

CS504 Quiz 1 Lec1-10 mcqs

100+ mcqs correct answer

Orange Monkey Team

Important NOTE:-

Like share and comment too ..ager koi
mistake hogaye ho to sorry and comment
main lazmi mention krdijiye ga takey main
correction krlon file main And like
zaroor krein is hamein or bhe apsab
keyliye files makes krny ke himat milti hey
...JAZAKALLAH

Orange Monkey Team



1. In _____ phase of software development requirement analyst focuses on possible design of the proposed solution

Defination

In ----- **phase of** software development, requirement analyst focuses on possible design of the proposed solution.

- ☐ Maintenance
- ☐ Development
- ☒ **Definition**

2. System _____ are built to allow the system engineer to evaluate the system components in relationship to one another.

Models....confirm

System models **are built** to allow the system engineer to evaluate the system components in relationship to one another.

3. _____ diagram does not capture control flow information, it just shows the flow of the data in a system

Data flow diagram.....confirm

_____ flow in an algorithm. Flow charts are quite detailed. **Whereas DFD does not captures control flow information, it just shows the flow of the data in a system.** Flow charts show

4. In data flow diagram (DFD), Create, Update, delete and read operations are normally called.

CRUD operation.....confirm

In data flow diagram (DFD), Create, Update, Delete and Read operations are normally called:

1. DURC operations
2. CDUR operation
3. RUDC operations
4. **CRUD operations**

5. More powerful hardware resulted into the development of _ powerful and _____ software.

More,complex.....confirm

days but were far more powerful than the computers of early fifties. More powerful hardware resulted into the development of more powerful and complex software. Those

6. Which elements of business processing engineering are the responsibilities of the software engineer?

Business system design.....confirm

Which elements of business processing engineering are the responsibilities of the software engineer?

Select correct option:

business area analysis

business system design ok

7. The use case diagram shows that which _____ interact with each use case.

Actor.....confirm

The Use case diagram shows that which _____ interact with each use case.

Select correct option

Use case

Actor

8. A prototype is not the real product but just a real looking _____ of what would be eventually delivered and might not do anything useful

Mock-up.....confirm

A prototype is **not the real** product. It is rather just a real looking mock-up of what would be eventually delivered and might not do anything useful. However, the presence of a

9. A _____ is not the real product but just a real looking mock-up of what would be eventually delivered.

Prototype.....confirm

A prototype is **not the real** product. It is rather just a real looking mock-up of what would be eventually delivered and might not do anything useful. However, the presence of a

10. In data flow diagram the entity or system outside the boundary of this system is called

External Agent....confirm

External Agent

External systems which are outside **the boundary of** this system.

11. The project manager would need _ document to monitor and track the progress of the project and if needed.

Requirement....confirm

On the other hand, the project manager **would need** this document to monitor and track the progress of the project and if needed, change the project scope by modifying this document through the change control process.

12. By leveling a DFD(adding more levels of abstraction) we mean

Splitting it into different levels.....confirm

By levelling a DFD (adding more levels of abstraction) **we mean:**

- **Splitting it into different levels**

13. Data cannot flow from one external entity to other external entity because

It is not allowed in DFD.....confirm

Data cannot flow from one external entity to other external entity because:

1. It will get corrupted
2. It is not allowed in DFD

14. A __ is not the real product but just a real looking mock up of what would be eventually delivered.

Prototype.....confirm

A prototype is not the real product. It is rather just a real looking mock-up of what would be eventually delivered and might not do anything useful. However, the presence of a

15. A context diagram is used

As an aid to system design....confirm

A context diagram is used
Select correct option:

as the first step in developing a detailed DFD of a sy:
very complex systems
as an aid to system design
as an aid to programming

16. _____ the analyst determines all the sources of requirements and where do these requirements consume.

Source and sink analysis.....confirm

In source and sink analysis the analyst determines all the sources of requirements and where do these requirements consume (sinks). Now evaluate a report which displays

17. _____ is a technique that can be used to reduce customer dissatisfaction at the requirement stage.

