute for each

subclass

cannot be shared

- What is contained in a class that does not exist in an interface
 - ✓ implementation definition method attributes
- 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

C is friend of A

✓ C is friend of B

A is friend of B and C

✓ B is friend of A

What triggers an event

None of the answers are correct Raise Event Inside the Method

Call Method

Raise Event

All answers are correct

84 Identify the statement about Global Classes that is NOT true

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

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

Programs that are available to Global Classes must be

associated in Class Builder 85 Refer to the following code and indicate which statements are true Data: cl_container type ref to cl_gui_custom_container, type ref to cl_qui_alv_grid. cl_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_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 86 What name is always given to a static constructor? static_constructor class=>constructor class_constructor constructor 87 What statement will request memory to be allocated to an object Create Object Call Method Create Constructor

(More than one answer is correct)

88

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

Call Constructor

The syntax for instance method specification is

- ✓ Call method (from within another instance method)
- When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

- ✓ Code can be changed
 Private Static methods
 Signature can be changed
 ✓ Only Instance methods
- Finish the following sentence so that it is TRUE. Static Components in an inheritance relationship.......

(More than one answer is correct)

- ✓ does not allow for methods to be redefined in
 - subclasses
- ✓ exist once per roll area

receive their own copy of the static attribute for each

subclass

cannot be shared

Which statement will create an instance of a class

Class my_class Implementation Class my_class Definition.

Data: my_object TYPE REF TO my_class

✓ Create Object my_object

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

(More than one answer is correct)

✓ Event Triggering using Raise Event can be

issued in a method

✓ Methods must be registered to an event in order to

be called when the event is triggered

Events can be triggered with the Trigger Event

command

An event is defined in the Implementation of a

Class

93 An inherited class:

(More than one answer is correct)

can access the inherited private components

✓ can redefine the public methods of the superclass

can remove superclasss components

can add components over and above the superclass

can not access the protected components

What name is always given to a static constructor?

class_constructor
constructor

class=>constructor static_constructor

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

Instantiation
Encapsulation
Polymorphism
Inheritance

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.
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.
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
  PUBLIC SECTION.
```

METHODS: get_course_name REDEFINITION.
ENDCLASS.

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

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

name can not be accessed unless course1 is instantiated

course_price = lcl_course=>price.

course_name = course1=>name.

course_name = course1->name.

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->

What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

Classes are an instance of an object

✓ Class is a template for an object

✓ Objects are an instance of a class

Objects can change their class

100 Define Polymorphism

(More than one answer is correct)

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

it s a characteristic when objects from different

classes react differently to the same method call it s a characteristic when methods from different

classes react differently to the same interface

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 can

When calling a static method, the class name is required

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 it s one of the main strengths of inheritance

the same method is implemented in different ways

by redefining the method in subclasses

it s a characteristic when methods of the same class react differently to the same method call

What are the rules for Event parameters

104

(More than one answer is correct)

EXPORTING Parameters for events can only be passed by reference

Events also allow RETURNING parameters
Events can only have EXPORTING parameters

✓ EXPORTING Parameters for events can only be

passed by value

Identify the characteristics of the self reference ME

✓ All 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.

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

None of the answers are correct

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

Call Method Superclass-> mymethod.

Call Method Super-> mymethod.

You can't . Only the redefined method can be called

Call Method mymethod.

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

narrowing cast

up cast

dynamic referencing

widening cast

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

programs

Local Classes are available only to programs in the

Global classes are centrally available to all ABAP

same development class

✓

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

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 the user is protected from the actual implementations

✓ interfaces contain their own implementation part

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

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

Call Method Create Constructor Call Constructor Create Object

111 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

112 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

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

A runtime error will occur

(More than one answer is correct)

✓ A syntax message will occur
✓ The subclass is invalidated
The superclass is invalidated

Where are the methods of a class implemented

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

115 An inherited class:

(More than one answer is correct)

can access the inherited private components can not access the protected components

- ✓ can redefine the public methods of the superclass
- can remove superclasss components
- can add components over and above the superclass
- 116 Identify the behaviors of Abstract Classes.

(More than one answer is correct)

- Methods can not be implemented in the subclass
- ✓ Cannot be instantiated
- Methods can only be implemented in the subclass
 Can only be implemented through an Interface
- 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.
**INSTANTIATION OMITTED **
```

(More than one answer is correct)

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

course_name = name

- 118 Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.
 - Attributes and class methods can be redefined.

 Constructor methods can't be redefined

 The signature of the method must remain the same

 Only instance methods can be redefined
- 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)

- get_city is a public attribute

 city is a public attribute

 address is protected attribute
- display address is a private met
- display_address is a private method display_address is a public method display_address is a static public method
- 120 Identify the line that contains the valid use of the READ-ONLY additon

class lcl_course definition.

- 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.

