TAW10_2-2

1   Define Polymorphism

(More than one answer is correct)

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

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

(More than one answer is correct)

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

3   The syntax for static method specification

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

4   Where would the components of a class be defined

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

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

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

	Exception
✓	Result
	Returning
	Importing

10   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

11   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

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

___

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.

CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.

   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.

Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.

Start-of-selection.

Create object course1.
Course2 = course1.
```

(More than one answer is correct)

                      Only one instance of method get_course_name exists

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

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

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

14	What component of a class guarantees its own consistency

functional methods
✓	private attributes
public attributes
static methods

15	Define Polymorphism

(More than one answer is correct)

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

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

Interface
Object
✓ Method
Event
Attribute

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

✓   Registered Methods in the handler table can only be
          triggered by RAISE EVENT i.e. not by CALL
          METHOD
          Event handler methods are called in the sequence
          that they were registered in the handler table
          There is a separate handler table for every object
          that has defined events
          A single SET Handler command can be used to
          register multiple handler methods in the handler
          table

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

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

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

      (More than one answer is correct)

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

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

```
class lcl_course definition.

 10 public section.
 20    Data: Price(3) type p decimals 2
                        value 100 READ-ONLY.
 30    Types: type_category(15)  type C READ-ONLY.
 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.
```

	40
	60
	50
✓	20
	30

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

_____

(More than one answer is correct)

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

22   What items are true about Inheritance

_____

(More than one answer is correct)

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

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

_____

(More than one answer is correct)

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

24   Choose the short form of the method call below

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

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

25   Identify the statement about Global Classes that is NOT true

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

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

                Call Method
                Call Constructor
✓   Create Object
                Create Constructor

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

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

28   Identify the statements that best describe the visibility of classes

(More than one answer is correct)

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

29   The syntax for static method specification

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

30   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

31   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

32   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->

33   What component provides the Point of Contact for outside users

             Method Signature

             Instantiated Object

             Private Attributes

✓   Public Attributes

34   What name is always given to a static constructor ?

             class=>constructor

             static_constructor

✓   class_constructor

             constructor

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

---

(More than one answer is correct)

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

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

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

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

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

---

(More than one answer is correct)

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

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

---

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

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

        up cast
        narrowing cast
        dynamic referencing
✓   widening cast

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

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

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

        attributes
        method
✓   implementation
        definition

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

_____

✓   Result
                            Returning
                            Exception
                            Importing

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

_____

(More than one answer is correct)

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

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

_____

(More than one answer is correct)

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

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

_____

✓   widening cast
                                narrowing cast
                                dynamic referencing

up cast

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

(More than one answer is correct)

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

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

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.

CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.

   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.

Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.

Start-of-selection.

Create object course1.
Course2 = course1.
```

(More than one answer is correct)

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

15

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

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

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

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

class
implementation
signature
✓ method

49   Mark the invalid attribute definitions

```
class lcl_course definition.

 10 public section.
 20   Data: school(20)  type c,
 30         Supervisor  type string value  ADAMS ,
 40         Price(3)  type p decimals 2 value 100 READ-ONLY.
 50   types: type_category(15) type c,
 60          type_name(10)     type c.

 70   constants: write_position type i value 10.
 80   class-data: course_count type i.
 90  private section.
 100   data: category(15) type c,
 110         name(10)     type c.
 120         courseid     like mara-matnr.

endclass.
```

70,80
✓ 30,120

40, 120
40,70
30,80

50   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.

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

---

           none
           only many
✓   only 1
           1 or many

52   Define Polymorphism

(More than one answer is correct)

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

✓   the same method is implemented in different ways by redefining the method in subclasses

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

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

✓   it s one of the main strengths of inheritance

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

---

(More than one answer is correct)

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

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

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

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

54   What name is always given to a static constructor ?

---

          constructor
✓   class_constructor
          class=>constructor
          static_constructor

55   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.

56   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.

B
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.

D
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

SubClass Definition A

✔ SubClass Definition D

SubClass Definition C

SubClass Definition B

57   Identify the behaviors of Abstract Classes.

(More than one answer is correct)

Can only be implemented through an Interface

✔ Cannot be instantiated

Methods can not be implemented in the subclass

✔ Methods can only be implemented in the subclass

58   How can a program access private attributes of an object

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

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

                     Event
                     Object
✓   Method
                     Interface
                     Attribute

60   Which of the following answers characterize ABAP OO events

(More than one answer is correct)

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

61   Identify the ABAP OO Event signature protocols

(More than one answer is correct)

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

62   Where would the components of a class be defined

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

63   Identify the characteristics of the self reference ME

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

64   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

65   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

66   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

67   What component of a class guarantees its own consistency

---

✓   private attributes
static methods
functional methods
public attributes

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

---

```
class lcl_course definition.

 10 public section.
 20   Data: Price(3) type p decimals 2
                  value 100 READ-ONLY.
 30   Types: type_category(15)  type C READ-ONLY.
 40   Constants: write_position type I value 10 READ-ONLY.
```

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

endclass.
```

                50
✓   20
                30
                40
                60

69   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

70   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

24

71   Identify the statements that best describe the visibility of classes

(More than one answer is correct)

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

72   An inherited class :

(More than one answer is correct)

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

73   Mark the items that characterize the Methods of a Class

(More than one answer is correct)

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

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

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

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

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

(More than one answer is correct)

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

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

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

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

	method
	definition

attributes
✓ implementation

---

78   Method

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

---

79   What items are true about Inheritance

(More than one answer is correct)

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

---

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

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

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

81   Mark the operators used to widen cast of a class

(More than one answer is correct)

            ->
✓   ?=
            =>
            =
            =?
✓   ?TO

82   What name is always given to a static constructor ?

✓   class_constructor
            static_constructor
            constructor
            class=>constructor

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

            Importing
✓   Result
            Exception
            Returning

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

(More than one answer is correct)

✓   Behavior
✓   Component
            Aggregation
            Composition
✓   Class

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

```
class lcl_course definition.

   public section.

