

1. _____ subprogram does have the return type [01D01]
 - a. for
 - b. while
 - c. procedure
 - d. function**
2. A _____ provides the protocol, but not the body, of the subprogram [01D02]
 - a. subprogram declaration**
 - b. subprogram definition
 - c. subprogram itself
 - d. subprogram code
3. A _____ is the first line of the definition, including the name, the kind of subprogram, and the formal parameters. [01M01]
 - a. Subprogram
 - b. structure
 - c. iteration
 - d. subprogram header**
4. The _____ of a subprogram is its parameter profile [01M02]
 - a. protocol**
 - b. subprogram
 - c. structure
 - d. iteration
5. The caller is _____ during execution of the called subprogram [01S01]
 - a. continues its execution
 - b. suspended**
 - c. terminated
 - d. can't predict
6. Control always returns to the _____, when the called subprogram's execution terminates [01S02]
 - a. beginning of program
 - b. end of program
 - c. caller**
 - d. next program
7. An _____ subprogram is one that has the same name as another subprogram in the same referencing environment. [01S03]
 - a. overloaded**
 - b. generic
 - c. static
 - d. dynamic
8. _____ subprogram does not have return type [01S04]
 - a. for
 - b. while
 - c. procedure**
 - d. function
9. An _____ represents a value or address used in the subprogram call statement [01S05]
 - a. actual parameter
 - b. formal parameter
 - c. normal parameter**
 - d. usual parameter
10. An _____ subprogram is one whose computation can be done on data of different types with different calls. [01S06]
 - a. overloaded
 - b. generic**
 - c. static
 - d. dynamic

11. If local variables are stack-dynamic, advantage is _____ [02D01]
- Allocation/deallocation time
 - Indirect addressing
 - Subprograms cannot be history sensitive
 - They support recursion**
12. Life time of variables declared as auto is [02D02]
- Within all block
 - Within the blocks**
 - Through out the program
 - Within two corresponding blocks
13. _____ variables are opposite to stack- dynamic variables [02M01]
- static**
 - stack
 - queue
 - formal
14. The _____ of a variable is the time between creation and termination [02M02]
- scope
 - lifetime**
 - context
 - range
15. The default initial value of static variable is _____ [02M03]
- Zero**
 - Garbage value
 - One
 - Null
16. _____ variables are bound to memory cells before execution begins and remains bound to the same memory cell throughout execution. [02S01]
- auto
 - extern
 - Static**
 - range
17. The _____ of a variable is the range of statements in a program over which its visible [02S02]
- lifetime
 - scope**
 - life
 - activation
18. The period of time between an allocation and its subsequent disposal is called [02S03]
- Scope
 - binding
 - lifetime**
 - longevity
19. The _____ of a program unit or block are those that are visible within the program unit or block but are not declared there. [02S04]
- Local variables
 - non local variables**
 - constants
 - identifiers
20. Scope of static variable is [02S05]
- Local to the block in which the variable is defined**
 - Within all blocks
 - Through out the program
 - Within two corresponding blocks
21. Default initial value of a register variable is [02S06]
- Zero
 - Garbage value**
 - One
 - Null

22. In C and C ++ functions locals are stack dynamic unless specifically declared to be [03D01]
a. static
b. dynamic
c. auto
d. register
23. _____ compilation is compilation of some of the units of a program separately from the rest of the program, using interface information to check the correctness of the interface between the two parts. [03D02]
a. aIndependent
b. separate
c. combined
d. mixed
24. The advantage of _____ parameters is that they can appear in any order in the actual parameter list [03M01]
a. positional parameters
b. keyword parameters
c. intrinsic parameters
d. void parameters
25. Variables that are called defined inside subprograms are called _____ [03M02]
a. auto variables
b. global variables
c. local variables
d. static variables
26. The parameters in which the have of the formal parameter to which an actual parameter is to be bound is specified with the actual parameters is _____ [03S01]
a. positional parameters
b. keyword parameters
c. intrinsic parameters
d. void parameters
27. The disadvantage to keyword parameters is that the user of the subprogram must know the names of _____ [03S02]
a. positional parameters
b. keyword parameters
c. intrinsic parameters
d. formal parameters
28. The idea of specifying that a particular subprogram can be recursively called originated with _____ [03S03]
a. Ada
b. C
c. Fortran
d. PL/I
29. the greatest disadvantage of static local variables is there inability to support [03S04]
a. Iteration
b. Recursion
c. Selection
d. Termination
30. _____ compilation is compilation of some of the units of a program separately from the rest of the program, without the benefit of interface information [03S05]
a. Independent
b. separte
c. combined
d. mixed
31. A _____ subprogram is one that takes parameters of different types on different activations [03S06]
a. generic or polymorphic
b. overloaded
c. overridden
d. over written