60 40 50 30 ✓

Define Polymorphism

(More than one answer is correct)

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
- 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

122 An inherited class:

(More than one answer is correct)

can not access the protected components can access the inherited private components

- can redefine the public methods of the superclass
 - can remove superclasss components
- can add components over and above the superclass

Where are the methods of a class implemented

Object instantiation part of a program

Definition part of Class

- Call method of the class
- ✓ Implementation part of a class

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
- What would happen if the public components of a class were changed
 - private components will also need to be changed

 ✓ Outside Users may have to make changes to to their components to reflect the changes

 Inheritance becomes invalidated

 Nothing. The class maintains it's own status
- 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.
```

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

(More than one answer is correct)

- CALL METHOD ME->CALL METHOD object instance->ME->object instance->ME->
- ✓ ME->
- Where would the components of a class be defined
 - Definition part of Class
 Logic component of a program
 Implementation part of a class
 Data Component of a program

131	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 methods defined in the Class Definition lister 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 the system looks for registered handler methods In the event handler internal table and processes those that are registered for the event		
132	What would happen if the public components of a class were changed			
	✓	Nothing. The class maintains it's own status Inheritance becomes invalidated Outside Users may have to make changes to to their components to reflect the changes private components will also need to be changed		
133	Constructors have special considerations. Identify the incorrect statement below.			
	✓	Generally, constructor methods can not be called A class can have multiple constructors The Constructor must defined in the Public section Only Import and Exception Parameters are allowed		

What are the rules for Event parameters

134

(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

Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

refvar->method receiving()

refvar->method(im = p1)

refvar->method returning()

refvar->method(p1)

136 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).

Finish the sentence. Propagating exceptions requires

138

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

a Cleanup Statement

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

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

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

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

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

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

Program

✓ Only by methods of the specific object itself

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

Private methods can not call public methods

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

When calling a static method, the class name is required

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

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

list_prices_and_discounts exists

Only one instance of method get_course_name

exists

Memory is reserved for 2 instances of lcl_course 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

Which statement will create an instance of a class

Class my_class Implementation

Class my_class Definition.

Data: my_object TYPE REF TO my_class

✓ Create Object my object

In object orientation, the term USER includes

Methods

None of the answers are correct

Events

Attributes

✓ All of the answers are correct

146 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 and subclass both point to an instance of the same class type
Super class method is called from the subclass

What name is always given to a static constructor?

class_constructorconstructorclass=>constructorstatic_constructor

What component of a class guarantees its own consistency

static methods
public attributes
private attributes
functional methods

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 lcl_course->price.

write: price.

✓ write lcl_course=>price.

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

widening cast
narrowing cast
up cast
dynamic referencing

151 Identify the behaviors of Abstract Classes.

(More than one answer is correct)

Methods can not be implemented in the subclass

Methods can only be implemented in the subclass

✓ Cannot be instantiated

Can only be implemented through an Interface

Method

display

lcl_basepart=>display

lcl_basepart->display

lif_material~display

lcl_basepart~display

lcl_basepart~display

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

(More than one answer is correct)

cannot be shared

✓ does not allow for methods to be redefined in

subclasses

✓ exist once per roll area

receive their own copy of the static attribute for

each subclass

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

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

a class can implement any number of interfaces the user is protected from the actual implementations

interfaces describe the point of contact of a class interfaces contain their own implementation part

Which statement will create an instance of a class

Class my_class Definition.

Create Object my_object

Class my_class Implementation

Data: my_object TYPE REF TO my_class

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 private method

city is a public attribute

display_address is a public method

address is protected attribute get_city is a public attribute

display_address is a static public method

What can be said about the lifetime of an object

All answers are correct
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.
An object exists for as long as it is being used in the program

The syntax for static method specification

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

Call method class name =>method
Call class-method

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.
      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.
```

T	41	N 1	2	1.	-3

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 would happen if the public components of a class were changed

Nothing. The class maintains it's own status private components will also need to be changed Inheritance becomes invalidated

- Outside Users may have to make changes to to their components to reflect the changes
- 163 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
 Exporting parameters can only be passed by reference
- ✓ Events can only have exporting Parameters
- The syntax for instance method specification is

(More than one answer is correct)

Call method Objref=>method

Call Method->Objref

- ✓ Call method Objref->method
- ✓ Call method (from within another instance method)

What happens when the Set Handler command is executed

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

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 Subclass does not know it superclass A superclass is a specialization of a subclass

- ✓ Superclass does not know its subclasses
- ✓ A subclass is a specialization of a superclass
- Where is the visibility of class components defined

Class Methods
Class Implementation
Object Instance
Class Definition

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
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

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

Exception Importing Returning

✓ Result

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 name is available to methods only inside the class

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

171	The syntax	for	static	method	specifica	tion
- / -					Special	

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

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

Event

Object

MethodInterfaceAttribute

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

signature implementation class

✓ method

Where are the methods of a class implemented

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

✓ Implementation part of a class

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

✓	You can't . Only the redefined method can be called Call Method Superclass-> mymethod. Call Method Super-> mymethod. Call Method mymethod.	
Which of	the following answers characterize ABAP OO events	
(More th	an one answer is correct)	
✓	Classes trigger events Events subscribe to classes Start-of-selection is an OO event	
✓	Methods subscribe to classes Classes subscribe to events	
Identify t	he behaviors of Abstract Classes.	
(More th	an one answer is correct)	
~	Methods can only be implemented in the subclass Methods can not be implemented in the subclass	
✓	Cannot be instantiated Can only be implemented through an Interface	
Identify t	he ABAP OO Event signature protocols	
(More th	an 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	
Finish the	e sentence. Propogating exceptions requires	