Prototyping ,,,confirm

Prototyping is yet another technique that can be used to reduce customer dissatisfaction at the requirement stage. The idea is to capture user's vision of the product and get early

18. At which stage of software development loop results are delivered?

Status quo.....confirm

- vision
- At which stage of software development loop, results are delivered
- Problem definition
 - Solution integration
 - Technical development
 - **Status quo**

19. Requirement engineering mainly deals with the _____ of the system

Definition phase.....confirm

Requirement engineering mainly deals with the definition phase of the system.

20. A use case represents

The role a user plays when interacting with the system....confirm

- A use case represents:
- A class, its attributes and operations
 - An operation's interface and signature
 - **The role a user plays when interacting with the system**

21. _____ requirements are often called products features.

Non-functional.....confirm

- _____ requirements are often called product features.
- Functional
 - **Non-functional**

22. All the documents related to the software are also considered as part of the _____.

Software....confirm

documentation. All the documents related to the software are also considered as part of the software.

23. Include and extend relationship is used in UML notation of a/an _____.

Use case model.....confirm

3.9 Relationship among Use Cases

The **UML** allows us to extend and reuse already defined use cases by defining the relationship among them. Use cases can be reused and extended in two different fashions: extends and uses. In the cases of “uses” relationship, we define that one use case invokes the steps defined in another use case during the course of its own execution. Hence this

24. A DFD is normally leveled (adding more levels of abstraction) as

It is easier to read and understand a number of smaller DFDs than one large DFD.....confirm

- ☒ It must be the most useful use most of the data members most of the time.
- A DFD is normally leveled (adding more levels of abstraction) as
 - ☐ It is a good idea in design
 - ☐ It is recommended by many experts
 - ☐ It is easy to do it
 - ☒ It is easier to read and understand a number of smaller DFDs than one large DFD

25. From the following which is/are not the example(s) of illegal data flow in data flow diagram.

There must be an intermediate process which should transform data received from one external entity and then send the transformed data to the other external entity.....confirm

Following is/are example(s) of illegal data flow in Data Flow Diagram (DFD)

Select correct option:

External Agents directly communicating with each other

External Agent updating information in a Data Store

External Agent accessing information from a Data Store

All of the given options ok

26. In data flow diagram (DFD) data flow can

Originate and terminate in an external entity....confirm

Question # 2 of 10 (Start time: 10:43:21 PM) Total Marks: 1

In Data Flow Diagram (DFD), data flow can:

Select correct option:

Only originate from an external entity

Only terminate in an external entity

Originate and terminate in an external entity ok

Either originate or terminate in an external entity but not both

27. To construct a system model the engineer should consider one of the following restraining factors?

Assumptions and constraints.....confirm

Question # 6 of 10 (Start time: 10:36:57 PM) Total Marks: 1

To construct a system model the engineer should consider one of the following restraining factors?

Select correct option:

assumptions and constraints ok

28. In a top-down system analysis a/an _ is required to develop high level view of the system at first

Analyst.....confirm

In a top-down system analysis, an analyst is required to develop high level view of the system at first. In data flow modeling, this high-level view is the Context level data flow

29. In data flow diagram (DFD) one data store cannot directly copy the data from another _____.

Data store.....confirm

In Data Flow Diagram (DFD), one data store can directly copy the data from another data store :

30. _____ of the total cost of the software development is spent on maintenance.

Two third....confirm

_____ of the total cost of the software development is spent on maintenance.
Select correct option:
one third
two third ok

31. The system specification describes the

Function and behavior of a computer-based system.....confirm

The system specification describes the:

o Function and behavior of a computer-based system

32. In software engineering paradigm, any engineering approach must be founded on organizational commitment to _____.

Quality.....confirm

Any Engineering approach must be founded on organizational commitment to quality.