32. _____ parameter passing method behave as inmode, outmode (i.e,multimode) [04D01]
- pass-by-value
 - pass-by-reference
 - pass-by-result
 - pass-by-name**
33. _____ parameter passing method supports late binding. [04D02]
- pass-by-value
 - pass-by-reference
 - pass-by-result
 - pass-by-name**
34. In Java, object parameters are passed using [04M01]
- call-by-value
 - call-by-name
 - call-by-result
 - call-by-reference**
35. In Pascal, the default parameter passing mechanism is [04M02]
- call-by-value**
 - call-by-name
 - call-by-result
 - call-by-reference
36. Call by name parameter passing was introduced by [04M03]
- Ada
 - Algol 60**
 - PL/I
 - FORTAN
37. _____ data structure used to implement parameter passing technique [04S01]
- Stack**
 - Queue
 - Array
 - Union
38. An _____ subprogram is one that has the same name as another subprogram in the same referencing environment [04S02]
- nested
 - overloaded**
 - iterative
 - selective
39. In C, arrays are passed as parameters using [04S03]
- call-by-value
 - call-by-reference**
 - call-by-name
 - call-by-result
40. In FORTAN 77, the default parameter passing mechanism is [04S04]
- call-by-value
 - call-by-reference**
 - call-by-name
 - call-by-result
41. _____ is not a parameter passing methods [04S05]
- Pass-by-value
 - pass-by-reference
 - pass-by-result
 - pass-by-example**
42. A _____ is a special subprogram that has multiple entries. [05D01]
- routine
 - procedure
 - function
 - co routine**
43. _____ link is a pointer to the top of the activation record instanc e. [05D02]
- static

- b. dynamic**
- c. active
- d. in active

44. The following language does not support operator overloading [05M01]

- a. C++
- b. Ada
- c. C
- d. Java**

45. _____ does not have overloaded subprograms built-in, and users cannot write their own overloaded subprograms [05M02]

- a. C++
- b. Ada
- c. Java
- d. C**

46. The _____ of a subprogram are those that are visible but not declared in the subprogram [05S01]

- a. Non local variables**
- b. Global variables
- c. Reference Variables
- d. Auto Variables

47. The _____ are those that may be visible in all of the subprograms of a program [05S02]

- a. Non local variables
- b. Global variables**
- c. Reference Variables
- d. Auto Variables

48. If local variables are stack-dynamic, advantage is _____ [05S03]

- a. Allocation/deallocation is more
- b. Indirect addressing
- c. Subprograms cannot be history sensitive
- d. Sub program flexibility**

49. The first high level language to include co routines was [05S04]

- a. Pascal
- b. Ada
- c. SIMULA 67**
- d. C++

50. The subprogram call and return operations of a language are together called its _____ [05S05]

- a. Sub program linkage**
- b. Sub program definition
- c. Subprogram prototype
- d. Subprogram declaration

51. The format or layout of the non code part of a subprogram is called an _____ code [05S06]

- a. static
- b. dynamic
- c. activation**
- d. visible

52. Grouping of subprograms that are logically related into a unit that can be separately compiled is called _____ [06D01]

- a. Encapsulation**
- b. Decapsulation
- c. Binding
- d. Pasing

53. In FORTRAN 77 and C _____ used for encapsulation, containing one or more subprograms can be independently compiled [06D02]