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 handler for the exception

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 Subclass does not know it s superclass
- ✓ A subclass is a specialization of a superclass
 A change in a superclass does not automatically get realized in the subclass

Identify the statements that best describe the visibility of classes

(More than one answer is correct)

✓ 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

Global Classes are available only from programs

belonging to the same development class

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

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

name is available to methods only inside the class

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

Which statement will create an instance of a class

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

✓ Create Object my_object

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

Mark the items that characterize the Methods of a Class

(More than one answer is correct)

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

Can access all attributes in their class

Can change the state of an object

Can access only public attributes in their class

The syntax for static method specification

188

Call method class name->method

Call method class name =>method

Call Method-> class name

Call class-method

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

What is true about classes and objects in Object Oriented ABAP

(More than one answer is correct)

189

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

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

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

68

191 Define Polymorphism

(More than one answer is correct)

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 objects from different classes 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

192 Identify the Characteristics of a Final Class

contains final methods implicitly methods cannot be explicitly designated as FINAL

cannot have subclasses all answers are correct
No answers are correct

193 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

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.
   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_price = lcl_course=>price.
                  course_name = name
                  course_price = lcl_course->price.
                  course_name = course1->name.
                  course name = course1=>name.
What happens when the Set Handler command is executed
                  The Event is handled
                  The Event is triggered
                  An instance of the event is created
                  The Event Handler Method is registered
What can be said about the lifetime of an object
                  All answers are correct
                  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. An object exists for as long as it is being used in

195

196

the program

197 Choose the short form of the method call below

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

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 Inheritance becomes invalidated

199 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 ZCL CLASS

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

How can a program access private attributes of an object

200

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

71

Where would the components of a class be defined

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

What name is always given to a static constructor?

static_constructor
class=>constructor
class_constructor
constructor

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.
- 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.

20 50 30 40

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

60

implementation method definition attributes

205 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 program

All answers are correct
An object exists as long as at least one reference points to it

206 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 Global classes are stored in TADIR with key R3TR CLAS

Class Builder can be used to test global classes A method to be transported is identified in transport organiser as LIMU METH

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

207 Choose the short form of the method call below

Where are the methods of a class implemented

208

Call method of the class

Implementation part of a class

Definition part of Class

Object instantiation part of a program

The syntax for instance method specification is

(More than one answer is correct)

✓ Call method (from within another instance

method)

Call Method->Objref

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

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 ZCL CLASS R3TR GLOB CLASS

✓ R3TR CLAS cl_course

R3TR cl_course

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

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

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

- Where is the visibility of class components defined
 - Class Implementation
 Class Definition
 Class Methods
 Object Instance
- The concept of restricting direct access to data via hidden internal processes is best represented by which term
 - Instantiation
 ✓ Encapsulation
 Inheritance
 Polymorphism
- 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

None of the answers are correct

✓ All answers are correct

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

215 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->methodCall method Objref=>method
- 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
- How do you call the method in a superclass that has the same name as a redefined method in the subclass?
 - Call Method Superclass-> mymethod.
 - ✓ Call Method Super-> mymethod.

Call Method mymethod.

You can't . Only the redefined method can be called

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

Users of the private components must change their interface

None of the answers are correct

Any programs accessing the class must also change

- ✓ Programs are insulated from change
- 219 Choose the item that is not characteristic of redefinition in the context of super/sub class inheritance.

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

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 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

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 only work with a single instance of

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 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

- The concept of restricting direct access to data via hidden internal processes is best represented by which term
 - Encapsulation
 Polymorphism
 Instantiation
 Inheritance
- In the context of Triggering and Handling of Events, mark those which apply

(More than one answer is correct)

✓ Event Triggering using Raise Event can be

issued in a method

An event is defined in the Implementation of a

Class

Events can be triggered with the Trigger Event

command

1

TAW12 1-3

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

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,
     class-data: course_count type I READ-ONLY.
 70
endclass.
             60
             50
             20
             30
             40
```

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: coursel type ref to lcl_course,

course2 type ref to lcl_course.

Start-of-selection.

Create object coursel.
```

Course2 = course1.

(More than one answer is correct)

Method list_prices_and_discounts can only be called once

Only one instance of method get_course_name exists

Memory is reserved for 2 instances of lcl_course

/ method list_prices_and_discounts is a static

method

list_prices_and_discounts is a instance method

Only one instance of method

list_prices_and_discounts exists

What name is always given to a static constructor?

constructor
class_constructor
static_constructor
class=>constructor

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

Superclass does not know its subclasses

Subclass does not know it s superclass

✓ A subclass is a specialization of a superclass

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

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

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

230 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 ZCL CLASS R3TR CLASS R3TR lcl_class R3TR LOCAL CLASS

✓ None of the answers are correct

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 Constructor-> Super
    Call Method Super Constructor
```

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

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

TAW12 1-3

```
CLASS 1cl course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list prices and discounts.
ENDCLASS.
CLASS 1cl 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 method list_prices_and_discounts is a static method 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

Identify the statements that best describe the visibility of classes

(More than one answer is correct)

234

✓ 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
✓ Global classes are centrally available to all ABAP programs

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

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()
- 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 protected components are visible to all

subclasses

Superclass private components are visible to all

subclasses

Which statement will create an instance of a class

Data: my_object TYPE REF TO my_class

Class my_class Implementation

✓ Create Object my_object

Class my_class Definition.