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

   private section.

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

endclass.

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

Create Object course1.
```

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

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

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

                attributes
✓   implementation
                method
                definition

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

                Create Constructor
✓   Create Object
                Call Method
                Call Constructor

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

(More than one answer is correct)

✔   When none of its methods are registered as event handlers

✔   When there are no more references pointing to an object

✔   When objects can no longer be addressed from main memory

       When all active objects are marked

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

(More than one answer is correct)

       Static methods MUST be addressed by object reference after instantiation

       Instance methods MUST be addressed by class name

✔   Instance methods MUST be addressed by object ref after instantiation

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

93   Identify the ABAP OO Event signature protocols

(More than one answer is correct)

✔   Events can only have exporting Parameters

       Events can only have importing Parameters

✔   Exporting parameters can only be passed by value

       Exporting parameters can only be passed by reference

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

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

✓   Method calc_speed Redefinition.

                    Method calc_speed importing im_distance.

                    Method calc_speed Redefinition importing
im_distance type ty_dist.

                    Method calc_speed importing im_distance
Redefinition

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

(More than one answer is correct)

                    Composition

✓   Behavior

                    Aggregation

✓   Component

✓   Class

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

(More than one answer is correct)

✓   Class is a template for an object

                    Classes are an instance of an object

                    Objects can change their class

✓   Objects are an instance of a class

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

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

```
|-----------------|
```

(More than one answer is correct)

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

98   What items are true about Inheritance

(More than one answer is correct)

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

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

	none
✓	only 1
	only many
	1 or many

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

```
CLASS lcl_course DEFINITION.
PUBLIC SECTION.
  Data: name type string.

PRIVATE SECTION.
  Data: price type course-price.

ENDCLASS.
```

(More than one answer is correct)

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

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

Inheritance
Instantiation
✓   Encapsulation
Polymorphism

102   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

103   In the following method, what other parameters are allowed

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name
                  IMPORTING im_name type string
                  Returning value(student_count) type I.
ENDCLASS.
```

Changing
Exporting
Receiving
✓   Exceptions

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

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

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

When calling a static method, the class name is required

Private methods can not call public methods

---

105   An inherited class :

(More than one answer is correct)

✔   can redefine the public methods of the superclass

    can not access the protected components

    can remove superclasss components

    can access the inherited private components

✔   can add components over and above the superclass

---

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

(More than one answer is correct)

✔   Only Instance methods

    Signature can be changed

✔   Code can be changed

    Private Static methods

---

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

(More than one answer is correct)

    receive their own copy of the static attribute for each subclass

✔   exist once per roll area

    cannot be shared

✔   does not allow for methods to be redefined in subclasses

---

108   What component provides the Point of Contact for outside users

 ✓   Public Attributes
          Instantiated Object
          Private Attributes
          Method Signature

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

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

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

endclass.

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

**INSTANTIATION OMITTED **
```

(More than one answer is correct)

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

110   In object orientation, the term   USER   includes

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

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

Call Constructor
Create Constructor
✓   Create Object
Call Method

112   Identify the behaviors of Abstract Classes.

(More than one answer is correct)

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

113   What component provides the Point of Contact for outside users

Instantiated Object
✓   Public Attributes
Method Signature
Private Attributes

114   The syntax for instance method specification is

(More than one answer is correct)

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

115   What happens when the Set Handler command is executed

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

116   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
a Cleanup Statement
the Raising cx_class parameter as part of the method
signature of the calling method

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

      instantiation
✓   polymorphism
inheritance
encapsulation
casting

118   How can a program access private attributes of an object

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

119   Define Polymorphism

(More than one answer is correct)

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

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

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

✓ it s one of the main strengths of inheritance

✓ the same method is implemented in different ways by redefining the method in subclasses

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

Attribute

✓ Method

Event

Object

Interface

121   Identify the statement about Global Classes that is NOT true

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

122   Identify the behaviors of Abstract Classes.

(More than one answer is correct)

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

> ✔ Methods can only be implemented in the subclass

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

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

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

124   Which of the following answers characterize ABAP OO events

(More than one answer is correct)

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

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

	up cast
	dynamic referencing
	narrowing cast
✓	widening cast

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

✓	Registered Methods in the handler table can only be triggered by RAISE EVENT i.e. not by CALL METHOD
	A single SET Handler command can be used to register multiple handler methods in the handler table
	There is a separate handler table for every object that has defined events
	Event handler methods are called in the sequence that they were registered in the handler table

127   Identify the ABAP OO Event signature protocols

(More than one answer is correct)

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

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

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

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

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

(More than one answer is correct)

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

130   Method

---

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

131   Identify the characteristics of the self reference ME

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

132   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

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

     ✔   only 1
1 or many
none
only many

134   Where are the methods of a class implemented

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

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

136   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
            40, 120
            70,80
            40,70
            30,80

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

_____

(More than one answer is correct)

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

138   Identify the Characteristics of a Final Class

_____

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

139   Which of the following answers characterize ABAP OO events

_____

(More than one answer is correct)

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

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

_____

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

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

(More than one answer is correct)

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

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

✓   polymorphism
                inheritance
                encapsulation
                casting
                instantiation

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

(More than one answer is correct)

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

144   Where is the visibility of class components defined

✓   Class Definition
                Class Methods
                Object Instance

Class Implementation

145   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
	40, 120
	30,80
	70,80
	40,70

146   Mark the operators used to widen cast of a class

(More than one answer is correct)

	=
	=?
✓	?=
✓	?TO
	->
	=>

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

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

```
class lcl_course definition.

   public section.