- a. Files**
- b. Structures
- c. Unions
- d. Pointers

54. An _____ is a user-defined data type [06M01]
- primitive type
 - abstract data type**
 - derived
 - tagged
55. In C++,The _____ is the encapsulation device [06M02]
- loop
 - iteration
 - control statement
 - class**
56. Encapsulating units in Ada are called _____ [06M03]
- tasks
 - packages**
 - classes
 - clusters
57. What is encapsulation device in ada? [06S01]
- loop
 - iteration
 - control statement
 - Package**
58. What is encapsulation device in c? [06S02]
- file**
 - iteration
 - selection
 - loop
59. The first language which supported data abstraction was _____ [06S03]
- PL/1
 - SIMULA 67**
 - Ada
 - ALGOL 68
60. Encapsulating units in Ada are called _____ [06S04]
- tasks
 - packages**
 - classes
 - clusters
61. Encapsulating units in SIMULA 67 area called _____ [06S05]
- tasks
 - packages
 - classes**
 - modules
62. Access to a hidden method is provided by prefixing the message with the ps eudo variables [07D01]
- Static
 - Friend
 - Super**
 - Public
63. Neither _____ nor _____ currently support parameterized abstrac t data types [07D02]
- Ada,SIMU LA-67
 - SMALLTALK,ADA
 - Java, C**
 - Ada, Java
64. Which of the following language is the first language to offer full support of ADT`s [07M01]
- Ada**
 - SIMULA
 - C++
 - C
65. The functions defined in C++ class are called [07M02]

- a. Methods
- b. Procedures
- c. Member functions**
- d. Routines

66. Which of the following language does not directly support ADT` (S) [07S01]

- a. C++
- b. Java
- c. C**
- d. C

67. The concept of data abstraction had its origins in _____ [07S02]

- a. Ada
- b. SIMULA**
- c. C++
- d. C

68. The encapsulating contracts in Ada are called [07S03]

- a. Interface
- b. Package**
- c. Class
- d. Procedures

69. C++ provides the _____ and _____ operations to manage the heap (S) [07S04]

- a. Malloc , delete
- b. Calloc ,delete
- c. Malloc, free
- d. New ,delete**

70. All small talk objects are allocated from _____ [07S05]

- a. Stack
- b. Register
- c. RAM
- d. Heap**

71. C++ evolved from two languages [07S06]

- a. ADA, C
- b. SIMULA 67.ADA
- c. C, SIMULA 67**
- d. C, SMALL TALK

72. _____ function Name is the same as the class name [08D01]

- a. Destructors
- b. Constructors**
- c. Procedure
- d. Function

73. _____ functions to initialize the data members of instances [08D02]

- a. Destructors
- b. Constructors**
- c. Procedure
- d. Function

74. _____ can include parameters to provide parameterization of the objects [08M01]

- a. Destructors
- b. Constructors**
- c. Procedure
- d. Function

75. _____ Functions to cleanup after an instance is destroyed; usually just to reclaim heap storage [08M02]

- a. Destructors**
- b. Constructors
- c. Class
- d. Object

76. _____ called Implicitly when the objects lifetime ends [08M03]

- a. Constructors

- b. Destructors**
- c. Class
- d. Object

77. Default access specifier for class members in C++ is _____ [08S01]

- a. public
- b. private**
- c. protected
- d. friendly

78. A constructor in c++ is called when _____ [08S02]

- a. a class is defined
- b. when an object is created**
- c. when the object ceases
- d. a block is defined

79. C++ dynamic memory deallocation operator is _____ [08S03]

- a. dispose
- b. delete**
- c. free
- d. terminate

80. Which one of the following is not an access specifier for class members in C++ is _____ [08S04]

- a. public
- b. private
- c. protected
- d. online**

81. Protected clause is for _____ [08S05]

- a. inheritance**
- b. sub program ming
- c. looping
- d. selection

82. In Java, All user-defined types are _____ [09D01]

- a. files
- b. structures
- c. classes**
- d. unions

83. Default access specifier for class members in java is _____ [09D02]

- a. public
- b. private
- c. protected
- d. default**

84. Which one of the following is not an access specifier for class members in C++ is _____ [09M01]

- a. public
- b. private
- c. protected
- d. friend**

85. Java supports concurrency by _____ [09M02]

- a. processes
- b. subprograms
- c. threads**
- d. routine

86. In java all method calls are dynamically bound unless the called method has been defined to be _
_____ [09S01]

- a. Final**
- b. Friend
- c. Static
- d. Abstract

87. Explicit deallocation is required for heap dynamic objects using the _____ operator [09S02]

- a. Free

- b. Delete**
- c. New
- d. Size of

88. Which abstract class is used for implementing multiple inheritance in java? [09S03]

- a. Packages
- b. Interface**
- c. Synchronization
- d. Message passing

89. Java has a _____ as second scoping mechanism, [09S04]

- a. package**
- b. box
- c. class
- d. object

90. Ada 95 classes area new category of types called _____ [09S05]

- a. Tagged types
- b. Package types**
- c. Constructor types
- d. Destructor type s