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

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
Events can be triggered with the Trigger Event
command

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

interfaces contain their own implementation part a class can implement any number of interfaces

240 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 reference

✓ Exporting parameters can only be passed by value

✓ Events can only have exporting Parameters

In object orientation, the term USER includes

Methods

✓ All of the answers are correct

Events Attributes

None of the answers are correct

Identify the characteristics of the self reference ME

None of the answers are correct

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

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

debugger

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.

Receiving

Exceptions

Exporting

Changing

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

Interface Object Attribute Event Method

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

What triggers an event

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

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

Event handler methods are called in the sequence that they were registered in the handler table A single SET Handler command can be used to register multiple handler methods in the handler table

Mark the invalid attribute definitions

TAW12 1-3

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

UML provides various diagram types. Mark the valid UML diagrams

(More than one answer is correct)

249

- ✓ Component
 Composition
 ✓ Behavior
 ✓ Class
 Aggregation
- A MOVE_CAST_ERROR runtime error just occurred. Identify the cause.

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

Super class method is called from the subclass Super class and subclass both point to an instance of the same class type

What implications exist when private components of a class are changed

✓ Programs are insulated from change

Users of the private components must change their

interface

None of the answers are correct

Any programs accessing the class must also change

- 252 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
- 253 UML provides various diagram types. Mark the valid UML diagrams

(More than one answer is correct)

Aggregation

✓ Class

✓ Behavior

Composition

Component

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 ZCL CLASS

R3TR cl_course

✓ R3TR CLAS cl_course

None of the answers are correct

255 Method

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

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
Only one instance of method get_course_name exists
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

TAW12 1-3

method✓ Only one instance of methodlist_prices_and_discounts exists

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

inheritance casting instantiation polymorphism encapsulation

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

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

259 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. 100 data: category(15) type c,

110	name(10)	type	С.
120	courseid	like	mara-matnr.
endclass.			
	70,80		
	40,70		
	30,80		
✓	30,120		

Where would the components of a class be defined

40, 120

Implementation part of a class

✓ Definition part of Class

Logic component of a program

Data Component of a program

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
 - A runtime error will occur
- The subclass is invalidated
 The superclass is invalidated

Refer to the following code and Select the VALID method call

```
Class lcl_course definition.
  Public section.
             course_name(12) type c.
    data:
    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.
```

TAW12 1-3

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 = c objects 101. Call method obj_course->display_price exporting im course name = 'OBJECTS101'. 263 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 264 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 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 265 Finish the sentence. Propogating 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 do you call the method in a superclass that has the same name as a redefined method in the subclass?

Call Method mymethod.

Call Method Superclass-> mymethod.

✓ Call Method Super-> mymethod.

You can't . Only the redefined method can be called

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)

- get_city is a public attribute
 address is protected attribute
 display_address is a public method
 display_address is a static public method
 city is a public attribute
 display_address is a private method
- 268 An inherited class:

(More than one answer is correct)

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

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

What is true about classes and objects in Object Oriented ABAP

course_name = name

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

(More than one answer is correct)

270

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

271 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 GLOB CLASS
R3TR ZCL CLASS
R3TR cl_course

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

```
Class lcl_course definition.
  Public section.
             course_name(12) type c.
    data:
    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.
```

TAW12 1-3

Call method obj_course->display_price exporting im_course_name = c_objects 101.

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 importing im course name = 'OBJECTS101'.

273 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 as long as at least one reference points to it

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

✓ All answers are correct

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

(More than one answer is correct)

- \checkmark refvar->method(im = p1)
 - refvar->method receiving()
- ✓ refvar->method(p1)
 - refvar->method returning()

Identify the statement about Global Classes that is NOT true

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

Access to a global class is done as a reference variable using TYPE REF TO

Class Builder can be used to test global classes Global classes are stored in TADIR with key R3TR

✓ Programs that are available to Global Classes must

be associated in Class Builder

276 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

None of the answers are correct

/ All answers are correct

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

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

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

Encapsulation
 Instantiation
 Polymorphism
 Inheritance

Identify the ABAP OO Event signature protocols

(More than one answer is correct)

Exporting parameters can only be passed by reference

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

Finish the sentence. Propogating exceptions requires

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

281 Method

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

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 object instance->ME->

✓ CALL METHOD ME->

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.

Call Method mymethod.