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

   private section.
```

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

endclass.

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

Create Object course1.
```

(More than one answer is correct)

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

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

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

150   Where are the methods of a class implemented

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

52

	TAW10_2-2

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

    ✓   Create Object
                     Create Constructor
                     Call Method
                     Call Constructor

152   How can a program access private attributes of an object

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

153   What are the rules for Event parameters

(More than one answer is correct)

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

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

(More than one answer is correct)

    ✓   When there are no more references pointing to an object
                     When all active objects are marked

✓   When objects can no longer be addressed from main memory

✓   When none of its methods are registered as event handlers

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

(More than one answer is correct)

✓   Component

          Composition

✓   Class

          Aggregation

✓   Behavior

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

          Constructor methods can't be redefined

✓   Attributes and class methods can be redefined.

          The signature of the method must remain the same

          Only instance methods can be redefined

157   Mark the items that characterize the Methods of a Class

(More than one answer is correct)

✓   Can change the state of an object

          Only pass return codes to the calling program

✓   Can be defined with a parameter interface

          Can access only public attributes in their class

✓   Can access all attributes in their class

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

(More than one answer is correct)

cannot be shared

receive their own copy of the static attribute for each subclass

✓ exist once per roll area

✓ does not allow for methods to be redefined in subclasses

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

_____

(More than one answer is correct)

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

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

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

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

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

_____

```
class lcl_course definition.

 10 public section.
 20   Data: Price(3) type p decimals 2
                   value 100 READ-ONLY.
 30   Types: type_category(15)  type C READ-ONLY.
 40   Constants: write_position type I value 10 READ-ONLY.

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

endclass.
```

50

30

✓ 20

40
60

161   Identify the behaviors of Abstract Classes.

(More than one answer is correct)

✓   Methods can only be implemented in the subclass

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

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

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

163   How can a program access private attributes of an object

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

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

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

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

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

*Sub Class Method ReDefinition
A
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.

B
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.


D
CLASS lcl_sub_course DEFINITION INHERITING
                      FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

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

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

Returning
✔ Result
Exception
Importing

168   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
	Memory is reserved for 2 instances of lcl_course
✓	method list_prices_and_discounts is a static method
✓	Only one instance of method list_prices_and_discounts exists
	Only one instance of method get_course_name exists
	Method list_prices_and_discounts can only be called once

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

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

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

endclass.

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

**INSTANTIATION OMITTED **
```

(More than one answer is correct)

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

170   Which statement will create an instance of a class

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

171   Finish the sentence. Propogating exceptions requires
_____.

                the Raising cx_class parameter as part of the method
signature of the calling method

✓   the Raising cx_class parameter as part of the method
signature where the exception is raised

                a handler for the exception

                a Cleanup Statement

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

(More than one answer is correct)

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

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

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

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

173   Method

                lcl_basepart=>display

✓   lif_material~display

                lcl_basepart->display

                lcl_basepart~display

                display

                lcl_basepart~display

174   Where would the components of a class be defined

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

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

(More than one answer is correct)

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

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

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

177   How can a program access private attributes of an object

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

178   Mark the items that characterize the Methods of a Class

(More than one answer is correct)

            Only pass return codes to the calling program
✓   Can be defined with a parameter interface
✓   Can change the state of an object

Can access only public attributes in their class
✓ Can access all attributes in their class

179 Identify the Characteristics of a Final Class

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

180 What items are true about Inheritance

(More than one answer is correct)

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

181   What items are true about Inheritance

(More than one answer is correct)

Superclass private components are visible to all subclasses

✓   Superclass public components are visible to all classes

Superclass private components are visible only within the subclasses

✓   Superclass protected components are visible to all subclasses

182   Define Polymorphism

(More than one answer is correct)

✓   the same method is implemented in different ways by redefining the method in subclasses

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

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

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

✓   it s one of the main strengths of inheritance

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

```
Class lcl_course definition.
  Public section.
    data:    course_name(12)  type c.
    methods: display_price
             importing im_course_name type string.

  Private section.

    Data:    price            type P value 100.
    constants: c_objects101(10) type c value 'OBJECTS101'.
```

```
endclass.


class lcl_course implementation.

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

endclass.