33. Which one is not a part of software development phase?

Project Vision....confirm

Question # 8 of 10 (Start time: 10:28:49 PM) Total Marks: 1

Which **one is not a part of Software Development phase ?**

Select correct option:

Construction

Scope

Project Vision ok

Definition

34. A process in Data flow diagram (DFD) represents

Transmission of data.....confirm

Question # 3 of 10 (Start time: 10:15:18 PM) Total

A **Process in Data Flow Diagram** (DFD) represents

Select correct option:

Flow of data

Transformation of data ok

Storage of data

35. In use case diagram, an ellipse signifies an

Use case.....confirm

In use case diagram, an **ellipse** signifies a(n)

1. actor
2. class
3. **use case**

36. Which of the given component of software engineering framework provides different techniques that can be used to perform a particular task.

Method.....confirm

Methods: **Methods** provide the technical "how-to's" to carryout these tasks. There could be more than one technique to perform a task and different techniques could be used in different situations.

37. Which of the given component of software engineering framework demands rational and timely development of a software?

Quality focus....confirm

organizational commitment to quality. The quality focus demands that processes be defined for rational and **timely** development of software. And quality should be maintained while executing these processes.

38. Arranging information in _____ form makes it easy to read, understand and comprehend as compared to streams of text.

Tabularconfirm

Arranging information in **tabular form** makes it easy to read, understand and comprehend as compared to streams of text.

39. The data on which the program operates is also considered as part of the _____.

Software.....confirm

Program: The program or code itself is definitely included in the software.
Data: The data on which the program operates is also considered as part of the software.

40. Construction activities are directly related to software _____.

Construction or Development....both are confirm

second is management. The construction activities are those that are directly related to the construction or development of the software. While the management activities are those

41. Many of the problems encountered in Software development are attributed to shortcoming in _____.

Requirement gathering.....confirm

Many of the problems encountered in SW development are attributed to shortcoming in requirement gathering and documentation process. We cannot imagine start building a house without being fully satisfied after reviewing all the requirements and developing all

42. _____ component of software engineering framework provides automated or semi-automated support in a software development

Tools.....confirm

Tools: Tools provide automated or semi-automated support for software processes, methods, and quality control.

43. Use case construction is a technique used for

Requirements structuring.....confirm

Use case construction is a technique used for:
Select correct option:

requirements determination.

requirements structuring.

44. The context diagram is used as the top level abstraction in a _ developed according to principles of structured analysis.

Dataflow diagram.....confirm

system. The context diagram is used as the top level abstraction in a dataflow diagram developed according to principles of structured analysis. The context diagram can be

45. Which one of the following is the external quality of a software product.

Low coupling.....confirm

Which one of the following is the external quality of a software product?

Select correct option

Correctness

Concision

Cohesion

Low Coupling

46. A software requirement document describes all the ____ provided by the system along with the constraints under which it must operate.

Services....confirm

same thing: a software requirement is a document that describes all the services provided by the system along with the constraints under which it must operate.

47. If you try to make software more user-friendly then the _____ may suffer.

Efficiency.....confirm

may be the case that if you try to make it more user-friendly then the efficiency may suffer. And if you try to make it more cost-effective then reliability may suffer. Therefore

48. According to caper jones analysis of project activities coding only has _____ affect part in software development

13-14%.....confirm

: but it is not more than 13-14% of

49. In _____ phase of software development, requirement engineer focuses on realizing the business object of an under developed product

development.....confirm

Requirement engineering mainly deals with the definition **phase of** the system. Requirement engineering is the name of the process when the system services and constraints are established. It is the starting point of the **development process with the focus of activity on what and not how.**

50. Which statement is not according to the software engineering principles? Software engineering is an _____.

Unsystematic approach.....confirm

Which statement is not according to the software engineering principles? Software engineering is a(n)
I. Balancing act
II. Disciplined approach
III. **Unsystematic approach**
IV. Personalizable approach

51. The architecture components for product engineering are

Data, hardware, software, people.....confirm

9. The architecture components for product engineering are
A. data, hardware, software, people
B. data, hardware, software, people, process
C. data, hardware, software, people, process, environment
D. data, hardware, software, people, process, environment, environment

52. _____ structure represents the internal organization of the various data and control items.