91. Derived classes in Ada 95 are based on _____ types [09S06]

- a. data
- b. tagged**
- c. base
- d. derived

92. Concurrency can occur at _____ levels [10D01]

- a. Operating System s Level
- b. System Level
- c. Unit level**
- d. Kernel level

93. _____ concurrency simulates multiple independent sub processors with single processor [10D02]

- a. Physical concurrency
- b. Logical concurrency**
- c. system concurrency
- d. application concurrency

94. _____ concurrency consists multiple independent process ors (M) [10M01]

- a. Physic al concurrency**
- b. Logical concurrency
- c. system concurrency
- d. application concurrency

95. Runnable state of a process means [10M02]

- a. Currently executing
- b. Currently blocked
- c. Terminated
- d. Ready to execute**

96. Concurrency can occur at _____ levels. [10S01]

- a. Machine instruction level**
- b. Operating System s Level
- c. Kernel Level
- d. statement level

97. Concurrency can occur at _____ levels. [10S02]

- a. Kernel Level
- b. statement level**
- c. Machine instruction level
- d. operating system level

98. 'sema' data type is available in [10S03]

- a. Ada
- b. ALGOL 68**
- c. PL/1

d. C

99. Concurrency can occur at _____ levels. [10S04]

- a. Data Level
- b. Program level**
- c. kernel level
- d. unit level

100. Protected objects are supported in [10S05]

- a. Ada 83
- b. Ada 95**
- c. CLU
- d. Modula-2

101. A _____ is a program unit that can be in concurrent execution with other program units [10S06]

- a. Program
- b. Task**
- c. unit
- d. module

102. In _____ kind of synchronization, Task A must wait for task B to complete some specific activity before task A can continue its execution [10S07]

- a. Cooperation**
- b. Competition
- c. Substitution
- d. comparison

103. _____ is a data structures consisting of an integer and a queue that stores task description [11D01]

- a. Semaphore**
- b. Metaphore
- c. Monitor
- d. Shared memory

104. A semaphore that only requires a binary valued counter ,we use to provide competition synchronization is called _____ [11D02]

- a. mutual semaphore
- b. exclusive semaphore
- c. unary semaphore
- d. Binary semaphore**

105. Semaphotes can be used to provide _____ [11M01]

- a. competition synchronization**
- b. compound synchronization
- c. corespondence synchronization
- d. cooperative synchronization

106. _____ is a linguistic device that follows the guarded code to be executed only when a specified condition is true [11M02]

- a. Guard**
- b. axiom
- c. queue
- d. query

107. _____ commands are the basis of the construct designed for controlling message passing [11M03]

- a. unguarded
- b. super guarded
- c. iterative
- d. Guarded**

108. The first programming language to introduce monitors was [11S01]

- a. PL/1
- b. Ada
- c. ALGOL 68
- d. Concurrent Pascal**

109. In Concurrent Pascal, instances of the monitors are created using [11S02]

- a. start
- b. init**
- c. new
- d. malloc

110. _____ is a data structure that stores all of that relevant information about the execution state of a task. [11S03]

- a. Semaphore
- b. Metaphore
- c. Monitor
- d. Task descriptor**

111. _____ is an elegant synchronization tool for an ideal programmer who never mistaken [11S04]

- a. Semaphore**
- b. Metaphore
- c. Monitor
- d. Task descriptor

112. The first programming language to incorporate monitors was (S) [11S05]

- a. Pascal
- b. Concurrent Pascal**
- c. Ada
- d. FORTRAN

113. The continue operation also takes a _____ type parameter. [11S06]

- a. Queue**
- b. stack
- c. tree
- d. pointer

114. _____ is an abstract data type for shared data [11S07]

- a. semaphore
- b. monitor**
- c. queue
- d. stack

115. An instance of type _____ is an abstraction of a particular kind of buffer for storing integers [11S08]

- a. metabuf
- b. Bufdata
- c. Databuf**
- d. Bufmeta

116. Monitors are _____ entities [11S09]

- a. Passive**
- b. Active
- c. static
- d. dynamic

117. _____ is the synchronization technique used to synchronize tasks which are not in same memory space [11S10]

- a. Semaphore
- b. Monitor
- c. Message passing**
- d. Counter

118. CSP stands for [12D01]

- a. Communicating sequence process
- b. Computer sequential process
- c. Communicating sequential process**
- d. Common sequential process