You can't . Only the redefined method can be

called

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
                 im course name = 'OBJECTS101'.
                 Call method obj_course->display_price importing
                 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.
Identify the Characteristics of a Final Class
                 cannot have subclasses
                 No answers are correct
                 contains final methods implicitly
                 methods cannot be explicitly designated as FINAL
                 all answers are correct
```

UML provides various diagram types. Mark the valid UML diagrams

285

286

(More than one answer is correct)

Composition

✓ Class

Aggregation
✓ Component

✓ Behavior

287 Choose the short form of the method call below

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)

288

- ✓ A syntax message will occur
- The subclass is invalidated

A runtime error will occur

The superclass is invalidated

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 reference

Events also allow RETURNING parameters

EXPORTING Parameters for events can only be

passed by value

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

✓ Create Object
Interface
Class Definition
Raise Event

What component provides the Point of Contact for outside users

- Method Signature
 Public Attributes
 Private Attributes
 Instantiated Object
- 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

 Events can be triggered with the Trigger Event command
- Event Triggering using Raise Event can be issued in a method

 An event is defined in the Implementation of a Class

Mark the invalid attribute definitions

endclass.

```
class lcl_course definition.
10 public section.
20
     Data: school(20) type c,
 30
            Supervisor type string value ADAMS,
            Price(3) type p decimals 2 value 100 READ-ONLY.
 40
 50
      types: type_category(15) type c,
            type name (10)
 60
                             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
            name(10)
                         type c.
120
                         like mara-matnr.
            courseid
```

30,80 70,80 40, 120 ✓ 30,120 40,70

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 reference

EXPORTING Parameters for events can only be

passed by value

Events also allow RETURNING parameters

The syntax for instance method specification is

(More than one answer is correct)

Call method Objref=>method

Call Method->Objref

✓ Call method Objref->method

✓ Call method (from within another instance

method)

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

(More than one answer is correct)

✓ 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

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

297 Identify the characteristics of the self reference ME

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

None of the answers are correct

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

All answers are correct

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

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

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

300 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 the user is protected from the actual implementations

✓ interfaces contain their own implementation part

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

Method
 Event
 Attribute
 Object
 Interface

The syntax for static method specification

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

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

B and C are friends of A

C is friend of A

C is friend of B

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

 	-	aı	sp	⊥a;	У_	aa	ar	()	

(More than one answer is correct)

display_address is a static public method get_city is a public attribute

- city is a public attribute
 - display_address is a public method
- √ display_address is a private method
- ✓ address is protected attribute

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

UML provides various diagram types. Mark the valid UML diagrams

(More than one answer is correct)

the event

Aggregation

Composition

Class

306

- ✓ Component
- ✓ Behavior

Where is the visibility of class components defined

Object Instance

Class Definition
 Class Implementation
 Class Methods

Mark the item that is NOT true about the handler table

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

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

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

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

(More than one answer is correct)

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

✓ ME->

What name is always given to a static constructor?

class_constructor class=>constructor constructor static_constructor

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

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 ZCL CLASS

None of the answers are correct

R3TR GLOB CLASS

R3TR cl_course

✓ R3TR CLAS cl_course

In object orientation, the term USER includes

None of the answers are correct

Methods

✓ All of the answers are correct

Attributes Events

What component of a class guarantees its own consistency

private attributes
static methods
functional methods
public attributes

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 available to methods inside the class
- price is protected from outside accessname is available to methods only inside the class
- What mechanism is used to define common components of different classes in one place
 - Class Definition
 Interface
 Create Object
 Raise Event
- What triggers an event

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

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

none
only many

only 1
1 or many

320 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).

rf_car->calculate_cost (importing ex_size =
 v_size).

calculate_cost(importing ex_size = v_size).

321 Identify the ABAP OO Event signature protocols

(More than one answer is correct)

Exporting parameters can only be passed by reference

Events can only have importing Parameters

✓ Exporting parameters can only be passed by value

✓ Events can only have exporting Parameters

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

implementation

signature

class

✓ method

323 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

✓ Instance methods MUST be addressed by object ref

after instantiation

Static methods MUST be addressed by class_name

even when object is instantiated

Static methods MUST be addressed by object

reference after instantiation

Mark the items that characterize the Methods of a Class

(More than one answer is correct)

✓ Can be defined with a parameter interface

✓ Can access all attributes in their class

Can access only public attributes in their class Only pass return codes to the calling program Can change the state of an object

325 Identify the statement about Global Classes that is NOT true

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

Access to a global class is done as a reference variable using TYPE REF TO

Global classes are stored in TADIR with key R3TR CLAS

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

Class Builder can be used to test global classes

326 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 programs in the same development class

✓ Global classes are centrally available to all ABAP

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

What happens when the Set Handler command is executed

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

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.

Exporting Receiving

Changing

✓ Exceptions

329 In object orientation, the term USER includes

✓ All of the answers are correct

Attributes

None of the answers are correct

Methods Events

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_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

Where is the visibility of class components defined

Object Instance
Class Definition
Class Methods
Class Implementation

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)

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

- method list_prices_and_discounts is a static method
- 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 ZCL CLASS R3TR CLASS R3TR LOCAL CLASS

- ✓ None of the answers are correct R3TR lcl_class
- 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

receive their own copy of the static attribute for

each subclass

✓ does not allow for methods to be redefined in

subclasses

Mark the operators used to widen cast of a class

(More than one answer is correct)

=? =

✓

=>

✓ ?TO

->

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

337 An inherited class:

(More than one answer is correct)

can add components over and above the superclass can access the inherited private components can not access the protected components can remove superclasss components

✓ can redefine the public methods of the superclass

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

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 Subclass reference variable correpsonds to the superclass reference variable

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

only 1
only many
1 or many
none

Which of the following answers characterize ABAP OO events

(More than one answer is correct)

340

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

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

implementation signature class method

Refer to the following code and Select the VALID method call

```
Class lcl_course definition.
  Public section.
           course_name(12) type c.
    data:
    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'.