Data....confirm

_____ structure represents the internal organization of the various data and control items.

1. Value

2. **Data**

53. The process of utilizing our knowledge of computer science in effective production of software system is called.

Software Engineering...confirm

"This is the process of utilizing our knowledge of computer science in effective production of software systems."

54. ___ are kind of umbrella activities that are used to smoothly and successfully perform the connection activities.

Management activities.....confirm

Management activities are kind of umbrella activities that are used to smoothly and successfully perform the construction activities e.g. project planning, software quality

55. Software Engineering in the combination of tools techniques and _____.

Processes.....confirm

Engineering is the combination of all the tools, techniques, and processes

56. In use case diagram, the scope of the system is defined by

System boundary.....confirm

LECTURE NO. 6

Use Diagram for a Library System

As an example, consider the following use case diagram for a library management system. In this diagram, there are four actors namely Book Borrower, Librarian, Browser, and Journal Borrower. In addition to these actors, there are 8 use cases. These use cases are represented by ovals and are enclosed within the system boundary, which is represented by a rectangle. It is important to note that every use case must always deliver

57. The ___ relationship is kind of a generalization specialization relationship.

Extends....confirm

...makes a call to the other function. The "extends" relationship is kind of a generalization-specialization relationship. In this case a special instance of an already existing use case

58. Data cannot flow from one external entity to other external entity because:

It is not allowed in DFD.....confirm

Data cannot flow from one external entity to other external entity because:

1. It will get corrupted
2. **It is not allowed in DFD**

59. The best way to conduct a requirements validation review is to.

Use a checklist of questions to examine each requirement....confirm

The **best way to conduct a requirements validation** review is to

- A. examine the system model for errors
- B. have the customer look over the requirements
- C. send them to the design team and see if they have any concerns
- D. **use a checklist of questions to examine each requirement**

60. External entity may be

Source of input data only.....confirm

External Entity may be

Select correct option

source of input data only

61. Which of the following is used for multi level commenting?

/*Comment*/....confirm

Which of the following is used for multi level commenting?

Select correct option:

// Comment

/* Comment */ ok

62. Return values in Synchronous messages are represented by

A dotted line with label....confirm

Return values in Synchronous messages are represented by:

Select correct option:

A solid line

A dotted line with label ok

A solid line with label

63. _____ is a role that each actor plays in the system under.

Participant.....confirm

A participant is a role that each actor plays in the system under consideration.

64. Modules with high cohesion and low coupling can be treated and analyzed as.

Black boxes.....confirm

Modules with high cohesion and low coupling can be treated and analyzed as black boxes. This approach therefore allows us to analyze these boxes independent of other

65. Any Engineering approach must be founded on organizational commitment to _____.

Quality....confirm

Any Engineering approach must be founded on organizational commitment to quality.

66. Return values in synchronous messages are: (V.V.V)

May not used when response is obvious.....confirm

Return values in synchronous messages are:

1. Compulsory
2. represented by solid lines
3. Not used at all
4. May not used when response is obvious

67. According to Caper Jones analysis of project activities, coding only has _____ affect part in system development.

13-14%...confrim

that, though coding is very important but it is not more than 13-14% of the whole effort of software development.

68. In multi-threaded or multiprocessing applications where different execution threads may pass information to one another by sending _____ to each other.

Asynchronous messages.....confirm

processing applications where different execution threads may pass information to one another by sending asynchronous messages to each other. Asynchronous messages

69. Which of the following is not among the four layers of the object-oriented pyramid?

The abstract layer.....confirm

of modularity. The four layers of the OO design pyramid are:

- 1) **The subsystem layer.** Contains a representation of each of the subsystems that enable the software to achieve its customers defined requirements and to implement the technical infrastructure that supports customer requirements.
- 2) **The class and object layer.** Contains the class hierarchies that enable the system to be created using generalization and increasingly more targeted specializations. The layer also contains design representations for each object.
- 3) **The message layer.** Contains the details that enable each object to communicate with its collaborators. This layer establishes the external and internal interfaces for the system.
- 4) **The responsibility layer.** Contains the data structures and algorithmic design for all attributes and operations for each object.