119. A task is ready to run but not currently running (no available processor) [12D02]

- a. new
- b. runnable**
- c. running
- d. waiting

120. A task has been running, but cannot now continue (usually waiting for some event to occur), then it enters to [12D03]
- new
 - runnable
 - running
 - blocked**
121. The code, if there is any between an accept clause and next OR is called _____ [12M01]
- Extended accept clause**
 - Extended reject clause
 - Extended acceptance clause
 - Extended clause.
122. _____ method , which stops execution of the thread and blocks it from execution for the amount of time specified in its parameter [12M02]
- sleep()**
 - run()
 - stop()
 - yield()
123. _____ method, which kills the thread [12M03]
- yield()
 - suspend()
 - stop()**
 - start()
124. In Java Threads, having the priority no as _____ [12M04]
- 2
 - 4
 - 8
 - 10**
125. Tasks need not have entry points . such tasks are called _____ [12S01]
- super tasks
 - Actor tasks**
 - Supreme tasks
 - Sub tasks
126. The process in which the run methods run is called a _____ [12S02]
- Object
 - instance
 - Thread**
 - binding
127. The sleep method has how many parameters ? [12S03]
- zero
 - Double
 - Multiple
 - Single**
128. _____ method ends the critical section of the thread [12S04]
- Exit**
 - Entry
 - start
 - stop
129. Every thread class has to extend _____ class [12S05]
- thread
 - runnable
 - Thread**
 - Runnable
130. Every thread class has to implement _____ interface [12S06]
- thread
 - runnable
 - Thread
 - Runnable**

131. _____ is the method should override in thread class [12S07]
- a. start()
 - b. run()**
 - c. exit
 - d. continue
132. _____ method, which stops execution of the thread until it is restarted with resume [12S08]
- a. stop()
 - b. yield()
 - c. suspend()**
 - d. Any of Above
133. _____ method, which restarts a suspended thread [12S09]
- a. start()
 - b. notify()
 - c. notifyAll()
 - d. resume()**
134. The wait and notify methods are defined in _____ class [12S10]
- a. Object**
 - b. Thread
 - c. Runnable
 - d. class
135. Java Threads have _____ leves of priority [12S11]
- a. 1
 - b. 2
 - c. 3**
 - d. 4
136. In Java Threads, NORM PRIRITY having the priority no as _____ [12S12]
- a. 2
 - b. 5
 - c. 8**
 - d. 9
137. _____ is the default priority if main thread [12S13]
- a. 0
 - b. 5**
 - c. 10
 - d. 3
138. Java Threads are scheduled by _____ [12S14]
- a. JVM**
 - b. OS
 - c. Java Application
 - d. java program
139. If task created but not yet started, its state is _____ [12S15]
- a. new**
 - b. runnable
 - c. running
 - d. waiting
140. A task no longer active in any sense, then it is in state _____ [12S16]
- a. dead**
 - b. deadlock
 - c. running
 - d. blocked
141. The special processing that may be required after detection of an exception is called _____ [13D01]
- a. exception handling**
 - b. exception avoidance
 - c. exception prevention
 - d. Exception catching
142. Which one is not a Design Issues for Exception Handling is(are) _____ [13D02]
- a. Should there be default exception handlers for programs that do not provide their own?

- b. Can built-in exceptions be explicitly raised?
- c. Are hardware-detectable errors treated as exceptions that can be handled?
- d. Are software errors treated as exceptions that can be handled**

143. Which one is not a Design Issue for Exception Handling is(are) _____ [13M01]

- a. How and where are exception handlers specified and what is their scope?
- b. How is an exception occurrence bound to an exception handler?
- c. How are user-defined exceptions specified?
- d. How is an exception occurrence is not bound to an exception handler?**

144. Which is not a Design Issues for Exception Handling is(are) _____ [13M02]

- a. How are user-defined exceptions specified?
- b. Are there any built-in exceptions?
- c. How can exceptions be disabled, if at all?
- d. Are there no built-in exceptions**

145. The exception handling code unit is called _____ [13S01]

- a. atcher
- b. event
- c. exception handler**
- d. Exception prevention

146. The catch block can have _____ no of parameters [13S02]

- a. One**
- b. Two
- c. No
- d. Any

147. All exceptions are objects of classes that are descendants of the _____ class [13S03]

- a. Throw
- b. Throws
- c. Try
- d. Throwable**

148. User-defined exceptions are usually subclasses of _____ class [13S04]

- a. This
- b. Exception**
- c. Error
- d. Throws

149. _____ has two predefined subclasses, IO Exception and RuntimeException [13S05]