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

(More than one answer is correct)

- Subclass does not know it s superclass

 A subclass is a specialization of a superclass
- 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 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 = name
course_name = course1=>name.

course_price = lcl_course=>price.

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

345 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 importing im_distance.

Method calc_speed Redefinition importing
im_distance type ty_dist.

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

347 An inherited class:

(More than one answer is correct)

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

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

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

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

only 1
only many
1 or many
none

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 protected components are visible to all

subclasses

Superclass private components are visible to all

subclasses

- The concept of restricting direct access to data via hidden internal processes is best represented by which term
 - Inheritance
 ✓ Encapsulation
 Polymorphism
 Instantiation
- A MOVE_CAST_ERROR runtime error just occurred. Identify the cause.

Subclass reference variable correpsonds to the superclass reference variable

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
 Super class and subclass both point to an instance of the same class type
- 353 An inherited class:

(More than one answer is correct)

- can remove superclasss componentscan add components over and above the superclass
 - can not access the protected components
- can redefine the public methods of the superclass can access the inherited private components
- 354 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 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
- the same method is implemented in different ways by redefining the method in subclasses
- ✓ it s one of the main strengths of inheritance

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

(More than one answer is correct)

- Subclass does not know it s superclass
- ✓ Superclass does not know its subclasses
 - A superclass is a specialization of a subclass
- A subclass is a specialization of a superclass
 A change in a superclass does not automatically get
 realized in the subclass
- 356 The syntax for static method specification

Call class-method

Call Method-> class name

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

v Can method class name =>method

357 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 all active objects are marked
- ✓ When objects can no longer be addressed from main memory
- ✓ When there are no more references pointing to an object

358 Method

lcl_basepart=>display lcl_basepart~display display

lif_material~display lcl_basepart->display lcl_basepart~display

What triggers an event

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

What is possible with a subclass in an inheritance relationship to the superclass

(More than one answer is correct)

- can add new components to the subclass
 Components defined in the superclass are not present in the subclass unless they are explicitly defined in the definition of the subclass
- can provide inherited methods with new implementations (redefinition)
 - The subclass can remove components of the superclass
- ✓ inherits all the characteristics of the superclass

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 Super-> Constructor
Call Method Constructor-> Super

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 importing im_distance.
 Method calc_speed Redefinition importing im_distance type ty_dist.

What component of a class guarantees its own consistency

static methods

private attributes
functional methods
public attributes

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,
                                  type p,
                course_price
                course_category type string.
         Create Object course1.
         (More than one answer is correct)
                       course name = name
                       course name = course1=>name.
                       course_name = course1->name.
                       course_price = lcl_course=>price.
                       course_price = lcl_course->price.
365
         What statement will request memory to be allocated to an object
                       Create Object
                       Create Constructor
                       Call Method
                       Call Constructor
         Which statement will create an instance of a class
366
                       Class my_class Definition.
                       Data: my_object TYPE REF TO my_class
                       Create Object my_object
                       Class my_class Implementation
         Define Polymorphism
367
```

(More than one answer is correct)

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 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 it s a characteristic when objects from different classes react differently to the same method call 368 Constructors have special considerations. Identify the incorrect statement below. Only Import and Exception Parameters are allowed Generally, constructor methods can not be called The Constructor must defined in the Public section A class can have multiple constructors 369 Which of the following answers characterize ABAP OO events (More than one answer is correct) Methods subscribe to classes Classes trigger events Classes subscribe to events Events subscribe to classes Start-of-selection is an OO event 370 In object orientation, the term USER includes All of the answers are correct None of the answers are correct **Events** Methods

Attributes

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

Attributes and class methods can be redefined.

Constructor methods can't be redefined

Only instance methods can be redefined

The signature of the method must remain the same

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 can be omitted

When calling a static method, the class name is required

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

(More than one answer is correct)

✓ Behavior

✓ Component

✓ Class

Aggregation Composition

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

none

1 or many

only 1

only many

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 and subclass both point to an instance of the same class type Super class method is called from the subclass

376 The syntax for static method specification

Call class-method

✓ Call method class name =>method

Call Method-> class name

Call method class name->method

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

30 20 60