Data obj_course type ref to lcl_course.

start-of-selection.

  create object obj_course.
```

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

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

Call method obj_course->display_price exporting im_course_name = c_objects101.

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

184   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 directly access data in the function group while access to data in an object is not possible

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

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

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

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

                  Super class method is called from the subclass

                  Subclass reference variable correpsonds to the superclass reference variable

✓   Casting a super class to a subclass when superclass does not point to an instance of the subclass type

186   What name is always given to a static constructor ?

                  static_constructor

                  constructor

                  class=>constructor

✓   class_constructor

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

                  Interface

                  Object

                  Attribute

✓   Method

                  Event

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

✓   Result

                  Returning

                  Exception

                  Importing

189   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.
```

30,80
40,70
40, 120
✓   30,120
70,80

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

_____

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

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

(More than one answer is correct)

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

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

        up cast
        narrowing cast
✓   widening cast
        dynamic referencing

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

        Create Constructor
✓   Create Object
        Call Method
        Call Constructor

194   What items are true about Inheritance

(More than one answer is correct)

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

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

         Only Import and Exception Parameters are allowed

✔   A class can have multiple constructors

         Generally, constructor methods can not be called

         The Constructor must defined in the Public section

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

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

         Super class method is called from the subclass

✔   Casting a super class to a subclass when superclass does not point to an instance of the subclass type

         Subclass reference variable correpsonds to the superclass reference variable

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

(More than one answer is correct)

         Static methods MUST be addressed by object reference after instantiation

         Instance methods MUST be addressed by class name

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

✔   Instance methods MUST be addressed by object ref after instantiation

198   What component provides the Point of Contact for outside users

         Private Attributes

         Method Signature

✔   Public Attributes

         Instantiated Object

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

(More than one answer is correct)

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

200   In object orientation, the term USER includes

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

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

✓   Create Object
                  Call Constructor
                  Call Method
                  Create Constructor

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

                  There is a separate handler table for every object
                  that has defined events
✓   Registered Methods in the handler table can only
                  be triggered by RAISE EVENT i.e. not by CALL
                  METHOD
                  A single SET Handler command can be used to
                  register multiple handler methods in the handler
                  table
                  Event handler methods are called in the sequence
                  that they were registered in the handler table

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

                  up cast
                  narrowing cast
                  dynamic referencing
✓   widening cast

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

                  Interface
                  Attribute
✓   Method
                  Object

Event

205   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

206   What component of a class guarantees its own consistency

_____

        ✓   private attributes
                        static methods
                        functional methods
                        public attributes

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

_____

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

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

_____

(More than one answer is correct)

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

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

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.

CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.

   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.

Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.

Start-of-selection.

Create object course1.
Course2 = course1.
```

(More than one answer is correct)

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

74

210   Mark the operators used to widen cast of a class

(More than one answer is correct)

	=>
	=?
✓	?TO
	=
	->
✓	?=

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

_____

             Attribute
             Event
✓   Method
             Interface
             Object

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

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

(More than one answer is correct)

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

213   What are the rules for Event parameters

_____

(More than one answer is correct)

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

214   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

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

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

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

       Polymorphism
       Inheritance
✓   Encapsulation
       Instantiation

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

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

220   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

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

<div style="overflow-x:auto;"></div>

            Object
            Event
            Interface
            Attribute
✔   Method

222 The syntax for static method specification

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

223 An inherited class :

(More than one answer is correct)

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

224 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

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

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

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

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

227   Mark the invalid attribute definitions

```
class lcl_course definition.

 10 public section.
 20   Data: school(20)  type c,
 30         Supervisor  type string value  ADAMS ,
 40         Price(3)  type p decimals 2 value 100 READ-ONLY.
 50   types: type_category(15) type c,
 60          type_name(10)     type c.

 70   constants: write_position type i value 10.
 80   class-data: course_count type i.
 90  private section.
100   data: category(15) type c,
110         name(10)      type c.
120         courseid      like mara-matnr.

endclass.
```

       70,80
       40,70
       40, 120

✓   30,120
                30,80

228   How can a program access private attributes of an object

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

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

(More than one answer is correct)

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

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

```
Class lcl_course definition.
  Public section.
    data:    course_name(12)  type c.
    methods: display_price
             importing im_course_name type string.

  Private section.

    Data:    price             type P value 100.
    constants: c_objects101(10) type c value 'OBJECTS101'.

endclass.


class lcl_course implementation.

  method display_price.
    course_name = im_course_name.
    If course_name = c_objects101.
```

```
      Write: price.
    Endif.
  endmethod.

endclass.

Data obj_course type ref to lcl_course.

start-of-selection.

  create object obj_course.
```

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

231   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.

B
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.

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

232   An inherited class :

(More than one answer is correct)

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

233   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

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

(More than one answer is correct)

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

235   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

236   What are the rules for Event parameters

(More than one answer is correct)

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

237   How can a program access private attributes of an object

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

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

✓	Interface
	Class Definition
	Create Object
	Raise Event

239   Finish the sentence. Propogating exceptions requires
          _____.

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

a handler for the exception

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

```
class lcl_course definition.

 10 public section.
 20   Data: Price(3) type p decimals 2
                     value 100 READ-ONLY.
 30   Types: type_category(15)  type C READ-ONLY.
 40   Constants: write_position type I value 10 READ-ONLY.

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

endclass.
```

	30
	50
	60
✓	20
	40

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

(More than one answer is correct)

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

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

```
class lcl_course definition.

 10 public section.
 20   Data: Price(3) type p decimals 2
                  value 100 READ-ONLY.
 30   Types: type_category(15)  type C READ-ONLY.
 40   Constants: write_position type I value 10 READ-ONLY.