- a. Throw
- b. Exception**
- c. Error
- d. Throwable

150. To specify code that is to be executed, regardless of exception raised or not _____ block is used [13S06]

- a. try
- b. catch
- c. finally**
- d. Any

151. Exceptions of class error and runtime exceptions and their decedents are called _____ exception [14D01]

- a. Unchecked**
- b. Checked
- c. Predictable
- d. Unpredictable

152. A default exception block must be placed [14D02]

- a. First among the catch blocks
- b. Last among the catch blocks**
- c. Globally at the top of the file
- d. At the end of all code in program

153. Array Index Out of BoundsExceptions is defined in _____ package [14M01]

- a. Java .lang
- b. Java.awt

- c. Java.applet
- d. Java. util**

154. The form exception handler in C++ is _____ [14M02]

- a. try block followed by finally block
- b. try block followed by static block
- c. try block followed by catch blocks**
- d. atch block followed by static block

155. In C++ each of the _____ functions are exception holders [14S01]

- a. Try
- b. Catch**
- c. Block
- d. Primitive

156. In C++ a catch function can have how many formal parameters [14S02]

- a. One**
- b. Two
- c. Any number
- d. Zero

157. C++ exceptions are raised by the explicit statement called [14S03]

- a. Throws
- b. Try
- c. Throw**
- d. Raise

158. All Java exceptions are objects of classes that are descendents of the _____ class [14S04]

- a. Throw
- b. Throws
- c. Throwable**
- d. Thrown

159. _____ Exceptions thrown when an end has occurred in an input or output operations [14S05]

- a. Runtime exceptions
- b. IO exceptions**
- c. ArrayIndexOutof BoundsException
- d. Null pointer exceptions

160. In C++ exception specification begins with keyword [14S06]

- a. Exception
- b. Try**
- c. Throw
- d. Catch

161. In C++, catch is _____ [14S07]

- a. not allowed
- b. allowed**
- c. it should after finally block
- d. refused

162. In C++, _____ used to bind the exception to its handler [14S08]

- a. throw**
- b. raise
- c. catch
- d. hide

163. In C++, A throw without an operand can only appear in _____ to raise the exception [14S09]

- a. try block
- b. a handler**
- c. in finally block
- d. it should be throws instead throw

164. In Java, Exceptions are thrown with _____ [14S10]

- a. throws
- b. throw**
- c. Throw
- d. Throws

165. In Java, An exception can be handled and rethrown by including a _____ in the handler [14S11]
a. throws
b. Throw
c. throw
d. Throws
166. In Java, the exception is _____ [14S12]
a. structure
b. pointer
c. object
d. class
167. In Java, _____ is the default handler [14S13]
a. ma in
b. class
c. object
d. JVM
168. In C++, _____ is the default handler [14S14]
a. ma in function
b. static function
c. object
d. no default handler
169. _____ is the language to pioneer the concept of exception handling. [14S15]
a. PL/1
b. Fortran
c. Pascal
d. Ada
170. Logic programming languages are also called as _____ [15D01]
a. Imperative languages
b. Declarative languages
c. Functional languages
d. Object oriented language
171. In proof by contradiction the original propositions are called _____ [15D02]
a. axioms
b. clauses
c. goal
d. hypothesis
172. In proof by contradiction the negation of the theorem is called [15G01]
a. Goal
b. Axioms
c. Hypothesis
d. Clauses
173. Languages based a symbolic logic are called _____ programming languages [15M01]
a. Functional
b. Imperative
c. Structural
d. Logic
174. The right side of a clausal form proposition is called the _____ [15M02]
a. consequent
b. variable
c. constant
d. antecedent
175. _____ logic can be used for the three basic needs of formal logic [15S01]
a. Symbolic
b. Predicate
c. Mathematical
d. Iterative
176. A _____ can be thought of as a logical statement that may or may not be true. [15S02]
a. Axiom

- b. functor
- c. Query
- d. Proposition**

177. A _____ is a function symbol that names the relation, and an ordered list of parameters.

[15S03]

- a. functor**
- b. tuple
- c. query
- d. axiom

178. The left side of a clausal form is called the [15S04]

- a. consequent**
- b. variable
- c. constant
- d. antecedent

179. The temporary assignment of values to variables to allow unification is called [15S05]

- a. instantiation**
- b. resolution
- c. backtracking
- d. proposition

180. Backing up in the goal to the reconsideration of a previously proven sub goal is called _____

[16D01]

- a. Recursion
- b. Re tracking
- c. Backtracking**
- d. Tracking

181. _____ are computer systems designed to emulate human expertise in some particular domain.