70. System models include(V.V.V)

All options....confirm

diagrams to model different business processes. System models include the following

- User business processes
- User activities for conducting the business processes
- Processes that need to be automated
- Processes which are not to be automated

71. In the architecture trade-off analysis method the architectural style should be described using the.

All options...confirm

In the architecture trade-off analysis method the architectural style should be described using the

Select correct option:

data flow view

module view

process view

all of the given ok

72. _____ is concerned with decomposing the system into interacting sub-system.

System structuring.....confirm

System structuring is concerned with decomposing the system into interacting sub-systems. The system is decomposed into several principal sub-systems

73. Software development is a step-by-step process and in _____ phase of software development Business Objective of an organization gets cleared.

Vision....confirm

Vision: Here we determine why are we doing this thing and what are our business objectives that we want to achieve.

74. When two components of a system are using the same global data area, they are related as.

Content coupling....confirm

When two components of a system are using the same global data area, they are related as
Select correct option:
Data Coupling
Content Coupling ok

75. The goal of _____ is to translate the customer's desire for a set of defined capabilities into a working product.

Product engineering....confirm

The goal of _____ is to translate the customer's desire for a set of defined capabilities into a working product.
1. Electrical Engineering
2. Product Engineering

76. The condition that must be met before the use case can be invoked, is called

Precondition.....confirm

Precondition: the condition that must be met before the use case can be invoked.

77. In software engineering paradigm any engineering approach must be founded an organizational commitment to _____.

Qualityconfirm

Any Engineering approach must be founded on organizational commitment to quality.

78. There are _____ most important characteristics of an object.

Three....confirm

An object has state, behavior, and identity.

79. _____ requirements cause frequent modifications in user interface

Unstable....confirm

----- requirements cause frequent modifications in user interface.

- ☐ Functional
- ☐ Non-functional
- ☒ Unstable

80. Prototyping is used when there is _____ regarding requirements.

Uncertainty...confirm

is used when there is uncertainty regarding requirements.

81. UML is a language for

Modeling and design...confirm

UML is a language for ____

- a. high level programming
- b. low level programming
- c. modeling and design ✓

82. UML stands for _____.

Unified Modeling Language.

popular of these include, Rumbaugh, Booch, and Coad, and UML(Unified Modeling Language). We will be using UML to document our design. Although the notation is very

83. Requirement engineering focuses on _____ aspect of the software development process.

What....confirm

Requirement engineering mainly deals with the definition phase of the system. Requirement engineering is the name of the process when the system services and constraints are established. It is the starting point of the development process with the focus of activity on what and not how.

84. Many of the problems encountered in Software development are attributed to shortcoming in _____.

Requirement gathering and documentation process.....confirm

Many of the problems encountered in SW development are attributed to shortcoming in requirement gathering and documentation process. We cannot imagine start building a

85. In object Oriented design _____ layer contains the details that enable each object to communicate with its collaborators.

Message....confirm

The message layer. Contains the details that enable each object to communicate with its collaborators. This layer establishes the external and internal interfaces for the

86. In Object Oriented design _____ layer contains a representation of each of the subsystem that enable the software to achieve its customers defined requirements and to implement the technical infrastructure that supports customer requirements.

Subsystem....confirm

The subsystem layer. Contains a representation of each of the subsystems that enable the software to achieve its customers defined requirements and to implement the technical infrastructure that supports customer requirements.

87. In object oriented design _____ layer contains the class hierarchies that enable the system to be created using generalization and increasingly more targeted specializations.

Class and object layer.....confirm

The class and object layer. Contains the class hierarchies that enable the system to be created using generalization and increasingly more targeted specializations. The

88. In object oriented design _____ layer contains the data structures and algorithmic design for all attributes and operations for each object.

Responsibilityconfirm

The responsibility layer. Contains the data structures and algorithmic design for all attributes and operations for each object.