```
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.
 60
     data: category(15)
                                type C READ-ONLY,
 70
     class-data: course_count type I READ-ONLY.
endclass.
             50
             40
```

What is possible with a subclass in an inheritance relationship to the superclass

(More than one answer is correct)

Components defined in the superclass are not present in the subclass unless they are explicitly

defined in the definition of the subclass can add new components to the subclass

The subclass can remove components of the

superclass

can provide inherited methods with new

implementations (redefinition)

✓ inherits all the characteristics of the superclass

Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

refvar->method returning()

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

refvar->method(p1)

380 In object orientation, the term USER includes

Methods

Events

Attributes

✓ All of the answers are correct

None of the answers are correct

- How do you call the method in a superclass that has the same name as a redefined method in the subclass?
 - Call Method mymethod.
 - Call Method Super-> mymethod.
 You can't . Only the redefined method can be called
 Call Method Superclass-> mymethod.

382 Method

lcl_basepart->display

lcl_basepart=>display

/ lif_material~display

display

lcl_basepart~display

lcl_basepart~display

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

(More than one answer is correct)

Aggregation

✓ Behavior

✓ Component

✓ Class

Composition

What is possible with a subclass in an inheritance relationship to the superclass

(More than one answer is correct)

✓ inherits all the characteristics of the superclass

The subclass can remove components of the superclass

Components defined in the superclass are not present in the subclass unless they are explicitly defined in the definition of the subclass

- can add new components to the subclass
- can provide inherited methods with new implementations (redefinition)
- 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: price.
- ✓ course_price = lcl_course=>price. Write course_price.
 - write lcl_course->price.
- ✓ write lcl_course=>price.

386 An inherited class:

(More than one answer is correct)

- can redefine the public methods of the superclass
- can add components over and above the superclass can remove superclasss components
 can not access the protected components
 can access the inherited private components
- Mark the operators used to widen cast of a class

(More than one answer is correct)

```
=?
->
=
=>
✓ ?=
✓ ?TO
```

Constructors have special considerations. Identify the incorrect statement below.

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

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

up cast

✓ widening cast

narrowing cast

dynamic referencing

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

course_price type p,
course_category type string.

**INSTANTIATION OMITTED **

(More than one answer is correct)

course_name = course1=>name.

name can not be accessed unless course1 is instantiated

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

course name = name

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 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
 name is protected from outside access
- price is available to methods inside the classname is available to methods only inside 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.
    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_price = lcl_course=>price.
 course_name = course1=>name.
- name can not be accessed unless course1 is
 instantiated
 course_name = name
 course name = course1->name.

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

(More than one answer is correct)

Composition
Aggregation
Behavior
Component
Class

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

Only Import and Exception Parameters are allowed Generally, constructor methods can not be called A class can have multiple constructors

The Constructor must defined in the Public section

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

397 Identify the behaviors of Abstract Classes.

(More than one answer is correct)

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

- ✓ Methods can only be implemented in the subclass
- Cannot be instantiated

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 R3TR CLASS R3TR ZCL CLASS

✓ None of the answers are correct

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 value

EXPORTING Parameters for events can only be passed by reference

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

encapsulation

polymorphism

casting

inheritance

instantiation

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

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

When calling a static method, the class name is required

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

403 Identify the statement about Global Classes that is NOT true

Programs that are available to Global Classes must

be associated in Class Builder

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

A method to be transported is identified in transport

organiser as LIMU METH

The syntax for instance method specification is

(More than one answer is correct)

✓ Call method Objref->method

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

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

(More than one answer is correct)

- CALL METHOD ME-> object instance->ME->
 - CALL METHOD object instance->ME->
- / ME->
- 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 Super Constructor
 Call Method Constructor
- Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

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

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

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

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

private components will also need to be 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

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 importing 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 exporting im_course_name = 'OBJECTS101'.

Finish the sentence. Propogating exceptions requires

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

Finish the sentence. Propogating exceptions requires

a handler for the exception 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

Mark the item that is NOT true about 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
A single SET Handler command can be used to register multiple handler methods in the handler table

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

The syntax for static method specification

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

Choose the short form of the method call below

```
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 ).
```

415 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.
 100
       data: category(15) type c,
 110
             name(10)
                          type c.
 120
             courseid
                          like mara-matnr.
endclass.
               40, 120
               40,70
               30,120
               30,80
               70,80
```

Identify the characteristics of the self reference ME

All answers are correct
None of the answers are correct
The self-reference ME can be used to access individual components
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

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 ZCL CLASS R3TR CLASS

✓ None of the answers are correct

R3TR LOCAL CLASS

R3TR lcl_class

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

The syntax for instance method specification is

(More than one answer is correct)

Call method Objref=>method

✓ Call method Objref->method

✓ Call method (from within another instance

method)

Call Method->Objref

420 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

✓ the same method is implemented in different

ways by redefining the method in subclasses

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

Identify the characteristics of the self reference ME

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

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

✓ All answers are correct

Mark the operators used to widen cast of a class

(More than one answer is correct)

?=

->

✓ ?TO

=> =?

423 Method

lcl_basepart->display

lcl_basepart=>display

lcl_basepart~display
lif_material~display

display

lcl_basepart~display

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
              course_name = 'OBJECTS101'.
              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
              im_course_name = 'OBJECTS101'.
```

What statement will request memory to be allocated to an object

Call Constructor
Create Object
Create Constructor
Call Method

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

private components will also need to be 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

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 returning()

 \checkmark refvar->method(im = p1)

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 LOCAL CLASS
R3TR ZCL CLASS
R3TR lcl_class
R3TR CLASS

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

attributes definition

implementation method

430 Define Polymorphism

(More than one answer is correct)

✓	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
✓	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 objects from different
	classes react differently to the same method call

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

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