[16D02]

- a. Database systems
- b. Expert systems**
- c. Embedded systems
- d. File systems

182. A prolog _____ is a constant available or a structure [16M01]

- a. atom
- b. Token
- c. Term**
- d. Symbol

183. The statement "Bill is the father of Jake" is represented in Prolog as [16M02]

- a. Father (bill, Jake)**
- b. Father (Jake, bill)
- c. Bill (Jake, father)
- d. Jake (Father, bill)

184. _____ contains multiple terms separated by logical AND operations [16S01]

- a. Conjunctions**
- b. Disjunction
- c. Implication
- d. Bimplication

185. In PROLOG queries are called _____ [16S02]

- a. Goals**
- b. Tasks
- c. Atoms
- d. Items

186. Sometimes proving a sub goal is called _____ [16S03]

- a. achievement
- b. Inference
- c. Matching
- d. Satisfying**

187. Bottom up resolution is also called as _____ [16S04]

- a. Forward chaining**

- b. Backward chaining
- c. Reverse chaining
- d. Opposite chaining

188. Top down resolution is also called as _____ [16S05]

- a. Forward chaining
- b. Backward chaining**
- c. Reverse chaining
- d. Opposite chaining

189. Database searches in PROLOG always proceeds in the direction of _____ [16S06]

- a. Last to first
- b. First to last**
- c. Top to bottom
- d. Bottom to top

190. For logic programming, following symbolic logic is used [16S07]

- a. Integration
- b. Relational Algebra
- c. Relational Calculus
- d. Predicate Calculus**

191. When a lambda expression is evaluated for a given parameter, the expression is said to be _____ [17D01]

- a. applied to that parameter**
- b. Applied to the function
- c. Applied to the procedure
- d. applied to the expression

192. One common kind of functional form is _____ [17D02]

- a. function definition
- b. function composition**
- c. function binding
- d. function evaluation

193. The mathematical function is a mapping of members of one set, called the domain set to another set called _____ [17M01]

- a. bounded set
- b. un bounded set
- c. range set**
- d. Finite set

194. Function composition is return as an expression, using _____ operator [17M02]

- a.**
- b. >
- c. *
- d. <

195. Local variables in functions in imperative programming languages maintain _____ of the function. [17S01]

- a. Strategy
- b. Address
- c. Reference
- d. State**

196. The symbol = is used to mean [17S02]

- a. is equal to
- b. is same as
- c. is defined as**
- d. is equivalent to

197. A _____ expression specifies the parameter and the mapping of a function [17S03]

- a. Gamma
- b. Lambda**
- c. Beta
- d. Sigma

198. _____ is functional form that takes single function as a parameter. [17S04]

- a. Apply-to-some

- b. Apply-to-existence
- c. Apply-to-all**
- d. Apply-to-more

199. In imperative language an expression is evaluated and the result is stored in ___ [17S05]

- a. Registers
- b. Memory location**
- c. Stack
- d. Heap

200. ___ handles the storage of intermediate results of expression evaluations in high level languages [17S06]

- a. Compiler**
- b. Interpreter
- c. CPU
- d. OS

201. A purely function programming language does not use _____ [17S07]

- a. Functions
- b. Procedure
- c. Constants
- d. Variable**

202. The original intent was to have a notation for LISP programs that would be as close to Fortran's as possible, with additions when necessary. This notation was called _____ [18D01]

- a. N-notation
- b. L-notation
- c. F-notation
- d. M-notation**

203. LISP functions specified in new notation were called _____ for symbolic expressions. [18D02]

- a. M-expression
- b. N-expression
- c. S-expression**
- d. C-expression

204. CDR(CDR(A,B,C))? [18D03]

- a. A
- b. B
- c. C**
- d. AB

205. The requirement for the universal LISP function was notation that allowed function to be expressed in the same way _____ [18M01]

- a. variables was expressed
- b. constants was expressed
- c. data was expressed**
- d. identifiers was expressed

206. A schema program is a collection of _____ [18M02]

- a. programs
- b. collection of fields
- c. function declarations
- d. function definitions**

207. .CAR(CAR(A,B,C))? [18M03]