89. Normally a system will be more easy to modify if its modulus have:

Low coupling and high cohesion....confirm

Normally a System will be more easy to modify if its modules have:

Select correct option:

High coupling and High cohesion.

High coupling and Low cohesion.

Low coupling and High cohesion. ok

90. The best way to conduct a requirements validation review is to.

Use a checklist of question to examine each requirement....confrim

Que. The best way to conduct a requirements validation review is to

- a. examine the system model for errors
- b. have the customer look over the requirements
- c. send them to the design team and see if they have any concerns
- d. use a checklist of questions to examine each requirement

Answer: use a checklist of questions to examine each requirement

91. Software design discusses _____ aspect of software development.

How....confirm

Software Design discusses _____ aspect of software development

Select correct option:

What

How ok

92. Software Engineering is the combination of tools, techniques and _____.

Processes....confrim

Software Engineering is the set of processes and tools to develop software.
Engineering is the combination of all the tools, techniques, and processes

93. _____ requirements cause frequent modifications in user interface.

Unstable.....confirm

Unstable requirements cause frequent modifications in UIs

94. In abbot's Textual analysis technique, different parts of speech are identified within the text of the specification and these parts are modeled using different _____.

Components.....confrim

initially developed by Abbot and then extended by Graham and others. In this technique different parts of speech are identified within the text of the specification and these parts are **modeled** using different components. The following table shows this scheme.

95. Which statement is not according to the software engineering principles? Software engineering is a(n)_____.

Unsystematic approach.....confirm

Which statement is not according to the **software engineering principles?**
Software engineering is a(n) _____

- Balancing act
- Disciplined approach
- **Unsystematic approach**

96. OOD results in a design that achieves a number of different levels of _____.

Modularity.....confirm

software construction. **OOD** results in a design that achieves a number of different levels of modularity. The four layers of the OO design pyramid are:

97. The architecture components for product engineering are

Data, hardware, software, people....confirm

Que. The architecture components for product engineering are

- a. data, hardware, software, people
- b. data, documentation, hardware, software
- c. data, hardware, software, procedures
- d. documentation, hardware, people, procedures

Answer: data, hardware, software, people

98. GUI stands for _____.

Graphical User interface.....confirm

graphical user interface (GUI)

99. In the case of _____ intra component linkages are stronger while inter component linkages are weak.

Low coupling.....confirm

connected with everything else. On the other hand, in the system with low coupling modules can be identified easily. In this case **intra component** linkages are stronger while inter component linkages are weak.

100. In the case of _____ module boundaries are not well defined as everything seems to be connected with everything else.

Highly coupled system.....confirm

coupling. The lines depict linkages between different components. In the case of highly coupled system, **module boundaries are not well defined**, as everything seems to be connected with everything else. On the other hand, in the system with low coupling

101. A prototype is not the real product. It is rather just a real looking _____ of what would be eventually delivered and might not do anything useful.

Mock-up.....confirm

A **prototype** is not the real product. It is rather just a real looking mock-up of what would be eventually delivered and might not do anything useful. However, the presence of a

102. _____ Coupling is a measure of _____ of a module or component.

Independence.....confirm

Coupling is a measure of independence of a module or component.

103. In UML, based object Oriented model of a system the demand sign is used to depict _____ relations between two objects/classes.

Composition and Aggregation.....confirm

In **UML based Object Oriented Model** of a system, the diamond sign is used to depict ———

- relations between two objects/classes.
- Aggregation and Association
- Inheritance and Association
- **Composition and Aggregation**

104. _____ and _____ are important short circuiting logical operators.
a.And b. OR c. Not d. NOR

a & b....confirm

The logical and operator, &&, and logical or operators, ||, are special due to the C/C++ **short circuiting** rule, i.e. a || b and a && b are short circuit evaluated. That is, logical

105. _____ One of the main reasons to make functions is _____.

Reusability.....confirm

Reusability is one of the prime reasons to **make functions**

106. _____ Is prefix should be used for _____ variables and methods.