```
signature

method
implementation
class
```

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 Redefinition

Method calc_speed importing im_distance.

✓ Method calc_speed Redefinition.

Method calc_speed Redefinition importing

im_distance type ty_dist.

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 available to methods only inside the class

price is available to methods inside the class

name is protected from outside access

✓ price is protected from outside access

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 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

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

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.

rf_car->calculate_cost (importing ex_size = v_size).

calculate_cost(importing ex_size = v_size).
```

In the following method, what other parameters are allowed

What name is always given to a static constructor?

class=>constructorconstructorclass_constructorstatic_constructor

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

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
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
Class Builder can be used to test global classes

The syntax for instance method specification is

(More than one answer is correct)

- Call method (from within another instance method)
- Call method Objref->method
 Call method Objref=>method
 Call Method->Objref
- 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.
      Types: type_category(15) type C READ-ONLY.
 30
 40
     Constants: write_position type I value 10 READ-ONLY.
 50 private section.
 60
      data: category (15)
                          type C READ-ONLY,
      class-data: course_count type I READ-ONLY.
 70
endclass.
```

✓ 20

40

60

30

50

Where is the visibility of class components defined

Class Definition
Object Instance
Class Methods
Class Implementation

What statement will request memory to be allocated to an object

Call Constructor
Create Object
Call Method
Create Constructor

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

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

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

None of the answers are correct

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 reference

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

448 Method

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

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

casting
encapsulation
polymorphism
instantiation
inheritance

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

Create Object course1.

(More than one answer is correct)

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

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

Call Method Superclass-> mymethod.

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

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

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

454 Identify the one addition that is not part of the interface of a method **Importing** Result Exception Returning 455 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 456 In ABAP objects, which compnent is said to determine an objects behavior class method implementation signature 457 What component provides the Point of Contact for outside users **Instantiated Object** Private Attributes Method Signature **Public Attributes**

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

458

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

Finish the sentence. Propogating exceptions requires

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

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

60 20 30 40 50

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.
```

Receiving Exporting Exceptions Changing

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

Returning
Importing
Exception
Result

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

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

464 An inherited class:

(More than one answer is correct)

can redefine the public methods of the superclass
 can remove superclasss components
 can not access the protected components

- can add components over and above the superclass
 can access the inherited private components
- 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-> Super
 Call Method Constructor
- 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 classname is available to methods only inside the class
- price is protected from outside access
 name is protected from outside access
- What is the only component that is implemented in the implementation part of a class

Event

Interface

Method Attribute

Object

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 A C is friend of B B is friend of A

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

469 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

470 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

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

encapsulation instantiation inheritance polymorphism casting

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.

What name is always given to a static constructor?

class_constructor static_constructor class=>constructor constructor

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 Redefinition

Method calc_speed importing im_distance.

✓ Method calc_speed Redefinition.

Method calc_speed Redefinition importing im_distance type ty_dist.

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.
В
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 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 B
SubClass Definition A
SubClass Definition C
SubClass Definition D

```
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.
 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.
               40,70
               70,80
               30,120
               30,80
               40, 120
Identify the Characteristics of a Final Class
               cannot have subclasses
               methods cannot be explicitly designated as FINAL
               contains final methods implicitly
               all answers are correct
               No answers are correct
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.
               Exporting
```

Exceptions

477

478

Changing Receiving

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->

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

methodsignatureimplementationclass

- What component of a class guarantees its own consistency
 - public attributes
 private attributes
 functional methods
 static methods
- 482 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 CLAS cl_course
 R3TR GLOB CLASS
 R3TR ZCL CLASS
 None of the answers are correct
 R3TR cl_course
- Choose the short form of the method call below

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.
```

(More than one answer is correct)

485

486

write: price.

write lcl_course->price.

course_price = lcl_course=>price. Write

course_price.

✓ write lcl_course=>price.

Mark the item that is NOT true about the handler table

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

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

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
A runtime error will occur
✓ The subclass is invalidated
The superclass is invalidated

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

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

Instantiation
✓ Encapsulation

489

Polymorphism Inheritance

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

with the container control

490 Identify the characteristics of the self reference ME

None of the answers are correct

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

The reference ME can be used to determine the

dynamic type of the reference variable in the

debugger

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

implementation

signature

method

class

492 An inherited class:

(More than one answer is correct)

can add components over and above the superclass

can redefine the public methods of the superclass can access the inherited private components can not access the protected components

can remove superclasss components

What statement will request memory to be allocated to an object

Call Constructor

✓ Create Object

Call Method

Create Constructor

494 Identify the Characteristics of a Final Class

495

contains final methods implicitly

No answers are correct

methods cannot be explicitly designated as FINAL

cannot have subclasses

/ all answers are correct

What happens when the Set Handler command is executed

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

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

In the following method, what other parameters are allowed

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.

Create Object course1.

(More than one answer is correct)

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

What is possible with a subclass in an inheritance relationship to the superclass

(More than one answer is correct)

The subclass can remove components of the superclass
can add new components to the subclass
Components defined in the superclass are not present in the subclass unless they are explicitly defined in the definition of the subclass inherits all the characteristics of the superclass can provide inherited methods with new implementations (redefinition)

500 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
A
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 A SubClass Definition B

SubClass Definition D SubClass Definition C