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

endclass.
```

	30
	60
✓	20
	40
	50

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

Importing

Exception
✓ Result
Returning

244 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

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

encapsulation
casting
✓ polymorphism
inheritance
instantiation

246 What component of a class guarantees its own consistency

static methods
✓ private attributes
public attributes
functional methods

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

up cast
narrowing cast
✓ widening cast
dynamic referencing

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

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

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

endclass.

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

**INSTANTIATION OMITTED **
```

(More than one answer is correct)

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

249   What component provides the Point of Contact for outside users

               Instantiated Object
               Private Attributes
               Method Signature
✓   Public Attributes

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

(More than one answer is correct)

✓   Code can be changed

Signature can be changed
Private Static methods
✓ Only Instance methods

251   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

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

(More than one answer is correct)

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

253   Where is the visibility of class components defined

	Class Implementation
✓	Class Definition
	Class Methods
	Object Instance

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

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

(More than one answer is correct)

cl_grid points to the object that communicates with the container control

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

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

✓ cl_container points to the object that communicates with the container control

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

Only Import and Exception Parameters are allowed

✓ A class can have multiple constructors

The Constructor must defined in the Public section

Generally, constructor methods can not be called

256   Method

lcl_basepart->display

lcl_basepart~display

display

lcl_basepart~display

lcl_basepart=>display

✓ lif_material~display

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

(More than one answer is correct)

✓ When none of its methods are registered as event handlers

✓ When objects can no longer be addressed from main memory

✓ When there are no more references pointing to an object

When all active objects are marked

258   What are the rules for Event parameters

(More than one answer is correct)

✓ EXPORTING Parameters for events can only be passed by value

Events also allow RETURNING parameters

✓ Events can only have EXPORTING parameters

EXPORTING Parameters for events can only be passed by reference

259 Identify the characteristics of the self reference ME

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

✓ All answers are correct

None of the answers are correct

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

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

260 The syntax for instance method specification is

(More than one answer is correct)

Call Method->Objref

Call method Objref=>method

✓ Call method Objref->method

✓ Call method (from within another instance method)

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

> Raise Event
> Create Object
> Class Definition
> ✔ Interface

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

(More than one answer is correct)

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

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

> only many
> 1 or many
> none
> ✔ only 1

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

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

265   Identify the statements that best describe the visibility of classes

(More than one answer is correct)

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

266   Choose the short form of the method call below

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

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

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

(More than one answer is correct)

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

268   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.
✔   course_price = lcl_course=>price. Write
         course_price.
         write lcl_course->price.
         write: price.

269   Which statement will create an instance of a class

_____

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

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

_____

(More than one answer is correct)

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

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

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

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

(More than one answer is correct)

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

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

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

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

(More than one answer is correct)

         refvar->method receiving()

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

275   Mark the operators used to widen cast of a class

(More than one answer is correct)

         ->
         =>
         =?
✓   ?TO
         =
✓   ?=

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

         Event
         Interface
         Attribute
✓   Method
         Object

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

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

(More than one answer is correct)

         display_address is a static public method
✓   address is protected attribute

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

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

(More than one answer is correct)

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

279   Identify the ABAP OO Event signature protocols

(More than one answer is correct)

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

280   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

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

(More than one answer is correct)

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

282   Which of the following answers characterize ABAP OO events

(More than one answer is correct)

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

283   What can be said about the lifetime of an object

   ✔   All answers are correct
         An object exists for as long as it is being used in the program
         An object exists as long as at least one method of the object is registered as an event handler.
         An object exists as long as at least one reference points to it

284   Where is the visibility of class components defined

       Object Instance
       Class Methods
       Class Implementation
✓   Class Definition

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

       narrowing cast
       dynamic referencing
       up cast
✓   widening cast

286   The syntax for instance method specification is

(More than one answer is correct)

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

287   Identify the statements that best describe the visibility of classes

(More than one answer is correct)

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

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

✓   Create Object

Call Constructor
Create Constructor
Call Method

289   What name is always given to a static constructor ?

_____

        static_constructor
        class=>constructor
        constructor
✓   class_constructor

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

_____

(More than one answer is correct)

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

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

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

*Sub Class Method ReDefinition
A
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PRIVATE SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
ENDCLASS.

B
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.

D
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
     METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

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

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

---

               class
    ✓   method
               implementation
               signature

293   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

294   Mark the operators used to widen cast of a class

       (More than one answer is correct)

    ✓   ?TO
                   =>
                   =
                   =?
    ✓   ?=
                   ->

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

       (More than one answer is correct)

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

296   Identify the statements that best describe the visibility of classes

---

(More than one answer is correct)

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

297   In the following method, what other parameters are allowed

---

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name
                 IMPORTING im_name type string
                 Returning value(student_count) type I.
ENDCLASS.
```

	Changing
✓	Exceptions
	Receiving
	Exporting

298   Identify the characteristics of the self reference ME

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

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

(More than one answer is correct)

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

300   What can be said about the lifetime of an object

	An object exists for as long as it is being used in the program
	An object exists as long as at least one reference points to it
	An object exists as long as at least one method of the object is registered as an event handler.
✓	All answers are correct

301   What component provides the Point of Contact for outside users

        Method Signature
        Private Attributes
        Instantiated Object
✓   Public Attributes

302   An inherited class :

(More than one answer is correct)

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

303   In object orientation, the term   USER   includes

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

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

```
class lcl_course definition.

   public section.