Boolean.....confirm

2. is prefix should be used for boolean **variables and** methods.

isSet, isVisible, isFinished, isFound, isOpen

107. _____ The terms get/set must be used where an _____ is accessed directly.

Attribute.....confirm

1. The terms *get/set* must be used where an attribute is accessed directly.

employee.getName();
matrix.getElement (2, 4);

108.

Code should not be.

Commented.....confirm

As Fowler puts it, comments should not be used as deodorants. Tricky code should not be commented but rewritten. In general, the use of comments should be minimized by

109.

The size of _____ plays a significant role in making the program easy or difficult to understand

Individual functions.....confirm

in managing and mastering the complexity of a program. We also discussed that the size of individual functions plays a significant role in making the program easy or difficult to understand. In general, as the function becomes longer in size, it becomes more difficult

110.

_____ is a tool that can help us in reducing the size of individual functions.

Modularity.....confirm

to understand. Modularity is a tool that can help us in reducing the size of individual functions, making them more readable. As an example, consider the following selection

111.

N-tier architecture stems from the struggle to find a _____ between the fat-client architecture and the thin-client architecture.

Middle ground.....confirm

N-tier architecture stems from the struggle to find a middle ground between the fat-client architecture and the thin-client architecture. In this case the idea is to enhance

112.

For (i=0, col = 0; i<27; i++, j++).

In the above line of the code, 27 is representing _____.

Constant.....confirm

Consider the following code segment:

```
fac = lim / 20;  
if (fac < 1)  
    fac = 1;  
for (i = 0, col = 0; i < 27; i++, j++) {  
    col += 3;  
    k = 21 - (let[i] / fac);  
    star = (let[i] == 0) ? ' ' : '*';  
    for (j = k; j < 22; j++)  
        draw(j, col, star);  
}  
draw(23, 1, ' ');  
for (i = 'A'; i <= 'Z'; i++)  
    cout << i;
```

Can you tell by reading the code what is meant by the numbers 20, 27, 3, 21, 22, and 23. These are constants that mean something but they do not give any indication of their importance or derivation, making the program hard to understand and modify. To a

113. In case of using unrelated operators in a single expression _____ would be the best choice to prevent the logical errors.

Parenthesize....confirm

specifying grouping. It is especially important to use parentheses when different unrelated operators are used in the same expression as the precedence rules are often assumed by the programmers, resulting in logical errors that are very difficult to spot. As an example consider the following statement:

114. In the switch statement, cases should always end with a _____ statement.

Break....confirm

In the switch statement, cases should always end with a break.

115. Floating point constants should always be written with decimal point and at least.

One decimal....confirm

2. Floating point constants should always be written with decimal point and at least one decimal.

116. In case of header files construction is to avoid _____ errors. The construction should appear in the top of the file (before the file header).

Compilation.....confirm

The construction **is to avoid** compilation errors. The construction should appear in the top of the file (before the file header) so file parsing is aborted immediately and compilation time is reduced.

117. **Names representing methods and functions should be ____ and written in mixed case starting with ____ case.**

Verbs, lower....confirm

4. **Names representing methods and functions should be verbs and written in mixed case starting with lower case.**

118. **Names representing types must be nouns and written in mixed case starting with ____.**

Upper case....confirm

Names representing types must be nouns and written in mixed case starting with upper case.

119. **Variable names must be in mixed case starting with ____.**

Lower case....confirm

Variable names must be in mixed case starting with lower case.

120. **Names representing constants must be all uppercase using underscore to ____ words.**

Separate....confirm

Names representing constants must be all uppercase using underscore to separate words.

121. **Names representing template types in C++ should be a ____ letter.**

Single uppercase.....confirm

Names representing template types in C++ should be a single uppercase letter.

122. Global variables in C++ should always be referred to by using the _____ operator.

(::)confirm

Global variables in C++ should always be referred to by using the :: operator.
::mainWindow.open() , ::applicationContext.getName()

123. Private class variable should have _____ suffix.

Underscore(_).....confirm

Private class variables should have _ suffix.

124. MVC stands for

Model View Controller....confirm

Model View Controller (MVC)