- a. A**
- b. B
- c. C
- d. AB

208. _____ is the oldest and most widely used functional programming language [18S01]

- a. LISP**
- b. PROLOG
- c. Small talk
- d. ML

209. What are the two types of data objects in original LISP [18S02]

- a. variables, functions

- b. constants, variables
- c. atoms, lists**
- d. functions, blocks

210. A LISP is referenced by a pointer to which _____ [18S03]

- a. last element
- b. first element**
- c. Previous element
- d. Middle element

211. The future of the real LISP systems that was apparently accidental was the use of ___ [18S04]

- a. Static scoping
- b. Dynamic scoping**
- c. Dynamic binding
- d. Static binding

212. A predicate is one that returns _____ [18S05]

- a. Integer value
- b. Character value
- c. Boolean value**
- d. Float value

213. The most common use of functional languages is [18S06]

- a. LISP
- b. ML
- c. PROLOG
- d. LIST Processing**

214. CAR (A,B,C)? [18S07]

- a. A**
- b. B
- c. C
- d. AB

215. CDR (A,B,C)? [18S08]

- a. A,B
- b. B,C**
- c. C,A
- d. A

216. The _____ function in LISP, returns the first element of a given list. [18S09]

- a. CDR
- b. CAR**
- c. CONS
- d. FIRST

217. Haskell uses a different evaluation technique is called _____ [19D01]

- a. Early evaluation
- b. Quick evaluation
- c. Fast evaluation
- d. Lazy evaluation**

218. In ML, the _____ statement binds a name to a value, but the name cannot be rebound to a new value. [19D02]

- a. Let
- b. Fun
- c. Bind
- d. Val**

219. Multiple definitions of a function can be written using _____ [19M01]

- a. pattern matching
- b. parameter pattern matching**
- c. variable matching
- d. function name matching

220. _____ evaluation means that parameters to functions are evaluated only when it is a necessary to evaluate the function. [19M02]

- a. Early evaluation
- b. Quick evaluation

- c. Lazy evaluation
- d. Fast evaluation**

221. ML is a _____ functional programming language. [19S01]

- a. Static scoped**
- b. Dynamic scoped
- c. Dynamic binding
- d. Static binding

222. ML is _____ typed language [19S02]

- a. Strongly typed**
- b. purely typed
- c. loosely typed
- d. tightly typed

223. In ML, every variable and expression can be determined at ___ time [19S03]

- a. Interpreted
- b. Execution
- c. Binding
- d. Compile**

224. In schema _____ function is used to determine the value of a given parameter [19S04]

- a. FIND
- b. BOOLEAN
- c. COND**
- d. CALCULATE

225. Haskell has a method of defining lists that allow infinite lists. These are called [19S05]

- a. List evaluation
- b. List comprehensions**
- c. List generator
- d. List compiler

226. The method of defining infinite lists in Haskell is [19S06]

- a. Linked List
- b. Lambda expression
- c. List Comprehension**
- d. Not possible

227. _____ is a static scope and strongly typed functional programming language that uses a syntax that is more similar to Pascal than to LISP. [20D01]

- a. ML**
- b. Common Pascal
- c. Ada
- d. PROLOG

228. The execution of a function always produces the same result when given the same parameters.

This is called _____ [20D02]

- a. State space
- b. Referential transparency**
- c. Function composition
- d. Construction

229. Functional programs can be executed by first translating them into _____ [20M01]

- a. Figures
- b. Flow charts
- c. Graphs**
- d. Labels

230. The output of the following statement CDR '(A (B) C D) in Lisp returns _____ [20M02]

- a. (A B C D)
- b. (D)
- c. (C D)**
- d. ((B) C D)

231. Function declaration in ML can be done using the keyword [20M03]

- a. function
- b. procedure
- c. DEFINE

d. fun

232. One of the standard language in AI applications is _____ [20S01]
a. C
b. C++
c. LISP
d. COBOL

233. EMACS text editor is written in _____ [20S02]
a. LISP
b. PROLOG
c. Ada
d. C

234. _____ is a relatively simple dialect of LISP that uses static scoping exclusively. [20S03]
a. Scheme
b. Atom
c. EVAL
d. ML

235. _____ is similar to ML. [20S04]
a. LISP
b. Common LISP
c. PROLOG
d. Haskell

236. _____ language was developed for symbolic computation and List processing application. [20S05]
a. LISP
b. ML
c. APL
d. Ada