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

   private section.
```

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

endclass.

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

Create Object course1.
```

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

```
class lcl_course definition.

 10 public section.
 20   Data: Price(3) type p decimals 2
                      value 100 READ-ONLY.
 30   Types: type_category(15)  type C READ-ONLY.
 40   Constants: write_position type I value 10 READ-ONLY.

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

endclass.
```

60
30
✓ 20
40
50

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

---

(More than one answer is correct)

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

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

---

(More than one answer is correct)

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

309   How can a program access private attributes of an object

---

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

310   What are the rules for Event parameters

(More than one answer is correct)

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

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

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

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

```
class lcl_course definition.

 10 public section.
 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
           30
           60
           40
           50

313   What triggers an event

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

314   Identify the behaviors of Abstract Classes.

(More than one answer is correct)

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

315   Method

---

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

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

---

	instantiation
	casting
✓	polymorphism
	encapsulation
	inheritance

317   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

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

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

319   What component provides the Point of Contact for outside users

          Instantiated Object
          Method Signature
          Private Attributes
✓   Public Attributes

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

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

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

     attributes
✔   implementation
     method
     definition

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

(More than one answer is correct)

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

323 Identify the Characteristics of a Final Class

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

324 The syntax for static method specification

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

325 What triggers an event

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

326   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 the event

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

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

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

(More than one answer is correct)

✓ When objects can no longer be addressed from main memory
✓

When there are no more references pointing to an object

When all active objects are marked

✓ When none of its methods are registered as event handlers

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

a class can implement any number of interfaces

interfaces describe the point of contact of a class

✓ interfaces contain their own implementation part

the user is protected from the actual implementations

330   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 = name

     course_name = course1=>name.

✓   course_price = lcl_course=>price.

331   What can be said about the lifetime of an object

_____

An object exists as long as at least one method of
the object is registered as an event handler.
✓   All answers are correct
An object exists for as long as it is being used in
the program
An object exists as long as at least one reference
points to it

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

_____

(More than one answer is correct)

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

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

_____

✓   Create Object
Call Constructor
Call Method
Create Constructor

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

_____

(More than one answer is correct)

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

The superclass is invalidated

335   Choose the short form of the method call below

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

                    calculate_cost(importing ex_size = v_size).

                    rf_car->calculate_cost (importing ex_size = v_size).

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

                    rf_car->calculate_cost importing ex_size = v_size.

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

                    the user is protected from the actual implementations

✔   interfaces contain their own implementation part

                    interfaces describe the point of contact of a class

                    a class can implement any number of interfaces

337   The syntax for instance method specification is

(More than one answer is correct)

✔   Call method Objref->method

                    Call Method->Objref

✔   Call method (from within another instance method)

                    Call method Objref=>method

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

                    Call Method Super Constructor

                    Call Method Constructor

✔   Call Method Super-> Constructor

                    Call Method Constructor-> Super

339   Identify the behaviors of Abstract Classes.

(More than one answer is correct)

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

340   Where is the visibility of class components defined

                     Class Implementation
                     Object Instance
                     Class Methods
✔   Class Definition

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

(More than one answer is correct)

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

342   In object orientation, the term   USER   includes

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

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

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

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

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

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

```
endclass.

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

**INSTANTIATION OMITTED **
```

(More than one answer is correct)

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

345   Identify the Characteristics of a Final Class

---

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

346   Define Polymorphism

(More than one answer is correct)

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

347   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.


B
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.


D
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

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

348   An inherited class :

(More than one answer is correct)

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

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

                   Returning
                   Importing
                   Exception
✓   Result

350   Identify the statement about Global Classes that is NOT true

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

351   Identify the behaviors of Abstract Classes.

(More than one answer is correct)

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

✓   Methods can only be implemented in the subclass

352   Mark the operators used to widen cast of a class

(More than one answer is correct)

✓   ?TO
         =?
         ->
✓   ?=
         =
         =>

353   What component provides the Point of Contact for outside users

✓   Public Attributes
         Private Attributes
         Instantiated Object
         Method Signature

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

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

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

(More than one answer is correct)

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

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

```
class lcl_course definition.

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

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

endclass.

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

(More than one answer is correct)

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

357 Identify the characteristics of the self reference ME

✓ All answers are correct

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

358   Where are the methods of a class implemented

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

359   Finish the sentence. Propogating exceptions requires
        _____.

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

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

(More than one answer is correct)

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

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

       (More than one answer is correct)

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

362   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

363   Choose the short form of the method call below

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

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

364   How can a program access private attributes of an object

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

365   What component of a class guarantees its own consistency

✔   private attributes
                  functional methods
                  public attributes
                  static methods

366   Mark the operators used to widen cast of a class

(More than one answer is correct)

                  =
                  =?
✔   ?TO
                  =>
                  ->
✔   ?=

367   Identify the statement about Global Classes that is NOT true

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

368   What items are true about Inheritance

(More than one answer is correct)

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

369   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

370   Which statement will create an instance of a class

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

371   Where would the components of a class be defined

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

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

```
class lcl_course definition.

 10 public section.
 20   Data: Price(3) type p decimals 2
                    value 100 READ-ONLY.
 30   Types: type_category(15)  type C READ-ONLY.
 40   Constants: write_position type I value 10 READ-ONLY.

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

endclass.
```

            60
            40
            30
✓   20
            50

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

```
CLASS lcl_course DEFINITION.
PUBLIC SECTION.
  Data: name type string.

PRIVATE SECTION.
  Data: price type course-price.

ENDCLASS.
```

(More than one answer is correct)

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

374   The syntax for static method specification

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

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

(More than one answer is correct)

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

376   How can a program access private attributes of an object

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

377   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

378   What component provides the Point of Contact for outside users

Method Signature
Private Attributes
✓ Public Attributes
Instantiated Object

379   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

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

Inheritance
Polymorphism
Instantiation
✓ Encapsulation

381   Method

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

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

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

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

       (More than one answer is correct)

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

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

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

(More than one answer is correct)

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

385   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.


B
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.


D
CLASS lcl_sub_course DEFINITION INHERITING
                     FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

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

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

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

387 Choose the short form of the method call below

```
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).

388 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.

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

```
-------------------
| cl_myclass      |
-------------------
```

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

(More than one answer is correct)

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

390   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

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	TAW10_2-2

391   What items are true about Inheritance

(More than one answer is correct)

✓   Superclass public components are visible to all classes

     Superclass private components are visible to all subclasses

✓   Superclass protected components are visible to all subclasses

     Superclass private components are visible only within the subclasses

392   What component of a class guarantees its own consistency

     functional methods

✓   private attributes

     static methods

     public attributes

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

(More than one answer is correct)

     Objects can change their class

     Classes are an instance of an object

✓   Class is a template for an object

✓   Objects are an instance of a class

394   How can a program access private attributes of an object

     From outside the class

     By methods of a different object within the same Program

✓   Only by methods of the specific object itself

By methods of a different instance of the same object

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

(More than one answer is correct)

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

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

```
class lcl_course definition.

  public section.

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

  private section.

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

endclass.

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

Create Object course1.
```

(More than one answer is correct)

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

397   Your program has registered several handler methods. How does the

139

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

---

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

398   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.

B
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.

D
CLASS lcl_sub_course DEFINITION INHERITING
```

```
                    FROM lcl_super_course.
    PUBLIC SECTION.
        METHODS: get_course_name REDEFINITION.
ENDCLASS.
```

         SubClass Definition B

✓   SubClass Definition D

         SubClass Definition A

         SubClass Definition C

399   What are the rules for Event parameters

(More than one answer is correct)

✓   EXPORTING Parameters for events can only be passed by value

         EXPORTING Parameters for events can only be passed by reference

✓   Events can only have EXPORTING parameters

         Events also allow RETURNING parameters

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

         only many

         none

✓   only 1

         1 or many

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

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

(More than one answer is correct)

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

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

(More than one answer is correct)

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

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

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

404   Identify the characteristics of the self reference ME

	None of the answers are correct
✓	All answers are correct

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

405   What name is always given to a static constructor ?

---

static_constructor
✓   class_constructor
constructor
class=>constructor

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

Inheritance
✓   Encapsulation
Polymorphism
Instantiation

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

---

```
Class lcl_course definition.
  Public section.
    data:    course_name(12)  type c.
    methods: display_price
             importing im_course_name type string.

  Private section.

    Data:    price            type P value 100.
    constants: c_objects101(10) type c value 'OBJECTS101'.

endclass.


class lcl_course implementation.

  method display_price.
    course_name = im_course_name.
```

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

endclass.

Data obj_course type ref to lcl_course.

start-of-selection.

 create object obj_course.
```

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

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

    Call method obj_course->display_price exporting im_course_name = c_objects101.

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

408 The syntax for static method specification

    Call method class name->method

✓   Call method class name =>method

    Call Method-> class name

    Call class-method

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

```
CLASS lcl_course DEFINITION.
PUBLIC SECTION.
  Data: name type string.

PRIVATE SECTION.
  Data: price type course-price.

ENDCLASS.
```

(More than one answer is correct)

✓   price is available to methods inside the class

    name is protected from outside access

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

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

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

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

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

412   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

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

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

414   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

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

```
CLASS lcl_course DEFINITION.
PUBLIC SECTION.
  Data: name type string.

PRIVATE SECTION.
  Data: price type course-price.

ENDCLASS.
```

(More than one answer is correct)

name is protected from outside access

✓ price is protected from outside access

✓ price is available to methods inside the class

name is available to methods only inside the class

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

Raise Event

✓ Interface

Class Definition

Create Object

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

✓ widening cast

up cast

dynamic referencing

narrowing cast

418   Mark the operators used to widen cast of a class

(More than one answer is correct)

✔   ?TO
         =
         ->
         =>
✔   ?=
         =?

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

(More than one answer is correct)

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

420   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

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

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

422   The syntax for static method specification

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

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

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

424   In the following method, what other parameters are allowed

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
```

```
METHODS: get_course_name
            IMPORTING im_name type string
            Returning value(student_count) type I.
ENDCLASS.
```

Changing
Exporting
✓ Exceptions
Receiving

425   Identify the ABAP OO Event signature protocols

(More than one answer is correct)

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

426   What triggers an event

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

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

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

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

```
Class lcl_course definition.
  Public section.
    data:    course_name(12)  type c.
    methods: display_price
             importing im_course_name type string.

  Private section.

    Data:    price            type P value 100.
    constants: c_objects101(10) type c value 'OBJECTS101'.

endclass.


class lcl_course implementation.

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

endclass.

Data obj_course type ref to lcl_course.

start-of-selection.

  create object obj_course.
```

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

429   What component provides the Point of Contact for outside users

___

✓	Public Attributes
	Private Attributes
	Instantiated Object
	Method Signature

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

(More than one answer is correct)

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

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

✓   only 1
             1 or many
             none
             only many

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

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
      METHODS: get_course_name IMPORTING im_name type string.
      CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.

CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.

   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.

Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.

Start-of-selection.

Create object course1.
Course2 = course1.
```

(More than one answer is correct)

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

153

✓   Only one instance of method
list_prices_and_discounts exists

433   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

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

_____

                  Instantiation
✓   Encapsulation
                  Inheritance
                  Polymorphism

435   The syntax for instance method specification is

_____

(More than one answer is correct)

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

436   Finish the sentence. Propogating 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

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

(More than one answer is correct)

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

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

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

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

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

440   Define Polymorphism

(More than one answer is correct)

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

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

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

(More than one answer is correct)

	Aggregation
✓	Component
✓	Behavior
	Composition
✓	Class

442   How can a program access private attributes of an object

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

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

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

444   Identify the Characteristics of a Final Class

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

cannot have subclasses

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

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

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

---

(More than one answer is correct)

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

447   Define Polymorphism

(More than one answer is correct)

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

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

       None of the answers are correct

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

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

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

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

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.

CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.

   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.

Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.

Start-of-selection.

Create object course1.
Course2 = course1.
```

(More than one answer is correct)

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

✓ Only one instance of method list_prices_and_discounts exists

list_prices_and_discounts is a instance method

✓ method list_prices_and_discounts is a static method

451   What component provides the Point of Contact for outside users

_____

                        Method Signature
   ✔   Public Attributes
                        Instantiated Object
                        Private Attributes

452   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.

453   Finish the sentence. Propogating exceptions requires

           _____.

_____

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

454   Identify the statements that best describe the visibility of classes

_____

           (More than one answer is correct)

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

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

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

         Instantiation
         Inheritance
✓   Encapsulation
         Polymorphism

456   Mark the invalid attribute definitions

```
class lcl_course definition.

 10 public section.
 20   Data: school(20)  type c,
 30         Supervisor  type string value  ADAMS ,
 40         Price(3)  type p decimals 2 value 100 READ-ONLY.
 50   types: type_category(15) type c,
 60          type_name(10)     type c.

 70   constants: write_position type i value 10.
 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
         30,80
         70,80
✓   30,120
         40, 120

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

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

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

(More than one answer is correct)

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

458   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

163

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

459 Identify the statement about Global Classes that is NOT true

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

460 Identify the ABAP OO Event signature protocols

(More than one answer is correct)

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

461   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.

462   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 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

463   What mechanism is used to define common components of different

classes in one place

- Raise Event
- Class Definition
- Create Object
- ✓ Interface

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

(More than one answer is correct)

- Aggregation
- ✓ Behavior
- ✓ Class
- Composition
- ✓ Component

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

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

(More than one answer is correct)

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

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

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

467   Where are the methods of a class implemented

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

468   What component of a class guarantees its own consistency

               public attributes
               static methods
               functional methods
✓   private attributes

469   What component provides the Point of Contact for outside users

               Instantiated Object
✓   Public Attributes
               Private Attributes
               Method Signature

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

               Object
               Interface
✓   Method
               Event
               Attribute

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

```
class lcl_course definition.

 10 public section.
 20   Data: Price(3) type p decimals 2
                   value 100 READ-ONLY.
 30   Types: type_category(15)  type C READ-ONLY.
 40   Constants: write_position type I value 10 READ-ONLY.

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

endclass.
```

        30
        40
        60
        50
✓   20

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

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

473   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->

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

---

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

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

```
CLASS lcl_course DEFINITION.
   PUBLIC SECTION.
     METHODS: get_course_name IMPORTING im_name type string.
     CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.

CLASS lcl_course IMPLEMENTATION.
   METHOD get_course_name.
   ENDMETHOD.

   METHOD list_prices_and_discounts.
   ENDMETHOD.
ENDCLASS.

Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.

Start-of-selection.

Create object course1.
Course2 = course1.
```

(More than one answer is correct)

✓   method list_prices_and_discounts is a static method

Method list_prices_and_discounts can only be called once

Memory is reserved for 2 instances of lcl_course

Only one instance of method get_course_name exists

✓   Only one instance of method list_prices_and_discounts exists

list_prices_and_discounts is a instance method

476   Mark the invalid attribute definitions

```
class lcl_course definition.

 10 public section.
 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.
```

        40,70

        30,80

        70,80

✓   30,120

        40, 120

477   Identify the statements that best describe the visibility of classes

(More than one answer is correct)

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

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

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

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

(More than one answer is correct)

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

479   Method

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

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

(More than one answer is correct)

             Functions allow multiple instances of the same data objects. Objects only allow single instances of data
             A program can directly access data in the function group while access to data in an object is not possible
✓   A program can only work with a single instance of the same function group versus a program can access several instances of the same object
✓

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

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

482   What are the rules for Event parameters

(More than one answer is correct)

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

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

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

(More than one answer is correct)

              display_address is a static public method

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

484   Which of the following answers characterize ABAP OO events

(More than one answer is correct)

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

485   Where would the components of a class be defined

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

486   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->

487   Where are the methods of a class implemented

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

174

Definition part of Class

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

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

489   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

490   How can a program access private attributes of an object

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

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

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

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

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

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

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

494 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.

B
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.

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

495 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)

496 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 Constructor
✓ Call Method Super-> Constructor
Call Method Super Constructor

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

narrowing cast
up cast
dynamic referencing
✓ widening cast

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

✓   only 1
none
only many
1 or many

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

(More than one answer is correct)

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

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

```
class lcl_course definition.
```

```
10 public section.
20   Data: Price(3) type p decimals 2
                  value 100 READ-ONLY.
30   Types: type_category(15)  type C READ-ONLY.
40   Constants: write_position type I value 10 READ-ONLY.

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

endclass.
```

	30
	50
✔	20
	40
	60